



Quality Control Products & Services Catalog

Catalog Product Pages at a Glance

Product pages are designed to make it easier to find the information you need in the QC Products and Services Catalog.

Features in this edition include:

- 1. Family URLs** are listed at the top of every page to help you find content at bio-rad.com on a specific product family.
- 2. Ordering Information** is identified by a blue bar.
- 3. Analyte Lists** are identified by a green bar.
- 4. Packaging Configuration Options** are identified directly below the product ordering information.
- 5. Tips and References** to helpful information can be found throughout the catalog.

www.bio-rad.com/chemistrycontrols

Chemistry Controls

Liquichek Pediatric Control

Four Bilirubin parameters are available at two clinically significant levels for neonatal testing. Suitable for monitoring high Bilirubin levels important for adult liver disease.

- Liquid
- 3 year shelf life at -20°C to -70°C
- 3 month stability when stored unopened at 2-8°C
- 14 day open-vial stability at 2-8°C

POCT Methods Listed

Ordering Information
Cal # Description
354 Level 1 6 x 3 mL
355 Level 2 6 x 3 mL
355X Level Min/Pak (1 of each level) 2 x 4 mL

For Dimension Vista vials, see page 87.

Analytes

Bilirubin Direct	Caffeine	Magnesium	Sodium
Bilirubin Indirect	Calcium	Phenylamine	Theophylline
Bilirubin Neonatal	Chloride	Potassium	
Bilirubin Total	Glucose		

Liquichek Ethanol/Ammonia Control

Normal, elevated and toxic concentrations of Ethanol and Ammonia to monitor precision across the clinical range.

- 2 year shelf life at 2-8°C
- 20 day open-vial stability at 2-8°C

Ordering Information
Cal # Description
544 Level 1 6 x 3 mL
545 Level 2 6 x 3 mL
546 Level 3 6 x 3 mL
545X Level Min/Pak (1 of each level) 3 x 3 mL

For InteliQ Ethanol/Ammonia Control, see page 75.
For Dimension Vista vials, see page 95.

Analytes

Ammonia
Ethanol

Need an Alcohol control for mass spec?
Please review Liquichek Serum Vitrolics Control on Page 115.

Refer to rightswatch.com or the package insert document available via for specific analyte and identity claims.

www.bio-rad.com/catalog/products | 25



Table of Contents

Introduction	2
Online Resources	3
Product Support & Technical Services	4

Quality Control Products & Services

Education	5
Blood Gas Controls	9
Cardiac Assessment Controls	13
Chemistry Controls & Serum Indices	17
Coagulation Controls	25
Diabetes/Hemoglobin Controls	29
External Quality Assurance Services (EQAS)	33
Hematology Controls	41
Immunoassay Controls	49
Immunology/Protein Controls	57
Infectious Disease Controls	63
InteliQ Controls	73
Molecular Controls	79
Premium Controls	83
QC Data Management Solutions	87
QC Products in Dimension Vista Vials	93
Therapeutic Drug Monitoring Controls	99
Toxicology: Drugs-of-Abuse Controls	103
Toxicology: Specialty Controls	110
Urinalysis Controls	113
Accessories	116

Resources

Product Analyte Charts	118
Indexes	154
How to Place an Order	161
Labeling Reference	162
Legal Notices	164
Worldwide Contact Information	Inside Back Cover



Powering Exceptional Labs

Bio-Rad harnesses independent QC to take your lab to the next level, so you can stand behind your results, minimize risk and costly errors, and improve your workflow to power exceptional performance for your laboratory.

We offer high-quality materials, insightful informatics systems and renowned customer support, including staff training, lot reservation and technical expertise. We go beyond just monitoring precision to help you improve performance in your laboratory. We demand and invest in quality—because the patients deserve nothing less.

Quality control isn't just. . .

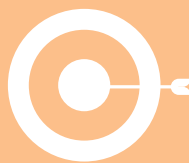
A cost.

It's an
investment.



A task.

It's a
practice.



Something you do.

It's
everything
you do.



QCNet – The Leading QC Portal on the Internet

Learn more about the many QC tools and resources from Bio-Rad at www.QCNet.com



Unity Interlaboratory Reports

- Access your monthly Unity and InstantQC Reports in just a few quick clicks

QCNet International

- Visit your local QCNet portal to obtain specific information related to your country (where available)

Additional Online Tools

- Access to EQAS services
- Linearity Web
- eInserts XML
- My eInserts
- Barcode Label Generator
- Urinalysis Tools
- SDS
- Code Lists for Unity

Experience the Convenience of Electronic Inserts On-demand. Visit myeinserts.com today.

Don't spend another minute tracking down your data through printed inserts. View it online with My einserts



Customize Your QC Inserts

- Find instruments and methods quickly
- Select analytes of interest
- Choose the preferred units to be displayed on your data charts

Save Your Selections

- View, print or edit at any time
- Simply duplicate your selection to add a new lot of quality control product

Receive Prompt Email Notifications

- Register to receive automatic email notifications for insert data updates
- Only receive updates that apply to your selected instruments or methods

Work Smarter & Easier

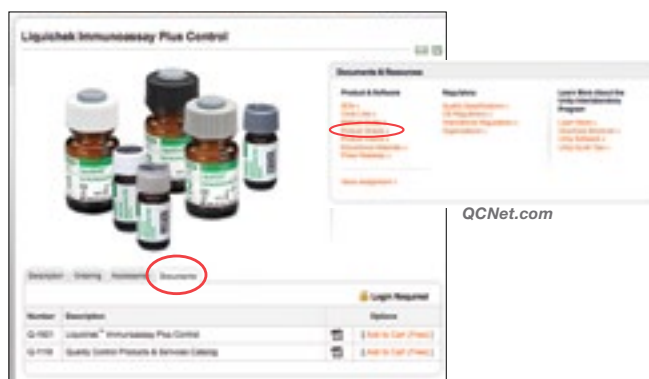
- Fast, easy Internet access to the most current QC values
- Available in over 25 languages
- Large font sizes for easy readability
- Environmentally friendly with less wasted paper

Access Bio-Rad product literature online

For more detailed product information, visit our websites

QCNet.com—Click on the Product Sheets link in the Documents and Resources panel on the home page for access to all Quality Control literature.

bio-rad.com—Click on the Documents tab for a list of literature related to the specific product or product family.



bio-rad.com

EQAS Resources on QCNet.com

Use the EQAS tab for quick access to program essentials

Access program information, product inserts and user documentation through www.QCNet.com. This secure website allows registered participants access to training material, customer notifications and provides the ability to submit results with EQAS Online and view or print EQAS reports.

Quality Control values listed for Point of Care Instruments

Visit qcnet.com for more information

- Consolidate with one QC vendor
- Assigned values generated on POC Instruments are listed for select products
- Efficiently oversee and monitor QC with Unity QC Data Management Solutions
- Expand your education options with basic QC videos, case studies, and POCT related webinars



Support for Bio-Rad controls and software products does not end after you receive your products

These support groups are available to help you with your questions and needs.

By Phone within the U.S.

1-800-854-6737
Monday – Friday
5:00 AM to 5:00 PM
Pacific time (PT)

By Fax

1-949-598-1531

Quality Controls Technical Support

When you purchase control products from Bio-Rad, you receive the backing of a full-service Technical Support Department. Bio-Rad Technical Service Representatives are trained to handle your inquiries in a prompt, knowledgeable and professional manner.

Unity and EQAS Program Support

The QC Program Department at Bio-Rad offers you expert technical support and information for all Unity and EQAS reports. Our QC Program staff answers inquiries about the Unity Interlaboratory Program, QCNet enrollments, as well as EQAS enrollments, submission of data and cycle dates.

Additional benefits are provided with continuing education seminar programs in Basic Statistics of Quality Control. This is a worldwide program and in the United States, P.A.C.E. accreditation may be obtained. Contact your local Bio-Rad office for more information on continuing education programs.

Software and Connectivity Support

The Software and Connectivity Support Department is dedicated to helping your laboratory get up and running with the latest QC data management and connectivity solutions from Bio-Rad. With the help of our experts, we'll make sure your laboratory is able to capture, analyze and submit QC data successfully.



For Worldwide Customers

For service outside the United States, please refer to the inside back cover for the Bio-Rad location nearest you.



Education

Bio-Rad offers the educational tools and resources for tomorrow's QC experts

Bio-Rad Path to Quality	6
Online Educational Resources	7
Live Training from Bio-Rad	8

Did You Know?

- **Our YouTube Channel** offers over 100 videos on a variety of educational topics; visit youtube.com/bioradqc



Bio-Rad Offers the Educational Tools and Resources for Tomorrow's QC Experts

Bio-Rad Laboratories has served clinical laboratories for over 35 years. Our commitment to improving patient care has made us a leader in laboratory quality control. And because leadership has its responsibilities, we are committed to providing you with the educational tools to help you produce reliable test results. That's why we continue to invest in webinars, regional and international educational events/workshops, and online training and education.

Whether you seek to begin with the fundamentals of QC theory, to continue building on the foundations of an existing program, or to develop advanced capabilities through leading-edge QC design, Bio-Rad has the educational tools and resources you need to succeed.

Visit our **Education page at QCNet.com** to learn more about our online training materials, videos and live customized training opportunities. You can view continuing education information and QC events along with an ever growing list of training materials in a variety of media to fit your learning style.

Bio-Rad Path to Quality—Become a Quality Expert

Level
1

Fundamentals

Establish a strong foundation for basic laboratory quality practices

- Basic QC Theory and Statistics
- QC and Risk Management Principles
- EQA and PT Programs
- QC and Interlaboratory Programs

Level
2

Practical Application

Apply theoretical knowledge and introduce new practices

- Understanding Levey-Jennings
- Practical Use of Statistics
- QC Troubleshooting

Level
3

Accreditation and Compliance

Reach your accreditation and compliance goals; reinforce your commitment to Quality

- CLIA Compliance
- Accreditation Requirements, CAP, TJC, and COLA
- Seeking Laboratory Accreditation Under ISO 15189
- Preparing for an Accreditation Audit

Level
4

Advanced QC Tools

Go beyond QC fundamentals and build on the informative power of statistical QC

- Interlaboratory Reports
- Meaningful QC Rule selection
- Quality Goals

Level
5

Quality Expert!

Advance Quality practices to the cutting edge using state-of-the-art QC theory and applications

- Statistical QC Design Theory
- Quality Indicators
- Traceability and Uncertainty
- Risk Based QC Planning

Online Educational Resources from Bio-Rad

Visit the Education tab on QCNet.com for access to innovative training tools

Bio-Rad continues to develop a growing library of educational materials for laboratories that are committed to achieving a higher standard of laboratory quality for improved patient care. **Check back often for updates.**

1. Online Product Videos

Need information on how to perform a specific task? Video playlists provide instructions for common activities.

2. Bio-Rad Software User Guides

Complete user and reference guides for Bio-Rad software solutions. Each guide contains basic QC information, setup and configuration details and instructions for use.

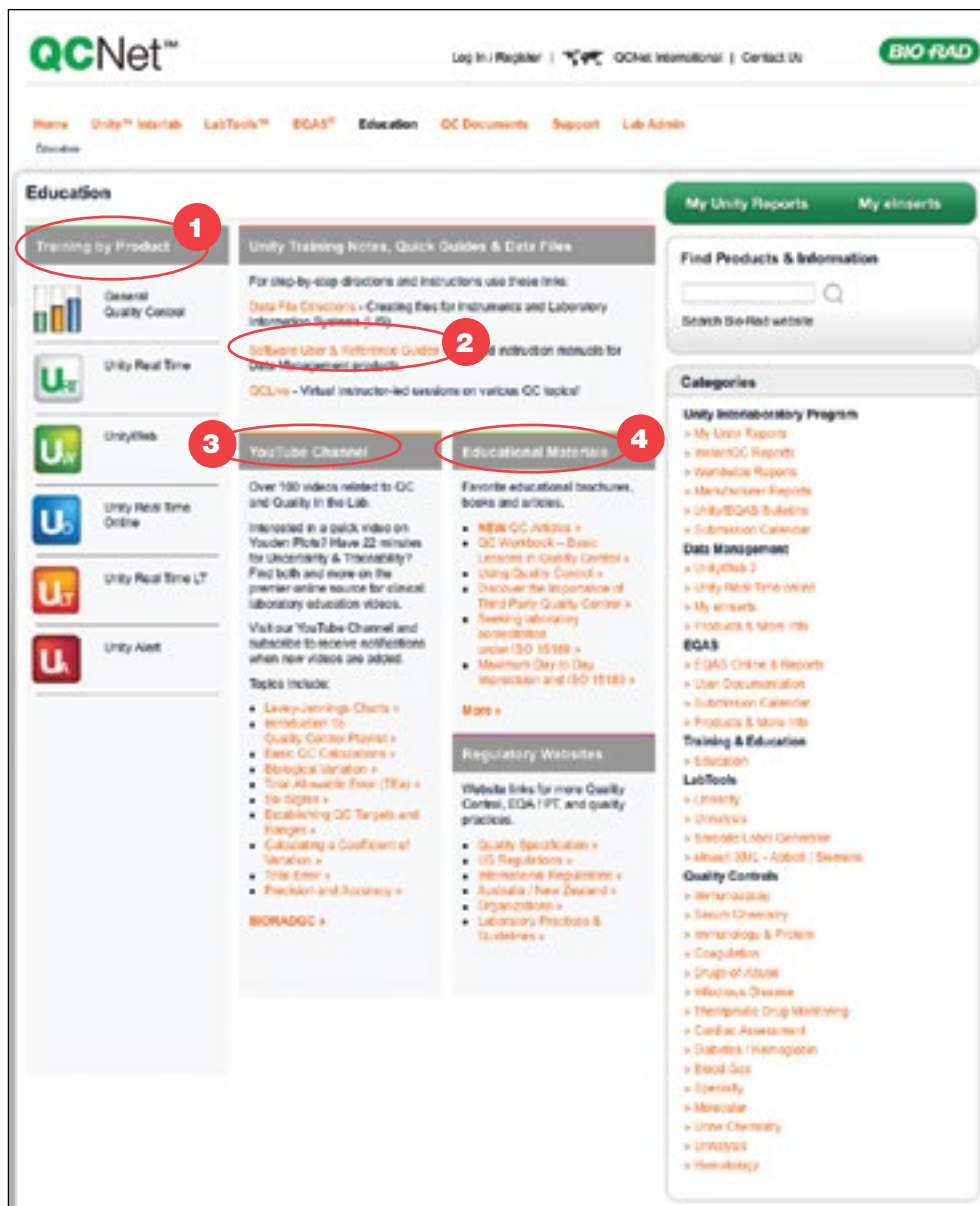
3. YouTube Channel

Our YouTube Channel has over 100 videos on a variety of topics. Videos are grouped into categories called 'Playlists' such as "Bio-Rad Unity Real Time Online", or quality control topics. Each playlist contains short videos, 2-8 minutes in length, designed to help you remember how to use or learn a new feature.

YouTube [youtube.com/bioradqc](https://www.youtube.com/bioradqc)

4. Links to Important Resources

Access brochures, articles, and links to regulatory websites from around the globe.



Actual website will vary by country and as new materials are added.



Live Training from Bio-Rad

QC Live

Online, highly interactive sessions with a Bio-Rad instructor in a less formal structure.

- Discover better ways to evaluate QC
- Improve software understanding
- Talk to experts

Customized, Instructor Led Training

Software training led by Bio-Rad technical trainers. Ideal for new users and those wanting to improve efficiency by using more functions and features of Bio-Rad software. Most courses offer P.A.C.E. credits.

Courses include, but are not limited to:

- **Unity Reports**
- **Unity Real Time 2.0 Bench Review**
 - How to check and document your daily QC data
- **Unity Real Time 2.0 Basic**
 - How to configure lots, test, rules, means and SDs
 - How to enter and submit your data to the Unity Interlaboratory Program
- **Unity Real Time 2.0 Advanced**
 - Reports, charts, Data Analysis Grid, Analytical Goals
- **UnityWeb 2.0**
 - Configuring the software, entering the data and submitting to the Unity Interlaboratory Program



For more information about our live training sessions, contact your Bio-Rad sales representative.



Blood Gas Controls

For blood gas analyzers with an expanded menu – electrolytes, glucose and lactate

Blood Gas Controls

Liquichek Blood Gas Control	10
Liquichek Blood Gas Plus E Control	10
Liquichek Blood Gas Plus EGL Control	11

Additional Information

Controls for Popular Instruments Chart	12
--	----

Did You Know?

- Bio-Rad offers aqueous controls for daily QC with the option of being stored at room temperature (up to 25°C)

For More Information

- www.bio-rad.com/bloodgascontrols

Liquichek Blood Gas Control



- Available in three distinct levels with values targeted at varying points within the clinical range
- Color coded matrix for easy identification
- Aqueous based matrix
- 4 year shelf life at 18–25°C
- Once opened, all analytes should be sampled immediately

POCT Methods Listed

Ordering Information

Cat #	Description
571	Level 1 30 x 1.7 mL
572	Level 2 30 x 1.7 mL
573	Level 3 30 x 1.7 mL
570X	Trilevel MiniPak (3 of each level) 9 x 1.7 mL

Analytes

pCO₂
pH
pO₂

Liquichek Blood Gas Plus E Control



- Designed to monitor precision of laboratory measurements on Blood Gas and Ion Selective Electrode (ISE) instrumentation
- Clear aqueous matrix
- 4 year shelf life at 2–25°C
- Once opened, pH and Blood Gas should be sampled immediately
- When used for Electrolytes only, product should be sampled within 10 minutes

POCT Methods Listed

Ordering Information

Cat #	Description
576	Level 1 30 x 1.7 mL
577	Level 2 30 x 1.7 mL
578	Level 3 30 x 1.7 mL
575X	Trilevel MiniPak (3 of each level) 9 x 1.7 mL

Analytes

Calcium (Ionized)
Chloride

pCO₂
pH

pO₂
Potassium

Sodium

Did you know . . .

Bio-Rad's Blood Gas Controls list assigned values for several near patient/point of care devices. Visit qcnet.com for more information.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Blood Gas Plus EGL Control



- Expanded test menu including pH, Blood Gas, Electrolytes and Metabolites
- Aqueous, clear matrix
- 3 year shelf life at 2–8°C
- Can be stored for up to 12 months at 20–25°C
- Once opened, pH and Blood Gas should be sampled immediately
- When used for Electrolytes or Glucose/Lactate/Magnesium measurements, product should be sampled within 10 minutes

POCT Methods Listed

Ordering Information

Cat #	Description
511	Level 1 30 x 1.7 mL
512	Level 2 30 x 1.7 mL
513	Level 3 30 x 1.7 mL
510X	Trilevel MiniPak (3 of each level) 9 x 1.7 mL

Analytes

Calcium (Ionized)	Lactate (Lactic Acid)	pCO ₂	Potassium
Chloride	Lithium	pH	Sodium
Glucose	Magnesium	pO ₂	

Use Bio-Rad's Blood Gas Controls on these popular instruments

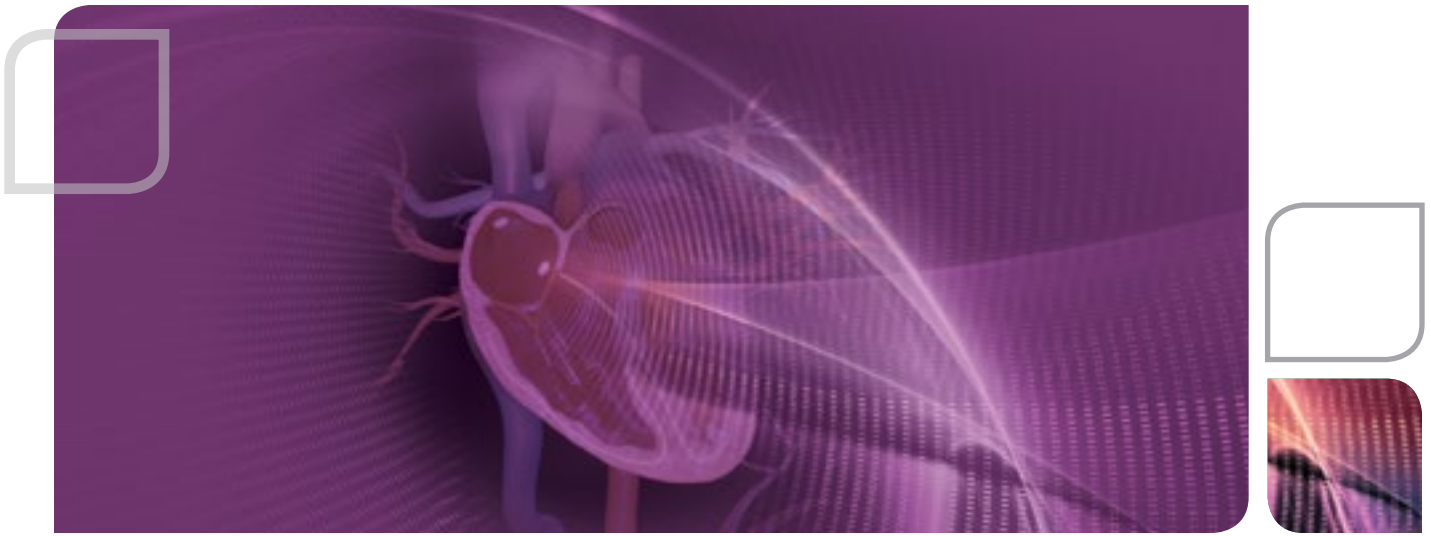
Manufacturer/Instrument(s)	Blood Gas	Blood Gas Plus E	Blood Gas Plus EGL
ESCHWEILER			
Combiline	●	●	●
Combisys II	●	●	●
Ecolyte		●	●
Ecosys II	●	●	●
Modular Pro	●	●	●
Instrumentation Laboratory			
IL943			●
IL1610/1620	●	●	●
IL1630/1640/1650		●	●
IL GEM PREMIER	●	●	●
Nova Biomedical			
Stat Profile 1/2		●	●
Stat Profile 3	●	●	●
Stat Profile 4/5		●	●
Nova Stat Profile 6			●
Stat Profile 7/9/10			●
Nova 8/Stat Profile Ultra			●
Nova pHox	●	●	
Radiometer			
ABL 5	●	●	●
ABL 50		●	●
ABL 80 Series		●	
ABL 500/510/520	●	●	●
ABL 505		●	●
ABL 600	●	●	
ABL 610/620	●		
ABL 700 Series	●	●	
ABL 800 Series	●	●	
Roche Diagnostics			
AVL Compact Series	●	●	
AVL OMNI	●	●	
Cobas b 121		●	
Siemens			
238/248	●	●	●
348		●	
614/634/644		●	●
800 Series	●	●	●
RAPIDLab 1200		●	
Other			
POCT Methods	●	●	●

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



Cardiac Assessment Controls

Helping laboratories address the growing complexity of measuring multiple Cardiac Markers at increasingly sensitive levels

Cardiac Assessment Controls

Liquichek Cardiac Markers Plus Control LT	14
Liquichek Cardiac Troponins Control	14
Liquichek Cardiac Markers Plus Control	15
Liquichek Cardiac Markers Control LT	15
Liquichek CK/LD Isoenzyme Control	15
Liquichek Homocysteine Control	16

Additional Information

Controls for Popular Instruments Chart	16
--	----

See Also

- **Page 27** for Liquichek D-dimer Control
- **Pages 73-78** IntelliQ Quality Control Products
- **Page 94** for Liquichek Cardiac Markers Plus Control LT in Dimension Vista vials

Did You Know?

- **Troponin I (TnI)** values are not standardized and the critical 99th-percentile upper reference limit is assay-specific
- **Bio-Rad** offers a full range of cardiac assessment controls that allows laboratories to select values of Troponin and other critical analytes best suited to their platform and patient population

For More Information

- **Brochure** Cardiac Assessment Controls (Q-1521)
- **Brochure** IntelliQ (Q-1665)

Liquichek Cardiac Markers Plus Control LT



- Choice of four Troponin levels (1, 1A, 1B, or 1C), with lower target values for all analytes
- Includes values for BNP, NT-proBNP and hs CRP
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 20 day open-vial stability at 2–8°C for most analytes

POCT Methods Listed

Ordering Information

Cat #	Description
146	Level 1 6 x 3 mL
27104	Level 1A 6 x 3 mL
27105	Level 1B 6 x 3 mL
27106	Level 1C 6 x 3 mL
147	Level 2 6 x 3 mL
148	Level 3 6 x 3 mL
149	Level Low 6 x 3 mL
146X	Level 1 MiniPak 1 x 3 mL
27104X	Level 1A MiniPak 1 x 3 mL
27105X	Level 1B MiniPak 1 x 3 mL
27106X	Level 1C MiniPak 1 x 3 mL
147X	Level 2 MiniPak 1 x 3 mL
148X	Level 3 MiniPak 1 x 3 mL
149X	Level Low MiniPak 1 x 3 mL



For Liquichek tube control, see page 77.

For Dimension Vista vials, see page 94.

Analytes

BNP	CRP	Myoglobin	Troponin I
CK (Total)	Digitoxin	NT-proBNP	Troponin T
CK-MB Isoenzyme	Homocysteine*		

*No claim is made for expected value or stability.

Liquichek Cardiac Troponins Control



- Dedicated Troponins control
- Monitors the precision of hs (high sensitivity) or next generation assays near the 99th percentile upper reference limit and across the assay range
- Value assigned for major analyzer systems
- Convenience of a liquid control
- 18 month shelf life at -20°C to -70°C
- Open-vial stability at 2–8°C
 - Troponin I: 14 days
 - Troponin T: 25 days

Ordering Information

Cat #	Description
12001084	Level 1 6 x 3 mL
12006239	Level 2 6 x 3 mL
12006369	Level 3 6 x 3 mL
12001085	Level 1 MiniPak 1 x 3 mL
12006370	Level 2 MiniPak 1 x 3 mL
12006371	Level 3 MiniPak 1 x 3 mL

Analytes

Troponin I
Troponin T

Need a wider range of CRP values?

Refer to page 59 for an overview of CRP levels in Bio-Rad Controls.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Cardiac Markers Plus Control



- Monitors precision of Troponin assays at higher levels
- Includes BNP and NT-proBNP
- Values provided for hs-CRP
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 20 day open-vial stability at 2–8°C for most analytes

POCT Methods Listed

Ordering Information

Cat #	Description
180	Trilevel (2 of each level) 6 x 3 mL
181	Level 1 6 x 3 mL
182	Level 2 6 x 3 mL
183	Level 3 6 x 3 mL
180X	Trilevel MiniPak (1 of each level) 3 x 3 mL

Analytes

BNP	CRP	Myoglobin	Troponin I
CK (Total)	Digitoxin	NT-proBNP	Troponin T
CK-MB Isoenzyme	Homocysteine*		

*No claim is made for expected values or stability.

Liquichek Cardiac Markers Control LT



- Designed to monitor precision of Roche Troponin T GEN 4 assays
- Value assigned solely for Roche systems
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 10 day open-vial stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
645	Trilevel (2 of each level) 6 x 3 mL
646	Level 1 6 x 3 mL
647	Level 2 6 x 3 mL
648	Level 3 6 x 3 mL
645X	Trilevel MiniPak (1 of each level) 3 x 3 mL

Analytes

CK-MB Isoenzyme	Homocysteine*	NT-proBNP	Troponin T
Digitoxin	Myoglobin	Troponin I*	

*No claim is made for expected values or stability.

Liquichek CK/LD Isoenzyme Control



- Monitors the precision of traditional and electrophoretic methods
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 10 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
671	Level 1 6 x 1 mL
672	Level 2 6 x 1 mL
670X	Bilevel MiniPak (1 of each level) 2 x 1 mL

Analytes

Albumin	CK-MB Isoenzyme	LD Electrophoresis	Protein (Total)
CK (Total)	Globulin	LDH	Protein Electrophoresis
CK Electrophoresis			

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Homocysteine Control



- Designed to monitor Homocysteine precision across a wide range of target values
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
287	Level 1 6 x 1 mL
288	Level 2 6 x 1 mL
289	Level 3 6 x 1 mL
288X	Trilevel MiniPak (1 of each level) 3 x 1 mL



For InteliQ Homocysteine Control, see page 75.

Analyte

Homocysteine

Use Bio-Rad's Cardiac Assessment Controls on these popular instruments

Manufacturer/Instrument(s)	Cardiac Markers Plus	Cardiac Markers Plus LT	Cardiac Markers LT	Cardiac Troponins	CK/LD Isoenzyme	Homocysteine
Abbott Diagnostics						
ARCHITECT Series	•	•			•	•
Beckman Coulter						
Access Series/LX i/UniCel Dxl	•	•		•		•
AU Series	•	•			•	•
CX/LX/UniCel DxC Series	•	•			•	•
Immage	•	•				
BioMérieux						
VIDAS		•				
LSI Medience						
PATHFAST		•				
Ortho Clinical Diagnostics						
VITROS Series	•	•			•	•
VITROS ECI	•	•			•	
Roche Diagnostics						
Cobas 6000 Series/COBAS INTEGRA	•	•	•	•	•	•
Elecsys Systems	•	•	•	•		
Hitachi Systems	•	•	•	•	•	
MODULAR Systems	•	•	•	•	•	•
Siemens						
ADVIA Series	•	•			•	
ADVIA Centaur Series	•	•		•	•	•
Atellica Solution		•				•
BN Series	•	•				
Dimension Vista	•	•		•	•	•
Dimension Series	•	•		•	•	
IMMULITE Series	•	•				•
Stratus	•	•				
Tosoh						
AIA Series	•	•				•
Other						
Electrophoresis					•	
LC/LC-MS/HPLC						•
POCT Methods	•	•				

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.



Chemistry Controls & Serum Indices

Maximum confidence, minimal hassle with clinical chemistry control solutions from Bio-Rad

Serum Chemistry Controls

Liquid Assayed Multiqual	18
Liquid Unassayed Multiqual	18
Lyphochek Assayed Chemistry Control	19
Lyphochek Unassayed Chemistry Control (Human)	19
Liquichek Unassayed Chemistry Control (Human)	20
Liquichek Lipids Control	20
Liquichek Pediatric Control	21
Liquichek Ethanol/Ammonia Control	21

Urine Chemistry Controls

Lyphochek Quantitative Urine Control	22
Liquichek Microalbumin Control	22
Liquichek Urine Chemistry Control	23

Additional Information

Controls for Popular Instruments Chart	23
--	----

Serum Indices

Liquichek Serum Indices	24
-----------------------------------	----

See Also

- **Pages 73-78** IntelliQ Quality Control Products
- **Page 84** Liquid Assayed Multiqual Premium
- **Pages 93-98** QC products in Dimension Vista vials

Did You Know?

- **A single control with a broad mix of analytes** can save time, provide QC coverage for a maximum number of tests, and minimize use of assay and single analyte control products

For More Information

- **Brochure** Independent Quality Control (Q-1128)
- **Booklet** Bio-Rad Quality Control Products in Dimension Vista Vials (Q-1214)
- **Brochure** Premium Controls for Immunochemistry (Q-1215)
- **Brochure** Liquichek Serum Indices (Q-1652)
- **Brochure** IntelliQ (Q-1665)

Liquid Assayed and Unassayed Multiqual



- Provides a comprehensive range of general chemistry analytes for integrated and modular platforms
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 30 day unopened stability at 2–8°C for most analytes
- 14 day open-vial stability at 2–8°C for most analytes

POCT Methods Listed for Liquid Assayed Multiqual

Ordering Information

Cat #	Description
Liquid Assayed Multiqual	
694	Level 1 12 x 3 mL
695	Level 2 12 x 3 mL
696	Level 3 12 x 3 mL
695X	Trilevel MiniPak (1 of each level) 3 x 3 mL
Liquid Unassayed Multiqual	
697	Level 1 12 x 10 mL
698	Level 2 12 x 10 mL
699	Level 3 12 x 10 mL
698X	Trilevel MiniPak (1 of each level) 3 x 10 mL



For InteliQ Assayed Multiqual Control, see page 74.

For Liquid Assayed Multiqual Premium, see page 84.

For Dimension Vista vials, see page 94.

Analytes

Acetaminophen	Chloride	Immunoglobulin A (IgA)	Protein (Total)
Acid Phosphatase (Total)	Cholesterol (HDL)	Immunoglobulin G (IgG)	Salicylate
Albumin	Cholesterol (LDL)	Immunoglobulin M (IgM)	Sodium
Alkaline Phosphatase (ALP)	Cholesterol (Total)	Iron	T3 (Total)
Alpha-1-Antitrypsin	Cholinesterase	Iron (TIBC)	T3 Uptake/T-Uptake
Alpha-Hydroxybutyrate	CK-MB Isoenzyme*	Iron (UIBC)	T4 (Free)
Dehydrogenase (αHBDH)	CO ₂	Lactate (Lactic Acid)	T4 (Total)
ALT/SGPT	Complement C3	Lactate Dehydrogenase (LDH)	Theophylline
Amikacin	Complement C4	LAP Arylamidase	Tobramycin
Amylase	Copper	Lipase	Transferrin
Amylase (Pancreatic)	Cortisol	Lithium	Triglycerides
Apolipoprotein A-1	Creatine Kinase (CK)	Magnesium	TSH
Apolipoprotein B	Creatinine	Osmolality	Urea
AST/SGOT	Digoxin	PAP*	Urea Nitrogen
Bilirubin (Direct)	Ethanol	Phenobarbital	Uric Acid
Bilirubin (Neonatal)	Ferritin	Phenytoin	Valproic Acid
Bilirubin (Total)	Gentamicin	Phospholipids	Vitamin B ₁₂
Calcium (Ionized)	GGT	Phosphorus	Zinc
Calcium (Total)	Globulin	Potassium	
Carbamazepine	Glucose	Prealbumin	
Ceruloplasmin	Haptoglobin	Protein Electrophoresis**	

*No claim is made for expected value or stability.

**Albumin, α-1-Globulin, α-2-Globulin, β-Globulin, γ-Globulin.

Need higher Bilirubin values suitable for monitoring adult liver disease and neonatal testing?

Please review Liquichek Pediatric Control on page 21.

Lyphocheck Assayed Chemistry Control and Lyphocheck Unassayed Chemistry Control (Human)



- Includes a comprehensive list of claimed analytes for general chemistry testing
- Provides good stability for enzymes and CO₂
- No special diluents are required for reconstitution
- Human serum based
- 3 year shelf life at 2–8°C
- 30 day frozen reconstituted stability for most analytes
- 7 day open-vial reconstituted stability at 2–8°C for most analytes

POCT Methods Listed for Lyphocheck Assayed Chemistry Control

Ordering Information

Cat #	Description	
Assayed Chemistry Control		
C-310-5	Level 1	12 x 5 mL
C-315-5	Level 2	12 x 5 mL
313X	Bilevel MiniPak (1 of each level)	2 x 5 mL
Unassayed Chemistry Control (Human)		
731	Level 1	25 x 5 mL
732	Level 2	25 x 5 mL
730X	Bilevel MiniPak (1 of each level)	2 x 5 mL
C-320-10	Level 1	50 x 10 mL
C-325-10	Level 2	50 x 10 mL
323X	Bilevel MiniPak (1 of each level)	2 x 10 mL

Analytes

Acetaminophen	CEA	hCG-β Subunit	PSA ¹
Acid Phosphatase (Total)	Ceruloplasmin	Immunoglobulin A (IgA)	Salicylate
Albumin	Chloride	Immunoglobulin G (IgG)	Sodium
Alkaline Phosphatase (ALP)	Cholesterol (HDL)	Immunoglobulin M (IgM)	T3 (Free)
Alpha-1-Antitrypsin	Cholesterol (LDL)	Iron	T3 (Total)
Alpha-Hydroxybutyrate Dehydrogenase (αHBDH)	Cholesterol (Total)	Iron (TIBC)	T3 Uptake/T-Uptake
Alphafetoprotein (AFP)	Cholinesterase	Iron (UIBC)	T4 (Free)
ALT/SGPT	CO ₂	Lactate (Lactic Acid)	T4 (Total)
Amylase	Complement C3	Lactate Dehydrogenase (LDH)	TBG
Amylase (Alpha)	Complement C4*	LAP Arylamidase	Theophylline
Amylase (Pancreatic)	Copper	Lipase	Tobramycin
Apolipoprotein A-1	Cortisol	Lithium	Transferrin
Apolipoprotein B	Creatine Kinase (CK)	Magnesium	Triglycerides
AST/SGOT	Creatinine	Osmolality	TSH
Bilirubin (Direct)	Digoxin	PAP	Urea
Bilirubin (Indirect)	Gentamicin	Phenobarbital	Urea Nitrogen
Bilirubin (Total)	GGT	Phenytoin	Uric Acid
Calcium	GLDH	Phosphorus	Valproic Acid
Calcium (Ionized)	Globulin	Potassium	Vancomycin
Carbamazepine	Glucose	Protein Electrophoresis	Vitamin B ₁₂
	Haptoglobin	Protein (Total)	Zinc

¹Available in Lyphocheck Assayed Chemistry Control only.
*No claim is made for expected value or stability.

Liquichek Unassayed Chemistry Control (Human)



- Unassayed control with larger 10 mL fill size for more cost effective serum chemistry testing
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 15 day open-vial stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
691	Level 1 25 x 10 mL
692	Level 2 25 x 10 mL
690X	Bilevel MiniPak (1 of each level) 2 x 10 mL

Analytes

Acetaminophen	Cholesterol (Total)	Iron (TIBC)	Salicylate
Acid Phosphatase (Total)	CO ₂	Iron (UIBC)*	Sodium
Albumin	Copper	Lactate (Lactic Acid)	T3 (Free)*
Aldolase*	Cortisol	Lactate Dehydrogenase (LDH)	T3 (Total)
Alkaline Phosphatase (ALP)	Creatine Kinase (CK)	LAP Arylamidase*	T3 Uptake/T-Uptake
Alpha-Hydroxybutyrate Dehydrogenase (αHBDH)	Creatinine	Lipase	T4 (Free)*
ALT/SGPT	Digoxin	Lithium	T4 (Total)
Amylase	Ethanol	Magnesium	Theophylline
AST/SGOT	Folate	Osmolality	Tobramycin
Bilirubin (Direct)*	Gentamicin	PAP*	Transferrin
Bilirubin (Indirect)*	GGT	Phenobarbital	Triglycerides
Bilirubin (Total)	GLDH*	Phenytoin	TSH
Calcium	Globulin	Phospholipids	Urea Nitrogen
Calcium (Ionized)*	Glucose	Phosphorus	Uric Acid
Carbamazepine	Immunoglobulin A (IgA)	Potassium	Valproic Acid
Chloride	Immunoglobulin G (IgG)	Protein (Total)	Vancomycin
Cholesterol (HDL)*	Immunoglobulin M (IgM)	Protein Electrophoresis	Vitamin B ₁₂
	Iron	Pseudocholinesterase	Zinc*

*No claims are made regarding performance or stability.

Liquichek Lipids Control



- Contains C-Reactive Protein in levels optimized for hs-CRP assays
- Higher Triglycerides and Cholesterol values to monitor precision of the full assay range
- Provides values for direct HDL
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
641	Level 1 6 x 3 mL
642	Level 2 6 x 3 mL
640X	Bilevel MiniPak (1 of each level) 2 x 3 mL

Analytes

Apolipoprotein A-1	C-Reactive Protein	Cholesterol (LDL)	Lipoprotein (a)
Apolipoprotein B	Cholesterol (HDL)	Cholesterol (Total)	Triglycerides

Need a wider range of CRP values?

Refer to page 59 for an overview of CRP levels in Bio-Rad Controls.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Pediatric Control



- Four Bilirubin parameters are available at two clinically significant levels for neonatal testing
- Suitable for monitoring high Bilirubin levels important for adult liver disease
- Liquid
- 3 year shelf life at -20°C to -70°C
- 3 month stability when stored unopened at 2–8°C
- 14 day open-vial stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
354	Level 1 6 x 4 mL
355	Level 2 6 x 4 mL
353X	Bilevel MiniPak (1 of each level) 2 x 4 mL



For Dimension Vista vials, see page 97.

Analytes

Bilirubin (Direct)	Caffeine	Magnesium	Sodium
Bilirubin (Indirect)	Calcium	Phenylalanine	Theophylline
Bilirubin (Neonatal)	Chloride	Potassium	
Bilirubin (Total)	Glucose		

Liquichek Ethanol/Ammonia Control



- Normal, elevated and toxic concentrations of Ethanol and Ammonia to monitor precision across the clinical range
- 2 year shelf life at 2–8°C
- 20 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
544	Level 1 6 x 3 mL
545	Level 2 6 x 3 mL
546	Level 3 6 x 3 mL
545X	Trilevel MiniPak (1 of each level) 3 x 3 mL



For IntelliQ Ethanol/Ammonia Control, see page 75.

For Dimension Vista vials, see page 95.

Analytes

Ammonia
Ethanol

Need an Alcohol control for mass spec?

Please review Liquichek Serum Volatiles Control on Page 111.

Lymphocheck Quantitative Urine Control



- Comprehensive analyte menu for quantitative assays that monitor the precision for general urine chemistry, hormones and esoteric testing including biogenic amines, metals and porphyrins
- Contains hCG
- Microalbumin available at levels found in early stages of proteinuria and associated nephropathy
- Value assigned for a comprehensive list of methods
- Human urine based
- 2 year shelf life at 2–8°C for most analytes
- 5 day reconstituted stability at 2–8° for most analytes

Ordering Information

Cat #	Description
376	Level 1, Normal 12 x 10 mL
377	Level 2, Abnormal 12 x 10 mL
375X	Bilevel MiniPak (1 of each level) 2 x 10 mL

Analytes

3-Methoxytyramine	Calcium	Hydroxyproline (Free)*	Potassium
5-Aminolevulinic Acid (ALA)	Chloride	Hydroxyproline (Total)	Pregnancy (Qualitative)
5-HIAA	Copper*	Iron	Pregnanetriol*
11-β-Hydroxy-Androsterone*	Coproporphyrin	Lead	Protein (Total)
11-β-Hydroxy-Etiocholanolone*	Cortisol	Magnesium	Sodium
17-Hydroxycorticosteroids	Creatine*	Mercury	Specific Gravity
11-Ketoandrosterone*	Creatinine	Metanephrine	Urea
11-Ketoetiocholanolone*	Cystine*	Metanephrine (Total)	Urea Nitrogen
17-Ketosteroids	Dehydroepiandrosterone (DHEA)*	Microalbumin	Uric Acid
17-Ketogenic Steroids	Dopamine	Norepinephrine	Uroporphyrins
Aldosterone	Epinephrine	Normetanephrine	Vanillylmandelic Acid (VMA)
AMP (Cyclic)*	Estriol (Total)*	Osmolality	Zinc*
Androsterone*	Etiocholanolone*	pH	
Arsenic	Glucose	Phosphorus	
Barbiturates*	Homovanillic Acid (HVA)	Porphyrins (Total)	

*No claims are made regarding performance or stability.

Liquichek Microalbumin Control



- Designed using human Albumin at levels found in early stage renal disease
- Values provided for a wide range of popular instrument platforms
- Liquid, human urine based
- 2 year shelf life at 2–8°C
- 90 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
378	Level 1 12 x 10 mL
379	Level 2 12 x 10 mL
374X	Bilevel MiniPak (1 of each level) 2 x 10 mL

Analytes

Creatinine
Microalbumin

Need additional analytes?

For more human urine analytes please refer to Liquichek Urine Chemistry Control on page 23.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Urine Chemistry Control



- Provides assayed values for urine tests commonly performed on chemistry analyzers and some manual methods
- Includes hCG, Amylase and Creatinine
- Liquid, human urine based
- 2 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
397	Level 1 12 x 10 mL
398	Level 2 12 x 10 mL
395X	Bilevel MiniPak (1 of each level) 2 x 10 mL



For Liquichek tube control see page 78.

For Dimension Vista vials, see page 98.

Analytes

Amylase	Glucose	Phosphorus	Specific Gravity
Calcium	Magnesium	Potassium	Urea
Chloride	Microalbumin	Pregnancy (Qualitative)	Urea Nitrogen
Cortisol	Osmolality	Protein (Total)	Uric Acid
Creatinine	pH	Sodium	

Looking for additional analytes?

An extensive list of general and esoteric urine analytes are also included in Lyphocheck Quantitative Urine Control on page 22.

Use Bio-Rad's Chemistry Controls on these popular instruments

Manufacturer/ Instrument(s)	Assayed & Unassayed Chemistry (Lyophilized)	Assayed & Unassayed Multiqual (Liquid)	Ethanol/ Ammonia	Unassayed Chemistry (Liquid)	Lipids	Microalbumin	Pediatric	Quantitative Urine	Urine Chemistry
Abbott Diagnostics									
ARCHITECT Series	●	●	●	●	●	●	●	●	●
Beckman Coulter									
AU Series	●	●	●	●	●	●	●	●	●
Image Systems		●			●	●		●	●
Synchron/UniCel DxC Series	●	●	●	●	●	●	●	●	●
Synchron/UniCel Dxl Series									●
Ortho Clinical Diagnostics									
VITROS Series	●	●	●	●	●	●	●	●	●
Roche Diagnostics									
cobas c Systems	●	●	●	●	●	●	●	●	●
COBAS INTEGRA	●	●	●	●	●	●	●	●	●
Elecsys Systems								●	●
Hitachi/MODULAR Systems	●	●	●	●	●	●	●	●	●
Siemens									
ADVIA Centaur Series	●	●						●	●
ADVIA Chemistry Series	●	●	●	●	●	●	●	●	●
Atellica Solution		●	●						●
BN Series	●	●			●	●		●	●
Dimension Series	●	●	●	●	●	●	●	●	●
Dimension Vista Systems	●	●	●	●	●	●	●	●	●
IMMULITE Series	●	●			●				
Other									
Enzymatic Method			●			●			
GC, GC-MS/GC-FID			●						
POCT Methods	●	●					●		●

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Serum Indices



- Intended for use as part of laboratory practice to monitor the response of the instrument to detect Hemolyzed, Icteric or Lipemic (HIL) samples

Hemolysis

- Prepared from human source material
- 6 month shelf life at -20°C to -70°C
- 5 day open-vial stability at 2-8°C
- 7 day closed-vial stability at 2-8°C
- 28 day frozen aliquot at -20°C to -70°C

Icterus, Lipemia and Non-interfered

- Prepared from human source material
- 2 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C
- 14 day closed-vial stability at 2-8°C
- 28 day frozen aliquot at -20°C to -70°C

Ordering Information

Cat #	Description
12012693	Hemolysis 6 x 4 mL
12012694	Icterus 6 x 4 mL
12012695	Lipemia 6 x 4 mL
12012696	Non-interfered 6 x 4 mL
12012697	Hemolysis MiniPak 1 x 4 mL
12012698	Icterus MiniPak 1 x 4 mL
12012699	Lipemia MiniPak 1 x 4 mL
12012700	Non-interfered MiniPak 1 x 4 mL

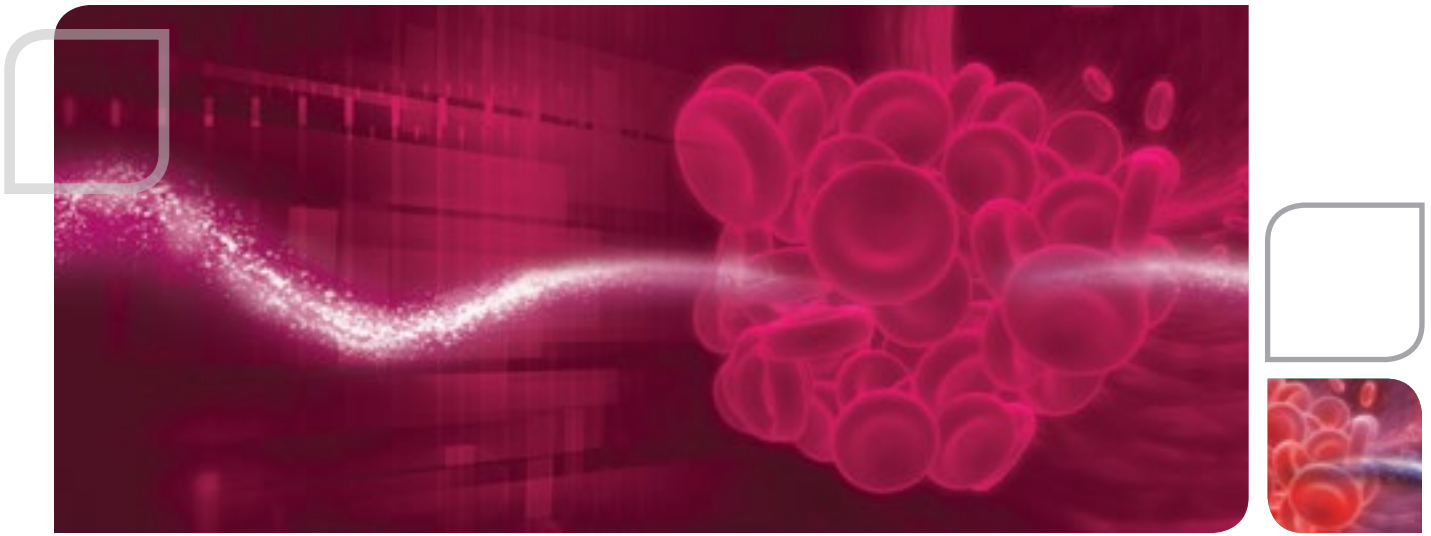
Interferent

Hemolysis
Icterus
Lipemia
Non-Interfered



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



Coagulation Controls

Values for coagulation times, factors and fragments across a wide range of platforms

Coagulation Controls

Lyphocheck Coagulation Control	26
Lyphocheck Hemostasis Control	26
Liquichek D-dimer Control	27

Additional Information

Controls for Popular Instruments Chart	28
--	----

See Also

- **Pages 13-16** for Cardiac Assessment Controls
- **Pages 41-48** for Hematology Controls

Did You Know?

- **Cost conscious** laboratories can take advantage of the 48 hour open-vial stability at 2–25°C for basic coagulation tests provided by Lyphocheck Coagulation Control

For More Information

- **Booklet** Hematology and Coagulation Controls (Q-1523)

Lyphocek Coagulation Control



- Extended open-vial stability reduces the cost of daily QC
- Three year shelf life allows laboratories to save money by performing fewer crossover studies
- Human based
- 3 year shelf life at 2–8°C
- 48 hour open-vial stability at 2–25°C

Ordering Information

Cat #	Description
744	Level 1 12 x 1 mL
745	Level 2 12 x 1 mL
746	Level 3 12 x 1 mL
745X	Trilevel MiniPak (1 of each level) 3 x 1 mL

Analytes

Activated Partial Thromboplastin Time (APTT)	Fibrinogen
Antithrombin III (AT III)	Prothrombin Time (PT)
	Thrombin Time (TT)

Lyphocek Hemostasis Control



- Supplements basic parameters provided by Lyphocek Coagulation Control with additional factors
- Provides QC for more specialized diagnostic testing
- Human based
- 3 year shelf life at 2–8°C
- 8 hour open-vial stability at 2–25°C, except for Protein S at 2–8°C

Ordering Information

Cat #	Description
597	Level 1 12 x 1 mL
598	Level 2 12 x 1 mL
599	Level 3 12 x 1 mL
598X	Trilevel MiniPak (1 of each level) 3 x 1 mL

Analytes

Activated Partial Thromboplastin Time (APTT)
 Antithrombin III (AT III)
 Factors II, V, VII, VIII, IX, X, XI and XII
 Fibrinogen
 Plasminogen

Protein C (Functional)
 Protein S (Functional)
 Prothrombin Time (PT)
 Thrombin Time (TT)



Did you know . . .

To improve patient safety, it's a good idea to end the day of testing with a QC evaluation.

Liquichek D-dimer Control



- Four level control monitoring assay precision across the critical range used in diagnosis of thrombotic events on multiple platforms
- Liquid, human-plasma based
- 3 year shelf life at -20°C to -70°C
- 15 day open-vial stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
27100	Level Low 6 x 1 mL
27101	Level 1 6 x 1 mL
27102	Level 2 6 x 1 mL
27103	Level 3 6 x 1 mL
27102X	Four Level MiniPak (1 of each level) 4 x 1 mL

Analyte

D-dimer

Liquichek D-dimer Control may be used with the following instruments and test methods

- Alere Triage
- BioMérieux VIDAS
- Diagnostica Stago STA Hemostasis System
- Instrumentation Laboratory (IL)
 - ACL ELITE/ELITE PRO
 - ACL TOP System
- Mitsubishi PATHFAST
- Roche Diagnostics
 - COBAS INTEGRA
 - Hitachi Systems
- Siemens
 - BCS/BCT
 - IMMULITE
 - Stratus CS
 - Sysmex CA Series
- POCT Methods

If your instrument model is not listed, please contact your nearest Bio-Rad office for current information.

Popular Instruments for D-dimer Assays

Instrument	Level Low	Level 1	Level 2	Level 3
bioMérieux	●	●	●	●
Biosite Triage Meter Pro		●	●	●
Diagnostica Stago	●	●	●	●
IL ACL	●	●	●	●
Mitsubishi PATHFAST	●	●	●	
Roche/Hitachi Cobas	●	●	●	●
Siemens BCS	●	●	●	●
Siemens Immulite 2000		●	●	●
Siemens Stratus	●	●	●	●
Sysmex CA Series	●	●	●	●

These are recommended levels. Refer to package insert for complete instrument listing.

Target Levels

	D-dimer ng/mL (FEU)*
Level Low	250
Level 1	550
Level 2	1600
Level 3	3200

The values listed are approximate targets. The actual observed values will vary depending upon lot number, analyzer, reagent, method, and calibrator.

*Fibrinogen Equivalent Units (FEU) = twice the mass of the D-DU (D-dimer units).

Use Bio-Rad's Coagulation Controls with these popular reagents

	PT	aPTT	Fibrinogen	AT III
Manufacturer/reagent(s)				
Diagon				
Dia-PT	●			
Dia-PT R	●			
Dia-PT (INR)	●			
Dia-PT LIQUID (INR)	●	●		
Dia-PTT		●		
Dia-PTT-LIQUID		●		
Dia-FIB			●	
Diagnostica Stago				
STA-Neoplastine CI Plus (INR)	●			
STA-Neoplastine CI Plus	●			
STA PTT Automate		●		
STA-Stachrom AT III				●
STA Fibrinogen			●	
Instrumentation Laboratory (IL)				
HemosIL RecombiPlasTin 2G (INR)	●			
HemosIL RecombiPlasTin 2G	●			
HemosIL APTT-SP (Synthetic Phospholipids)		●		
HemosIL SynthASiL		●		
HemosIL Antithrombin III (Liquid)				●
HemosIL Fibrinogen C			●	
HemosIL Q.F.A. Thrombin (Bovine)			●	
HemosIL RecombiPlasTin 2G (Derived)			●	
Siemens				
Dade Innovin	●			
Thromborel S	●			
Dade Innovin (INR)	●			
Thromborel S (INR)	●			
Dade Actin FS		●		
Dade Actin FSL		●		
Pathromtin SL		●		
Berichrom Antithrombin III				●
INNOVANCE Antithrombin				●
Multifibren U			●	
Dade Innovin (Derived)			●	
Dade Thrombin			●	

If your reagent is not listed, please contact your nearest Bio-Rad office for current information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



Diabetes/Hemoglobin Controls

Monitor Hemoglobin A1C testing with superior Quality Controls from Bio-Rad

Diabetes/Hemoglobin Controls

Liquichek Diabetes Control	30
Lyphochek Diabetes Control	30
Lyphochek Hemoglobin A1C Linearity Set	30
Lyphochek Hemoglobin A2 Control	31
Meter Trax Control	31

Additional Information

Controls for Popular Instruments Chart	32
--	----

See Also

- **Page 95** for Liquichek Diabetes Control in Dimension Vista vials

Did You Know?

- The Hemoglobin A1C values in our controls are listed in both NGSP (%) and IFCC (mmol/mol) units

For More Information

- **Booklet** Bio-Rad Quality Control Products in Dimension Vista Vials (Q-1214)
- **Brochure** Diabetes Controls and Lyphochek Hemoglobin A1C Linearity Set (Q-1520)

Liquichek Diabetes Control



- Designed to monitor the assay precision of Hemoglobin fractions associated with diabetes
- Liquid, human whole blood based
- 3 year shelf life at -10°C to -70°C
- 6 month shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
171	Level 1 6 x 1 mL
172	Level 2 6 x 1 mL
173	Level 3 6 x 1 mL
172X	Trilevel MiniPak (1 of each level) 3 x 1 mL



For Dimension Vista vials, see page 95.

Analytes

Hemoglobin (Total)
Hemoglobin A1C

Lyphocek Diabetes Control



- Lyophilized control available in two levels
- Human whole blood based control
- 3 year shelf life at 2–8°C
- 7 day reconstituted stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
740	Bilevel (3 of each level) 6 x 0.5 mL
740X	Bilevel MiniPak (1 of each level) 2 x 0.5 mL

Analytes

Hemoglobin (Total Glycated)* Hemoglobin A1C
Hemoglobin (Total) Hemoglobin F
Hemoglobin A1*

*No claims are made regarding performance or stability.

Lyphocek Hemoglobin A1C Linearity Set



- Intended to verify linearity throughout the reportable range of Hemoglobin A1C assays
- Human whole blood based
- 3 year shelf life at 2–8°C
- 7 day reconstituted stability at 2–8°C

Linearity Web software available on QCNet.com

Ordering Information

Cat #	Description
12000070	Set (1 of each level) 6 x 0.5 mL

Analyte

Hemoglobin A1C

Assayed values available for common analyzers:

Bio-Rad Analyzers

- D-10
- VARIANT
- VARIANT II Turbo

Other Analyzers

- Beckman Coulter SYNCHRON Systems
- Siemens ADVIA
- Siemens Dimension Series
- Roche COBAS INTEGRA & Hitachi Systems
- Tosoh G7 & G8

Expected Values for Hemoglobin A1C (%NGSP)*

Level 1	2.7 - 3.8%
Level 2	4.1 - 5.1%
Level 3	5.5 - 6.5%
Level 4	8.4 - 10%
Level 5	12 - 15%
Level 6	16 - 22%

*Ranges reflect typical recovery values for this product. Exact values may vary depending on test/assay methodology, instruments, reagent, system calibrators or laboratory technique.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Lyphocheck Hemoglobin A₂ Control



- Lyophilized
- Human whole blood based control
- 2 year shelf life at 2–8°C
- 21 day reconstituted stability at 2–8°C for most methods

Ordering Information

Cat #	Description
553	Bilevel (2 of each level) 4 x 0.5 mL
553X	Bilevel MiniPak (1 of each level) 2 x 0.5 mL

Assayed values available for common analyzers:

Bio-Rad

- D-10
- VARIANT
- VARIANT II

Other

- Sebia Hydragel
- Tosoh G7
- Trinity ultra 2

Analytes

Hemoglobin A₂
 Hemoglobin F
 Hemoglobin S

Meter Trax Control



- Easy-to-use control for Glucose, Hemoglobin and Hematocrit testing on point-of-care instruments
- Glucose and Hemoglobin stable for 31 days at 2–25°C after opening
- Hematocrit stable for 31 days at 2–8°C after opening
- 6 month shelf life at 2–8°C

POCT Methods Listed

Assayed values available for common analyzers:

- | | |
|--------------------|---------------------|
| ▪ Abbott iSTAT | ▪ i-SENS CareSens |
| ▪ BD Clay Adams | ▪ LifeScan OneTouch |
| ▪ Beckman StatSpin | ▪ Nova StatStrip |
| ▪ STI HemataSTAT | ▪ Roche Accu-Chek |
| ▪ HemoCue Hb | |

Ordering Information

Cat #	Description
970	Trilevel (2 of each level) 6 x 2 mL
971	Low Level. 6 x 2 mL
972	Mid Level 6 x 2 mL
973	High Level 6 x 2 mL
970X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

Glucose
 Hematocrit (HCT)
 Hemoglobin (Total)

Use Bio-Rad's Diabetes/Hemoglobin Controls on these popular instruments

Manufacturer/Instrument(s)	Diabetes (Liquid & Lyophilized)	Hemoglobin A1C Linearity	Hemoglobin A ₂	Meter Trax
Abbott Diagnostics				
ARCHITECT Series	●	●		
Beckman Coulter				
AU Series	●	●		
CX /LX/UniCel DxC Series	●	●		
Bio-Rad Laboratories				
VARIANT II Turbo	●	●		
VARIANT II	●	●	●	
D-10	●	●	●	
Ortho Clinical Diagnostics				
VITROS Series	●	●		
Roche Diagnostics				
Cobas 6000 Series/COBAS INTEGRA	●	●		
Hitachi Systems	●			
Sebia				
Hydragel			●	
Siemens				
ADVIA Series	●	●		
Dimension Vista	●	●		
Dimension Series	●	●		
Tosoh				
A1c	●			
G7	●	●	●	
Trinity Biotech				
ultra 2			●	
Other				
POCT Methods	●			●

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



External Quality Assurance Services (EQAS)

Participate in an internationally recognized quality assessment program

EQAS Programs

Blood Gas Program	34
Blood Typing Program	34
Cardiac Markers Program	34
Clinical Chemistry (Monthly) Program	35
Coagulation Program	35
Ethanol/Ammonia Program	35
Hematology Program	36
Hemoglobin Program	36
HIV/Hepatitis Program	36
Immunoassay (Monthly) Program	37
Lipids Program	37
Serum Proteins Program	38
Syphilis/Chagas Program	38
Therapeutic Drug Monitoring Program	38
ToRCH/EBV/MuMZ Program	39
Urinalysis Program	39
Urine Chemistry Program	39
EQAS Reports	40

Did You Know?

- **Accredited to ISO/IEC 17043:2010** “Conformity assessment–General requirements for proficiency testing”
- **Convenient electronic reporting options** to choose from (EQAS Online and EQAS Mobile)
- **Reference Method Values** provided for select programs

For More Information

- **Booklet** EQAS Programs (Q-1557)
- **Flyer** EQAS Online (Q-1175)
- **Brochure** EQAS Programs for Blood Banks (Q-1646)
- **Poster** EQAS Troubleshooting Poster (Q-1640)
- **Flyer** EQAS Troubleshooting Checklist (Q-1641)
- **Booklet** EQAS Explained (Q-1649)
- **Infographic** EQAS Programs (Q-1654)

Blood Gas Program



- Liquid, aqueous samples
- Comprehensive menu for external assessment of laboratory test performance of Blood Gas, Electrolytes, Glucose, Lactate and Magnesium
- 12-month cycle

Ordering Information

Catalog #
 BC31* 12 x 2.5 mL

Analytes

Calcium (Ionized)	pCO ₂
Chloride	pH
Glucose	pO ₂
Lactate (Lactic Acid)	Potassium
Magnesium	Sodium

Blood Typing Program



- Ideal for clinical lab, blood bank and transfusion center testing needs
- Barcoded and ready-to-use tubes for automated platforms
- 3 samples tested every 4 months
- Educational case studies with each shipment

Ordering Information

Catalog #	Description	Sample	Donor
12000837*	Shipment A	3 x 4 mL +	1 x 2 mL
12000838*	Shipment B	3 x 4 mL +	1 x 2 mL
12000839*	Shipment C	3 x 4 mL +	1 x 2 mL

Parameters

ABO Group	DAT (Direct Antiglobulin Test)
Antibody Identification	Rh(D)
Antibody Screen	<i>Pilot Analyte</i>
Compatibility (Cross-match)	Antigen Typing

Cardiac Markers Program



- Liquid, human plasma based
- Comprehensive menu of important cardiac assessment markers, plus D-dimer
- 12-month cycle

Ordering Information

Catalog #
 BC39* 12 x 1.5 mL

Analytes

BNP	Myoglobin
CK-MB	NT-proBNP
D-dimer	Troponin I
Homocysteine	Troponin T
hs-CRP	

*Aspects of the program are subcontracted from an approved supplier. Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Clinical Chemistry (Monthly) Program



- Lyophilized, human serum based
- 12-month cycle
- Submit results for the appropriate sample every month
- Reference Method Values provided for select analytes

Ordering Information

Catalog #
BC50 12 x 5 mL

Analytes

Acid Phosphatase (Total)	Calcium (Total)	Iron	Sodium
Alanine Aminotransferase (ALT/SGPT)	Carbon Dioxide (CO ₂) Chloride	Iron Binding Capacity, Total (TIBC)	Thyroid Stimulating Hormone (TSH)
Albumin	Cholesterol (HDL)	Iron Binding Capacity, Unsaturated (UIBC)	Thyroxine (T4), Free
Alkaline Phosphatase (ALP)	Cholesterol (LDL)	Lactate (Lactic Acid)	Thyroxine (T4), Total
Amylase (Pancreatic)	Cholesterol (Total)	Lactate Dehydrogenase (LDH)	Transferrin
Amylase (Total)	Cholinesterase	Lipase	Triglycerides
Aspartate Aminotransferase (AST/SGOT)	Copper	Lithium	Triiodothyronine (T3), Free
Bile Acid	Cortisol	Magnesium	Triiodothyronine (T3), Total
Bilirubin (Direct)	Creatine Kinase (CK)	Osmolality	Urea
Bilirubin (Indirect)	Creatinine	Phosphorus	Urea Nitrogen
Bilirubin (Total)	Gamma Glutamyl Transferase (GGT)	Potassium	Uric Acid
Calcium (Ionized)	Glucose	Protein (Total)	Zinc

Coagulation Program



- Lyophilized, human plasma based
- 11 parameters for external assessment of laboratory coagulation test performance
- 12-month cycle

Ordering Information

Catalog #
BC34* 12 x 1 mL

Analytes

Antithrombin III (ATIII)	Factor VIII	Protein C	Thrombin Time (TT)
APTT	Fibrinogen	Protein S	Von Willebrand Factor (vWF)
D-dimer	INR	PT	

Ethanol/Ammonia Program



- Liquid, human serum based
- Clinically relevant levels of serum Ethanol and Ammonia
- 12-month cycle

Ordering Information

Catalog #
BC35* 12 x 3 mL

Analytes

Ammonia
Ethanol

*Aspects of the program are subcontracted from an approved supplier. Refer to myInSerts.com or the package insert of currently available lots for specific analyte and stability claims.

Hematology Program



- Liquid product with human RBCs
- Choice of 11 basic hematology parameters
- For use on manual or automated analyzers
- Convenience of primary pierceable tubes
- 12-month cycle consisting of 4 separate shipments
- Submit results for the appropriate sample every month

Ordering Information

Catalog #	Description
BC90A*	Shipment A 3 x 2 mL
BC90B*	Shipment B 3 x 2 mL
BC90C*	Shipment C 3 x 2 mL
BC90D*	Shipment D 3 x 2 mL

Parameters

Hematocrit (HCT)	Platelets (PLT)
Hemoglobin (HGB)	Red Blood Cells (RBC)
Mean Corpuscular Hemoglobin (MCH)	Red Blood Cell Distribution Width (RDW)
Mean Corpuscular Hemoglobin Concentration (MCHC)	Red Blood Cell Distribution Width-SD (RDW-SD)
Mean Corpuscular Volume (MCV)	White Blood Cells (WBC)
Mean Platelet Volume (MPV)	

Hemoglobin Program



- Lyophilized, human whole blood based
- Includes HbA1C and HbA₂
- 12-month cycle
- Submit results for the appropriate sample every month
- **Reference Method Values** provided for Hemoglobin A1C

Ordering Information

Catalog #	Description
BC80	. . . . . 12 x 0.5 mL

Analytes

Hemoglobin A1C	Hemoglobin (Total Glycated)
Hemoglobin A ₂	

HIV/Hepatitis Program



- Liquid, human source material
- Suitable for serological tests used to detect key HIV and Hepatitis viral antibodies and antigens
- Qualitative and quantitative results reporting available
- Submit results and view reports each month through EQAS Online

Ordering Information

Catalog #	Description
12000815	. . . . . 12 x 2 mL

Analytes

Anti-HAV	Anti-HCV	Anti-HTLV-I	HBeAg
Anti-HBc	Anti-HIV-1	HAV IgG	HBsAg
Anti-HBe	Anti-HIV-1/2	HAV IgM	HIV-1 Ag
Anti-HBs	Anti-HIV-2	HBc IgM	

*Aspects of the program are subcontracted from an approved supplier. Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Immunoassay (Monthly) Program



- Lyophilized, human serum based
- Comprehensive menu of the most commonly tested immunoassay analytes
- 12-month cycle
- Submit results for the appropriate sample every month

Ordering Information

Catalog #
BC75 12 x 5 mL

Analytes

11-Deoxycortisol	DHEA	Phenobarbital	Thyroid Stimulating Hormone (TSH)
17- α -OH-Progesterone	DHEA Sulfate	Phenytoin	Thyroxine Binding Globulin (TBG)
25-OH Vitamin D	Digoxin	Plasma Renin Activity	Thyroxine, Free (FT ₄)
β -2 Microglobulin	Estradiol	Progesterone	Thyroxine (T ₄), Total
ACE	Estriol, Free (UE ₃)	Prolactin	Transferrin
ACTH	Ferritin	PSA (Free)	Triiodothyronine, Free (FT ₃)
Aldosterone	Folate	PSA (Free/Total Ratio)	Triiodothyronine (T ₃), Total
Alphafetoprotein (AFP)	Follicle Stimulating Hormone (FSH)	PSA (Total)	Valproic Acid
Androstenedione	Gastrin	Renin	Vitamin B ₁₂
C-Peptide	hCG	S100 Protein	<i>Pilot Analytes</i>
CA 15-3	hGH	Sex Hormone Binding Globulin (SHBG)	Calcitonin
CA 19-9	Immunoglobulin E (IgE)	T3 Uptake	Fructosamine
CA 27.29	Insulin	T-Uptake	Testosterone (Free)
CA 125	Intact PTH	Testosterone	
Carbamazepine	LH	Theophylline	
Carcinoembryonic Antigen (CEA)	NSE	Thyroglobulin (Tg)	
Cortisol			

Lipids Program



- Liquid, human serum based
- Comprehensive menu of lipid profile analytes
- 12-month cycle
- Submit results for the appropriate sample every month

Ordering Information

Catalog #
BC47* 12 x 3 mL

Analytes

Apolipoprotein A-1	Lipoprotein (a)
Apolipoprotein B	Triglycerides
Cholesterol (HDL)	<i>Pilot Analyte</i>
Cholesterol (LDL)	Cholesterol (non-HDL)
Cholesterol (Total)	

*Aspects of the program are subcontracted from an approved supplier.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Serum Proteins Program



- Lyophilized, human serum based
- Comprehensive menu for external assessment of serum protein assays
- 12-month cycle
- Submit results for the appropriate sample every month

Ordering Information

Catalog #
 BC23 12 x 1 mL

Analytes

α-1 Acid Glycoprotein	C-Reactive Protein (CRP)	Immunoglobulin E (IgE)	Protein (Total)
α-1 Antitrypsin	Ceruloplasmin	Immunoglobulin G (IgG)	Rheumatoid Factor (RF)
α-2 Macroglobulin	Complement C3	Immunoglobulin M (IgM)	Transferrin
β-2 Microglobulin	Complement C4	Kappa Light Chain	<i>Pilot Analyte</i>
Albumin	Haptoglobin	Lambda Light Chain	Anti-DNase B
Antistreptolysin O (ASO)	Immunoglobulin A (IgA)	Prealbumin	

Syphilis/Chagas Program



- Liquid, human source material
- Suitable for serological tests detecting *Treponema pallidum*, Non-Treponemal and *Trypanosoma cruzi* antibodies
- 12-month cycle
- Qualitative and quantitative results reporting available
- Submit results and view reports each month through EQAS Online

Ordering Information

Catalog #
 12000833 12 x 1.5 mL

Analytes

Non-Treponemal Antibodies	<i>Treponema pallidum</i> Antibodies
<i>Treponema pallidum</i> IgG	<i>Trypanosoma cruzi</i> Antibodies

Therapeutic Drug Monitoring Program



- Lyophilized, human serum based
- Analytes targeted at therapeutic, sub-therapeutic and toxic levels
- 12-month cycle
- Submit results for the appropriate sample every month
- **Weighed-in Values** provided for select analytes at end of cycle

Ordering Information

Catalog #
 BC10 12 x 5 mL

Analytes

Acetaminophen	Digoxin	Phenobarbital	Tricyclic Antidepressants (TCA)
Amikacin	Ethosuximide	Phenytoin	Screen
Amitriptyline	Gentamicin	Primidone	Valproic Acid
Caffeine	Lithium	Salicylate	Vancomycin
Carbamazepine	Methotrexate	Theophylline	
Cyclosporine	Nortriptyline	Tobramycin	

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

ToRCH/EBV/MuMZ Program



- Liquid, human source material
- Suitable for serological tests used to detect pediatric diseases and congenital infections
- Qualitative and quantitative results reporting available
- Submit results and view reports each month through EQAS Online

Ordering Information

Catalog #
12000825..... 12 x 2 mL

Analytes

Cytomegalovirus (CMV) IgG
Cytomegalovirus (CMV) IgM
Epstein-Barr Virus (EBNA) IgG
Epstein-Barr Virus (VCA) IgG
Epstein-Barr Virus (VCA) IgM
Herpes Simplex Virus (HSV-1) IgG
Herpes Simplex Virus (HSV-1/2) IgG
Herpes Simplex Virus (HSV-2) IgG

Measles Virus (Rubeola) IgG
Mumps Virus IgG
Rubella Virus IgG
Rubella Virus IgM
Toxoplasma gondii (Toxo) IgG
Toxoplasma gondii (Toxo) IgM
Varicella Zoster Virus (VZV) IgG

Urinalysis Program



- Liquid matrix
- Suitable for manual and automated dipstick analysis in both clinical and point-of-care testing (POCT)
- Submit qualitative results and view reports each month through EQAS Online

Ordering Information

Catalog #
12000810..... 12 x 12 mL

Analytes

Albumin
Albumin-to-Creatinine Ratio
Bilirubin
Blood/Hemoglobin
Creatinine
Glucose
Ketones
Leukocytes

Nitrite
pH
Pregnancy (hCG)
Protein (Total)
Protein-to-Creatinine Ratio
Specific Gravity
Urobilinogen

Urine Chemistry Program



- Lyophilized, human urine based
- Matrix appropriate samples include basic and specialty urine chemistry analytes
- 12-month cycle
- Submit results for the appropriate sample every month

Ordering Information

Catalog #
BC45..... 12 x 10 mL

Analytes

5-Hydroxyindoleacetic Acid (5-HIAA)
Calcium (Total)
Chloride
Cortisol (Free)
Creatinine
Dopamine

Epinephrine
Glucose
Homovanillic Acid (HVA)
Magnesium
Metanephrine
Microalbumin (Albumin)
Norepinephrine

Normetanephrine
Osmolality
Phosphorus
Potassium
Protein (Total)
Sodium

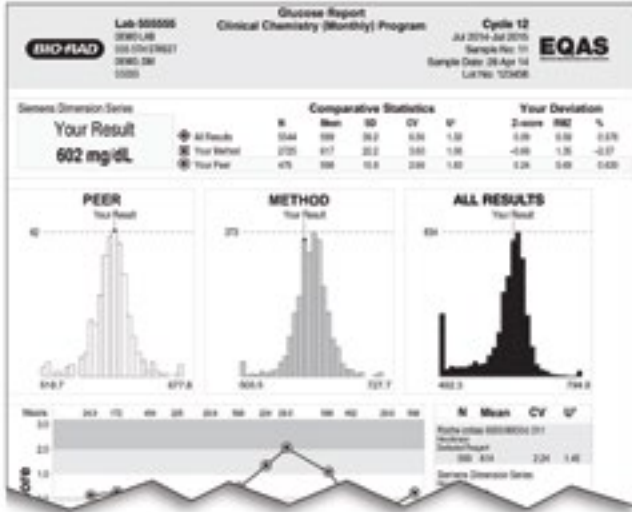
Urea Nitrogen
Uric Acid
Vanillylmandelic Acid (VMA)
Pilot Analyte
Urea

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

EQAS Reports

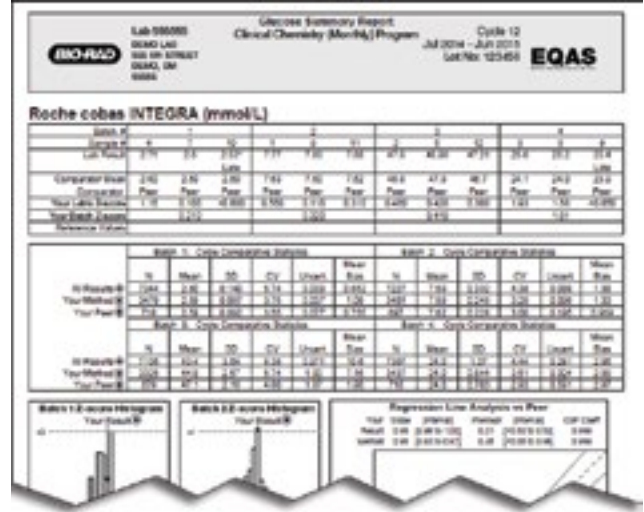
Participants receive twelve sample reports and one end-of-cycle report over each program cycle. These detailed reports are presented in an easy-to-read graphic format. Sample reports are available online within three days of the statistical analysis. Additional special reports (Quality Specification, Subgroup and Instrument/Method Summary) are available to registered participants.

Quantitative Reports



Sample Report

Detailed individual statistical analyses and peer group comparisons are provided.



End-of-Cycle Report

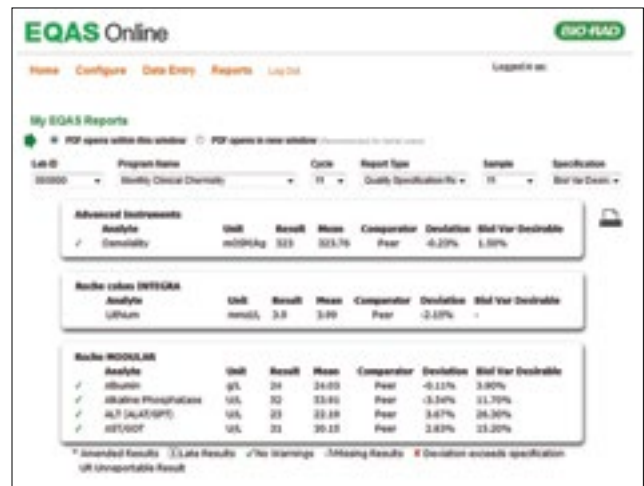
An overall assessment of laboratory performance over the entire cycle in terms of bias among participating laboratories is presented.

Qualitative Report



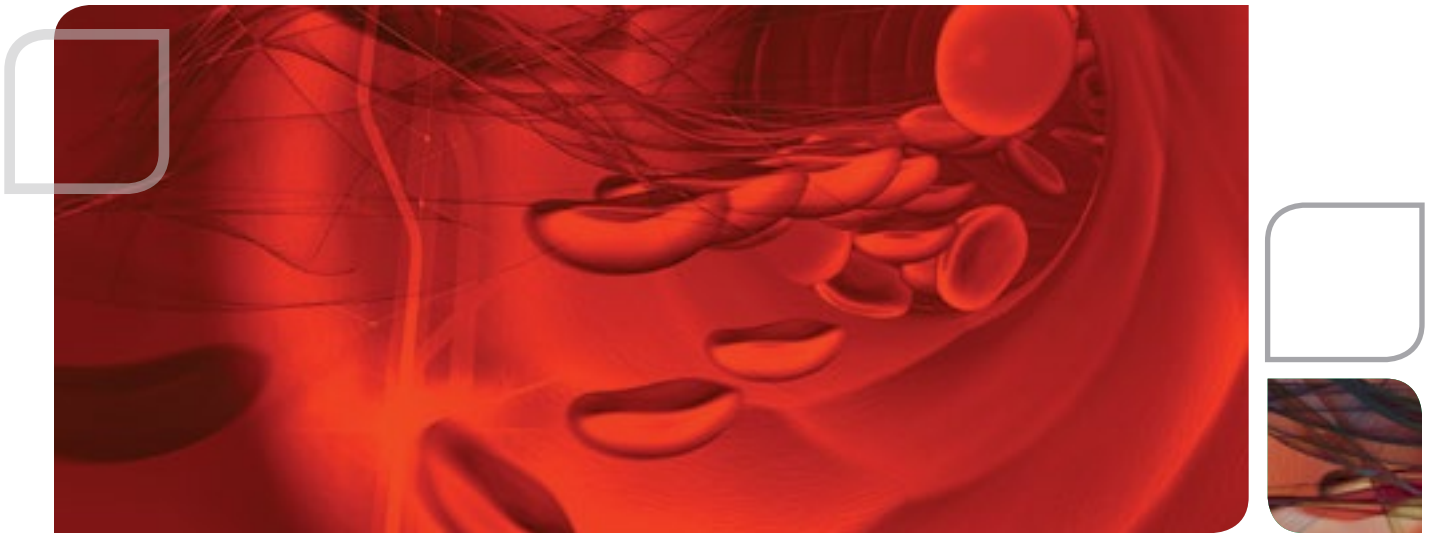
Sample Report

These reports provide clear and concise information about your qualitative test laboratory performance in the form of histograms and modified Levey-Jennings charts. They include detailed information about the distribution of the qualitative responses and the peer group consensus.



Quality Specification Report

An evaluation, in terms of percentage deviation, against set performance criteria from key regulatory and scientific organizations (ex. CLIA, BV, RCPA, IQMH, GOST and RiikBÄK), is available online for each sample analyte.



Hematology Controls

Hematology controls for multi-parameter analysis across a wide variety of instrument platforms

Hematology Controls

Liquichek Hematology Control (A)	42
Liquichek Reticulocyte Control (A)	42
Liquichek Reticulocyte Control (A-I)	42
Liquichek Hematology Control (C)	43
Liquichek Reticulocyte Control (C)	43
Liquichek Hematology Control (S)	44
Liquichek Reticulocyte Control (S)	44
Liquichek Hematology Control (X)	45
Liquichek Reticulocyte Control (X)	45
Liquichek Hematology-16 Control	46
Liquichek Hematology-16T Control	46
Liquichek Sedimentation Rate Control	47

Additional Information

Controls for Popular Instruments Chart	48
--	----

Did You Know?

- **Bio-Rad offers** Hematology controls optimized for Abbott, Beckman Coulter, Siemens and Sysmex test systems

For More Information

- **Booklet** Hematology and Coagulation Controls (Q-1523)

Liquichek Hematology Control (A)



- Provides assayed values for the Abbott CELL-DYN 3200, 3500, and CELL-DYN Ruby analyzers with 3-part and 5-part differential technology
- Blood cells in plasma-like fluid
- 78 day shelf life at 2–8°C
- 8 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
865	Trilevel (4 of each level) 12 x 3 mL
866	Low 4 x 3 mL
867	Normal 4 x 3 mL
868	High 4 x 3 mL
865X	Trilevel MiniPak (1 of each level) 3 x 3 mL

Parameters

Basophils (BASO)	Neutrophils (NEUT)
% Basophils	% Neutrophils
Eosinophils (EOS)	Nucleated Red Blood Cells (NRBC)
% Eosinophils	Nucleated Red Blood Cells/100 WBC (NRBC/WBC%)
Granulocytes (GRAN)	Platelecrit (PCT)*
Hematocrit (HCT)	Platelet Volume Distribution Width (PDW)*
Hemoglobin (Total)	Platelets (PLT)
Lymphocytes (LYMPH)	Platelets Impedance Method (PLTi)
% Lymphocytes	Red Blood Cell Distribution Width (RDW)
Mean Corpuscular Hemoglobin (MCH)	Red Blood Cells (RBC)
Mean Corpuscular Hemoglobin Concentration (MCHC)	Red Blood Cells, Optical (RBCo)
Mean Corpuscular Volume (MCV)	White Blood Cells (WBC)
Mean Platelet Volume (MPV)	- White Optical Count (WOC)
MID	- White Impedance Count (WIC)
Monocytes (MONO)	- Nucleated Optical Count (NOC)
% Monocytes	

*Values reported by the analyzer are not for diagnostic use



Liquichek Reticulocyte Control (A)

- Assayed whole blood reticulocyte control for use with the Abbott CELL-DYN 3200 analyzers
- Red cells suspended in plasma-like fluid
- 75 day shelf life at 2–8°C
- 16 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
854	Level 1 4 x 3 mL
855	Level 2 4 x 3 mL
855X	Bilevel MiniPak (1 of each level) 2 x 3 mL



Liquichek Reticulocyte Control (A-I)

- Assayed reticulocyte control for use with the CELL-DYN Sapphire hematology analyzer
- Red cells suspended in plasma-like fluid
- 78 day shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
916	Level 1 4 x 3 mL
917	Level 2 4 x 3 mL
915X	Bilevel MiniPak (1 of each level) 2 x 3 mL

Parameters for Liquichek Reticulocyte Control (A) and Liquichek Reticulocyte Control (A-I)

Immature Reticulocyte Fraction (IRF)
 Red Blood Cells (RBC)*
 Reticulocyte (Retic)

*Available in Liquichek Reticulocyte Control (A-1) only.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Hematology Control (C)



- Assayed hematology control for monitoring values obtained on Beckman Coulter hematology analyzers with complete CBC and VCS 5-part differential technology
- Assayed values for the UniCel DxH 600/800, LH 500 and LH 700 analyzers
- Blood cells suspended in plasma-like fluid
- 105 day shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C or 14 thermal cycles, whichever comes first

Ordering Information

Cat #	Description	
904	Trilevel (4 of each level)	12 x 5 mL
905	Low	4 x 5 mL
906	Normal	4 x 5 mL
907	High	4 x 5 mL
904X	Trilevel MiniPak (1 of each level)	3 x 5 mL

Parameters

Basophils (BA)
Eosinophils (EO)
Hematocrit (HCT)
Hemoglobin (HGB)
Lymphocytes (LY)

Mean Corpuscular Hemoglobin (MCH)
Mean Corpuscular Hemoglobin Concentration (MCHC)
Mean Corpuscular Volume (MCV)
Mean Platelet Volume (MPV)

Monocytes (MO)
Neutrophils (NE)
Platelecrit (PCT)*
Platelet Distribution Width (PDW)*
Platelets (PLT)
RDW-SD[†]
Red Blood Cell Distribution Width (RDW)
Red Blood Cells (RBC)
White Blood Cells (WBC)

*Values reported by analyzer are not for diagnostic use.
[†]For Beckman Coulter LH and UniCel DxH 600/800 only.

Liquichek Reticulocyte Control (C)



- Assayed hematology control for monitoring values obtained on Beckman Coulter analyzers using VCS technology
- Red cells suspended in plasma-like fluid
- 14 day open-vial stability at 2–8°C
- 75 day shelf life at 2–8°C

Ordering Information

Cat #	Description	
826	Level 1	4 x 4 mL
827	Level 2	4 x 4 mL
828	Level 3	4 x 4 mL
827X	Trilevel MiniPak (1 of each level)	3 x 4 mL

Parameters

Immature Reticulocyte Fraction (IRF)
Mean Reticulocyte Volume (MRV)
Red Blood Cells (RBC)
Reticulocyte (Retic)

Why use a Combination Hematology/Reticulocyte control if you really don't need it?

Use one of Bio-Rad's separate Liquichek Reticulocyte Controls when you need one.

Liquichek Hematology Control (S)



- An assayed hematology control for monitoring values obtained on Siemens analyzers with 3-part and 5-part differential technology
- Blood cells suspended in plasma-like fluid
- 80 day shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
449	Trilevel (4 of each level) 12 x 3.5 mL
449X	Trilevel MiniPak (1 of each level) 3 x 3.5 mL

Parameters

Basophils (BASO)	Mean Platelet Volume (MPV)
Cellular Hemoglobin Concentration Mean (CHCM)	Monocytes (MONO)
Eosinophils (EOS)	NEUT X
Hematocrit (HCT)	NEUT Y
Hemoglobin (HGB)	Neutrophils (NEUT)
Hemoglobin Concentration Distribution Width (HDW)	Platelets (PLT)
Large Unstained Cells (LUC)	Red Blood Cell Distribution Width (RDW)
Lymphocytes (LYMPH)	Red Blood Cells (RBC)
Mean Corpuscular Hemoglobin (MCH)	White Blood Cells (WBC)
Mean Corpuscular Hemoglobin Concentration (MCHC)	White Blood Cells Counts Measured in Perox Channel (WBCP Perox)
Mean Corpuscular Volume (MCV)	

Liquichek Reticulocyte Control (S)



- Assayed hematology control monitoring values obtained on Siemens analyzers with automated reticulocyte counting methods
- Red cells suspended in plasma-like fluid
- 80 day shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
921	Level 1 4 x 4 mL
922	Level 2 4 x 4 mL
923	Level 3 4 x 4 mL
922X	Trilevel MiniPak (1 of each level) 3 x 4 mL

Parameters

Cellular Hemoglobin Concentration Mean of Gated Red Blood Cells (CHCMg)	Mean Hemoglobin Content of All Gated Red Cells (CHg)
Cellular Hemoglobin Concentration Mean of Reticulocytes (CHCMr)	Mean Hemoglobin Content of Reticulocytes (CHr)
Mean Corpuscular Volume of Gated Red Blood Cells (MCVg)	Reticulocyte (Retic)
Mean Corpuscular Volume of Reticulocytes (MCVr)	Total Red Blood Cell Counts in Retic Channel (Retic RBC)

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Hematology Control (X)



- An assayed hematology control for use with Sysmex hematology analyzers with 5-part differential technology
- Blood cells in plasma-like fluid
- 80 day shelf life at 2–8°C
- Stable for 15 days open-vial or 15 samplings, whichever comes first, when stored at 2–8°C

Ordering Information

Cat #	Description
487	Trilevel (4 of each level) 12 x 4.5 mL
487X	Trilevel MiniPak (1 of each level) 3 x 4.5 mL

Parameters

- | | |
|--|---|
| Basophils (BASO) | Monocytes (MONO) |
| Eosinophils (EOS) | Neutrophils (NEUT) |
| Hematocrit (HCT) | Nucleated Red Blood Cells (NRBC)* |
| Hemoglobin (HGB) | Platelets (PLT) |
| Lymphocytes (LYMPH) | Platelets, Optical Count (PLT-o)* |
| Mean Corpuscular Hemoglobin (MCH) | Red Blood Cell Distribution Width-CV (RDW-CV) |
| Mean Corpuscular Hemoglobin Concentration (MCHC) | Red Blood Cell Distribution Width-SD (RDW-SD) |
| Mean Corpuscular Volume (MCV) | Red Blood Cells (RBC) |
| Mean Platelet Volume (MPV) | White Blood Cells (WBC) |

*No claims made for expected value or stability.

Liquichek Reticulocyte Control (X)



- Assayed reticulocyte control for use with Sysmex hematology analyzers with automated reticulocyte counting methods
- Red cells suspended in plasma-like fluid
- 80 day shelf life at 2–8°C
- Stable for 15 days open-vial or 15 samplings, whichever comes first, when stored at 2–8°C

Ordering Information

Cat #	Description
926	Level 1 4 x 3 mL
927	Level 2 4 x 3 mL
928	Level 3 4 x 3 mL
927X	Trilevel MiniPak (1 of each level) 3 x 3 mL

Parameters

- Immature Reticulocyte Fraction (IRF)
- Red Blood Cells (RBC)
- Reticulocyte (Retic)

Liquichek Hematology-16 Control



- Specifically designed for use on most hematology analyzers that measure up to 16 parameters and 3-part white blood cell differentials
- Can be used on either manual sampling or automatic cap-piercing instruments
- Assayed for most 2-16 parameter instruments
- Blood cell suspension
- 160 day shelf life at 2–8°C
- 21 day open-vial stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
760	Trilevel (2 of each level) 6 x 3 mL
761	Low 6 x 3 mL
762	Normal 6 x 3 mL
763	High 6 x 3 mL
760X	Trilevel MiniPak (1 of each level) 3 x 3 mL

Parameters

Granulocytes (GRAN)	Mean Platelet Volume (MPV)
Hematocrit (HCT)	Mid-Sized Cells (MID)
Hemoglobin (HGB)	Monocytes (MONO)
Lymphocytes (LYMPH)	Platelets (PLT)
Mean Corpuscular Hemoglobin (MCH)	Red Blood Cell Distribution Width (RDW)
Mean Corpuscular Hemoglobin Concentration (MCHC)	Red Blood Cells (RBC)
Mean Corpuscular Volume (MCV)	White Blood Cells (WBC)

Liquichek Hematology-16T Control



- A hematology reference control used in monitoring determinations of blood cell values on Sysmex and Abbott 3-part differential hematology analyzers
- Blood cells in plasma-like fluid
- 105 day shelf life at 2–8°C
- 14 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
144	Trilevel (4 of each level) 12 x 2.5 mL
144X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Parameters

Granulocytes (GRAN)	MXD (W-MCC & W-MCR)
Hematocrit (HCT)	NEUT (W-LCC & W-LCR)
Hemoglobin (Total)	Platelets (PLT)
LYMPH (W-SCC & W-SCR)	Red Blood Cell Distribution Width (RDW)
Lymphocytes (LYMPH)	Red Blood Cell Distribution Width-CV (RDW-CV)
Mean Corpuscular Hemoglobin (MCH)	Red Blood Cell Distribution Width-SD (RDW-SD)
Mean Corpuscular Hemoglobin Concentration (MCHC)	Red Blood Cells (RBC)
Mean Corpuscular Volume (MCV)	Spun Hematocrit (Spun HCT)
Mean Platelet Volume (MPV)	White Blood Cells (WBC)
MID	

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Sedimentation Rate Control



- Bilevel, human whole blood control designed to monitor the precision of both manual and automated methods for measuring erythrocyte sedimentation rates
- Assayed for over 20 automated and manual methods, including Westergren and Wintrobe
- Stabilized human red blood cells in suspensions
- 31 day open-vial stability at 18–30°C
- 540 day shelf life at 18–30°C

Ordering Information

Cat #	Description
514	Level 1 4 x 9 mL
515	Level 2 4 x 9 mL
514X	Bilevel MiniPak (1 of each level) 2 x 9 mL

Parameter

Erythrocyte Sedimentation Rate (ESR)

Liquichek Sedimentation Rate Control may be used with the following instruments and test methods

- BD Seditainer
- Diesse Mini-Ves
- Diesse Ves-Matic 10
- Diesse Ves-Matic 20/20 Plus
- Diesse Ves-Matic 30/30 Plus
- Diesse Ves-Matic 60/60 Plus
- Diesse Ves-Matic Cube 30
- Diesse Ves-Matic Cube 80/200
- Kimble-Chase Disposable Westergren Tubes
- Vital Diagnostics Excyte M, 10, 20, 40
- Vital Diagnostics Excyte Mini
- Vital Diagnostics MICROsed-System
- Vital Diagnostics Monitor Series
- Polymedco Sedimat 60
- Polymedco Sediplast
- RR Mechatronics StaRRsed
- Sarstedt S-Sedivette
- Streck ESR-Auto Plus
- Westergren (Modified)
- Wintrobe

If your instrument model is not listed, please contact your nearest Bio-Rad office for current information.

Use Bio-Rad's Hematology Controls on these popular instruments

- Use for CBC and 5-Part Differential Parameters
- ▲ Use for CBC and 3-Part Differential Parameters
- ◆ Use for Reticulocyte Counts
- ▷ Use for CBC Parameters Only
- ❖ Use for Manual Methods
- ✓ POCT Methods Available

Manufacturer/Instrument(s)	Hematology (A)	Reticulocyte (A)	Reticulocyte (A-I)	Hematology (C)	Reticulocyte (C)	Hematology (S)	Reticulocyte (S)	Hematology (X)	Reticulocyte (X)	Hematology-16	Hematology-16T
Abbott Diagnostics											
CELL-DYN 1800											▲
CELL-DYN 3000/ 3200	■	◆									
CELL-DYN 3500/3700	■										
CELL-DYN Ruby	■	◆									
CELL-DYN Sapphire	■		◆								
CELL-DYN Emerald	■									▲	
HORIBA ABX Diagnostics											
Micros 60										▲	
Beckman Coulter											
AcT DIFF/Act DIFF2										▲	
AcT 5DIFF/UniCell DxH 600/800				■							
LH 500/700 Series				■	◆					▷	
ERMA											
PCE 210										▲	
FORTRESS											
CELLDIFF-3										▲	
Medonic											
M-Series										▲	
Mindray											
BC-2600/2800										▲	
BC-3000CT/3200/3000 PLUS										▲	
Samsung											
Geo										▲	
Siemens											
ADVIA 60						▲					
ADVIA 120/2120/2120i						■	◆				
Sysmex											
KX-21											▲
XE-2100/XE-5000								■	◆	▷	
XN Series								■	◆		
XS-800i/XS-1000i								■	◆	▷	
XT-4000i								■	◆	▷	
XT-1800i/XT 2000i								■		▷	
Other											
Manual Methods	❖		❖			❖				❖	❖
POCT Methods										✓	

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Immunoassay Controls

Bio-Rad Immunoassay Controls offer over 200 analytes for routine and specialty assays

Immunoassay Controls

Liquichek Immunoassay Plus Control	50
Lyphocheck Immunoassay Plus Control	51
Liquichek Specialty Immunoassay Control	52
Lyphocheck Specialty Immunoassay Control	52
Liquichek Tumor Marker Control	53
Lyphocheck Tumor Marker Plus Control	53
Liquichek AMH Control	54
Lyphocheck Fertility Control	54
Liquichek Maternal Serum 1st Trimester Control	54
Liquichek Maternal Serum II Control	54
Lyphocheck Anemia Control	55
Lyphocheck Hypertension Markers Control	55
Lyphocheck Endocrine Control	55
Lyphocheck Urine Bone Markers Control	56

Additional Information

Controls for Popular Instruments Chart	56
--	----

See Also

- **Pages 73-78** IntelliQ Quality Control Products
- **Page 85** Liquichek Immunoassay Premium Control
- **Pages 93-98** QC Products in Dimension Vista Vials

Did You Know?

- **Many Bio-Rad** multi-analyte immunoassay controls have analyte target values at or near clinical decision levels

For More Information

- **Brochure** Independent Quality Control (Q-1128)
- **Booklet** Bio-Rad Quality Control Products in Dimension Vista Vials (Q-1214)
- **Brochure** Premium Controls for Immunochemistry (Q-1215)
- **Brochure** Tumor Marker Controls (Q-1556)
- **Brochure** IntelliQ (Q-1665)

Liquichek Immunoassay Plus Control



- Offers a vast array of popular routine immunoassay analytes
- Assigned values are available for all major automated analyzers
- Provides a highly efficient solution for laboratories that focus on routine tests
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes

POCT Methods Listed

Ordering Information

Cat #	Description
360	Trilevel (4 of each level) 12 x 5 mL
361	Level 1 12 x 5 mL
362	Level 2 12 x 5 mL
363	Level 3 12 x 5 mL
360X	Trilevel MiniPak (1 of each level) 3 x 5 mL



For Liquichek tube control, see page 77.

For Liquichek Immunoassay Premium Control, see page 85.

For Dimension Vista vials, see page 96.

Analytes

11-Deoxycortisol*	DHEA Sulfate	Insulin	SHBG (Sex Hormone Binding Globulin)
17- α -Hydroxyprogesterone**	Digoxin	Iron	Somatomedin-C*
25-Hydroxy Vitamin D*	Disopyramide**	Iron (TIBC)*	T3 (Free)
Acetaminophen	Estradiol	LH	T3 (Total)
Aldosterone	Estriol (Free)	Lidocaine	T3 Uptake/T-Uptake
Alphafetoprotein (AFP)	Estriol (Total)*	Lithium	T4 (Free)
Amikacin	Estrogen (Total)**	N-Acetylprocainamide (NAPA)	T4 (Total)
Amiodarone*	Ethosuximide	Netilmicin*	TBG
Amitriptyline*	Ferritin	Nortriptyline	Testosterone
Androstenedione	Flecainide**	PAP	Testosterone (Free)
Angiotensin I*	Folate	Phenobarbital	Theophylline
Anti-Thyroglobulin (Anti-Tg)*	Fructosamine**	Phenytoin	Thyroglobulin (Tg)*
Anti-Thyroperoxidase (Anti-TPO)*	FSH	Phenytoin (Free)**	Tobramycin
Caffeine	Gentamicin	Primidone	Tricyclic Antidepressants (TCA) Screen
Carbamazepine	hCG	Procainamide**	TSH
Carbamazepine (Free)**	hCG- β Subunit	Progesterone	Valproic Acid**
CEA	hGH	Prolactin	Valproic Acid (Free)
Chloramphenicol**	Ibuprofen	Propranolol	Vancomycin
CK-MB Isoenzyme	Imipramine*	PSA	Vitamin B ₁₂
Cortisol	Immunoglobulin A (IgA)	PSA (Free)	
Cyclosporine	Immunoglobulin E (IgE)	PTH-MM*	
Dehydroepiandrosterone (DHEA)*	Immunoglobulin G (IgG)	Quinidine	
Desipramine**	Immunoglobulin M (IgM)	Salicylate	

*No claims are made regarding performance or stability.

**Values are not provided.

Did you know . . .

Liquichek Immunoassay Plus Control has value assignment data available for all major instruments. It also offers a large worldwide peer group for interlaboratory comparison.

Lyphocheck Immunoassay Plus Control



- Offers a vast array of popular routine immunoassay analytes
- Assigned values are available for all major automated analyzers
- Provides a highly efficient solution for laboratories that focus on routine tests
- Human serum based
- 3 year shelf life at 2–8°C
- 7 day reconstituted stability at 2–8°C for most analytes

POCT Methods Listed

Ordering Information

Cat #	Description
370	Trilevel (4 of each level) 12 x 5 mL
371	Level 1 12 x 5 mL
372	Level 2 12 x 5 mL
373	Level 3 12 x 5 mL
370X	Trilevel MiniPak (1 of each level) 3 x 5 mL

Analytes

25-Hydroxy Vitamin D	Desipramine**	Immunoglobulin M (IgM)	Salicylate
11-Deoxycortisol	DHEA Sulfate	Immunoreactive Trypsinogen (IRT)*	SHBG (Sex Hormone Binding Globulin)*
17- α -Hydroxyprogesterone	Digoxin	Insulin	Somatomedin-C
Acetaminophen	Disopyramide	Iron	T3 (Free)
ACTH	Estradiol	Iron (TIBC)	T3 (Total)
Aldosterone	Estril (Free)	LH	T3 Uptake/T-Uptake
Alphafetoprotein (AFP)	Estril (Total)*	Lidocaine	T4 (Free)
Amikacin	Estrogen (Total)	Lithium	T4 (Total)
Amiodarone*	Ethosuximide	N-Acetylprocainamide (NAPA)	TBG
Amitriptyline	Ferritin	Netilmicin*	Testosterone
Androstenedione	Flecainide**	Nortriptyline	Testosterone (Free)
Angiotensin I	Folate	PAP	Theophylline
Anti-Thyroglobulin (Anti-Tg)*	Fructosamine**	Phenobarbital	Thyroglobulin (Tg)
Anti-Thyropoxidase (Anti-TPO)*	FSH	Phenytoin	Tobramycin
C-Peptide	Gastrin	Phenytoin (Free)**	Tricyclic Antidepressants (TCA) Screen**
Caffeine	Gentamicin	Primidone	TSH
Calcitonin	Glucagon*	Procainamide	Valproic Acid
Carbamazepine	hCG	Progesterone	Valproic Acid (Free)**
Carbamazepine (Free)**	hCG- β Subunit	Prolactin	Vancomycin
CEA	hGH	Propranolol**	Vitamin B ₁₂
Chloramphenicol	Imipramine	PSA	
Cortisol	Immunoglobulin A (IgA)	PSA (Free)	
Cyclosporine*	Immunoglobulin E (IgE)	PTH (Intact)*	
Dehydroepiandrosterone (DHEA)	Immunoglobulin G (IgG)	Quinidine**	

*No claims are made regarding performance or stability.

**Values are not provided.

Did you know. . .

The Lyophilized form of this control provides convenience in transportation and a longer shelf life.

Liquichek Specialty Immunoassay Control



- Offers complex, high usage specialty immunoassay analytes for laboratories conducting specialty testing in support of operating/emergency rooms, hospitals and physician offices
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
359	Level LTA 6 x 5 mL
364	Level 1 6 x 5 mL
365	Level 2 6 x 5 mL
366	Level 3 6 x 5 mL
359X	Four Level MiniPak (1 of each level) 4 x 5 mL



For InteliQ Specialty Immunoassay Control, see page 76.

Analytes

25-Hydroxy Vitamin D
 Anti-Thyroglobulin (Anti-Tg)
 Anti-Thyroperoxidase (Anti-TPO)
 C-Peptide

Erythropoietin (EPO)
 Insulin Growth Factor I (IGF-I)
 Intact PTH
 Osteocalcin

Lyphocheck Specialty Immunoassay Control



- Includes popular analytes with increasing clinical utilization
- Human serum based
- 3 year shelf life at 2–8°C
- 30 day reconstituted stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
27124	Level 1 6 x 2 mL
27125	Level 2 6 x 2 mL
27126	Level 3 6 x 2 mL
27125X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

25-Hydroxy Vitamin D
 Erythropoietin (EPO)
 Intact PTH

Procalcitonin
 Sex Hormone Binding Globulin (SHBG)

Specialty Immunoassay Controls Analyte Comparison

	Liquid	Lyophilized
25-Hydroxy Vitamin D	●	●
Anti-Thyroglobulin (Anti-Tg)	●	
Anti-Thyroperoxidase (Anti-TPO)	●	
C-Peptide	●	
Erythropoietin (EPO)	●	●
Insulin Growth Factor I (IGF-I)	●	
Intact PTH	●	●
Osteocalcin	●	
Procalcitonin		●
SHBG (Sex Hormone Binding Globulin)		●

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Tumor Marker Control



- An assayed, multi-analyte control
- Includes low PSA levels for high sensitivity methods and high levels of cancer antigens and Ferritin
- Human based
- 2 year shelf life when stored frozen at -20°C to -70°C
- 30 day open-vial stability at 2–8°C for most analytes

Lyphocheck Tumor Marker Plus Control



- A comprehensive, assayed, multi-analyte control
- Ideal for monitoring both routine and esoteric tumor marker testing
- Human serum based
- 3 year shelf life at 2–8°C
- 14 day reconstituted stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
547	Level 1 6 x 2 mL
548	Level 2 6 x 2 mL
549	Level 3 6 x 2 mL
548X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Ordering Information

Cat #	Description
367	Level 1 6 x 2 mL
368	Level 2 6 x 2 mL
369	Level 3 6 x 2 mL
368X	Trilevel MiniPak (1 of each level) 3 x 2 mL



For InteliQ Tumor Marker Control, see page 76.

For Dimension Vista vials, see page 98.

Analytes for Liquichek Tumor Marker and Lyphocheck Tumor Marker Plus Controls

	Liquid	Lyophilized
β-2-Microglobulin	●	●
ACTH		●
Aldosterone		●
Alphafetoprotein (AFP)	●	●
CA 15-3	●	●
CA 19-9	●	●
CA 27.29	●	●
CA 50*		●
CA 72-4*	●	●
CA 125	●	●
Calcitonin		●
Carcinoembryonic Antigen (CEA)	●	●
CASA ¹		●
Cyfra 21-1*	●	●
Ferritin	●	●
hCG	●	●
hCG-β Subunit	●	●
HE4	●	
HER2/neu	●	
Insulin Growth Factor I (IGF-I)	●	
Neuron Specific Enolase (NSE)*		●
PAP	●	●
ProGRP*	●	
Prolactin	●	●
PSA	●	●
PSA (Free)	●	●
S-100*		●
SCC*	●	
Thyroglobulin (Tg)	●	●

*International use only. Not available for diagnostic use in the United States.
¹No claim is made for expected values or stability.

Liquichek AMH Control



- Liquid convenience to reduce handling errors
- Three levels targeted at low, medium and high clinically-relevant ranges
- Human base to more closely resemble a patient sample
- 26 month shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C

Ordering Information

Catalog #	Description
12006327	Trilevel (2 of each level) 6 x 2 mL

Analyte

Anti-Mullerian Hormone

Lyphocheck Fertility Control



- Designed to monitor the precision of tests performed for fertility or pregnancy
- Elevated hCG and hCG-β Subunit levels allow laboratories to monitor their dilution procedure
- Human serum based
- 3 year shelf life at 2–8°C
- 7 day reconstituted stability at 2–8°C

POCT Methods Listed

Ordering Information

Cat #	Description
480	Trilevel (4 of each level). 12 x 5 mL
481	Level 1 12 x 5 mL
482	Level 2 12 x 5 mL
483	Level 3 12 x 5 mL
480X	Trilevel MiniPak (1 of each level) 3 x 5 mL

Analytes

Alphafetoprotein (AFP)	Estriol (Free)	FSH	LH
Digitoxin	Estriol (Total)*	hCG	Progesterone
Estradiol	Ferritin	hCG-β Subunit	Testosterone

*No claims are made regarding performance or stability.

Liquichek Maternal Serum 1st Trimester Control



- Liquid, assayed quality control
- Designed to monitor the precision of immunoassay test methods used during maternal serum first trimester screening
- Includes clinically relevant levels of Free beta hCG and PAPP-A
- Human serum based
- 2 year shelf life at -20°C to -70°C
- 15 day open-vial stability at 2–8°C

Available outside the United States only

Ordering Information

Catalog #	Description
636	Trilevel (2 of each level) 6 x 1 mL
636X	Trilevel MiniPak (1 of each level) 3 x 1 mL

Analytes

hCG	PAPP-A
hCG-β Subunit (Free)	

Liquichek Maternal Serum II Control



- Liquid, assayed quality control serum
- Analytes at clinically significant levels to monitor the precision of maternal serum analysis
- Human serum
- Includes the hormone Inhibin A
- Very elevated hCG
- Very low levels of Free Estriol and AFP

Ordering Information

Catalog #	Description
402	Level 1 6 x 2.5 mL
403	Level 2 6 x 2.5 mL
404	Level 3 6 x 2.5 mL
403X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Analytes

AFP	Free Estriol
hCG	Inhibin A

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Lyphocheck Anemia Control



- Monitors test precision at clinically significant low/deficient values for anemia-related analytes
- Human serum based
- 3 year shelf life at 2–8°C
- 14 day reconstituted stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
500	Single Level 6 x 3 mL
500X	MiniPak 1 x 3 mL

Analytes

Ferritin	Iron	Iron (UIBC)	TSH
Folate	Iron (TIBC)	Transferrin	Vitamin B ₁₂

Lyphocheck Hypertension Markers Control



- Provides relevant values in monitoring precision for analytes specific to hypertension disorders
- Human serum based
- 2 year shelf life at 2–8°C
- 21 day reconstituted stability at 2–8°C for most analytes

Ordering Information

Catalog #	Description
600	Trilevel (2 of each level) 6 x 2 mL
600X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

ACTH	Cortisol
ADH*	Renin
Aldosterone	

*No claims are made regarding performance or stability.

Lyphocheck Endocrine Control



- Monitors the test precision of a unique set of endocrine-related analytes in serum-based matrix
- Human serum based
- 2 year shelf life at 2–8°C
- 3 day reconstituted stability at 2–8°C

Ordering Information

Catalog #	Description
535	Bilevel (6 of each level) 12 x 10 mL
535X	Bilevel MiniPak (1 of each level) 2 x 10 mL

Analytes

Dopamine
Epinephrine
Norepinephrine

Did you know . . .

That Lyphocheck Anemia Control provides ultra low TSH values?

Lyphocheck Urine Bone Markers Control



- Contains analytes in a urine based matrix for monitoring the precision of tests performed for osteoporosis bone resorption management
- Human urine based
- 3 year shelf life at 2–8°C
- 14 day reconstituted stability at 2–8°C

Ordering Information

Catalog #	Description
406	Bilevel (3 of each level) 6 x 2 mL
406X	Bilevel MiniPak (1 of each level) 2 x 2 mL

Analytes

β-2-Microglobulin*	N-Telopeptide (NTx)
C-Telopeptide (CTx)	Pyridinium Crosslinks (DPD + PYD)
Creatinine	Pyridinoline (PYD)*
Deoxypyridinoline (DPD)	

*No claims are made for expected values or stability.

Use Bio-Rad's Immunoassay Controls on these popular instruments

Manufacturer/Instrument(s)	AMH	Anemia	Fertility	Hypertension Markers	Immunoassay Plus (Liquid & Lyophilized)	Maternal Serum 1st Trimester	Maternal Serum II	Specialty Immunoassay (Liquid & Lyophilized)	Tumor Marker (Liquid)	Tumor Marker Plus (Lyophilized)
Abbott Diagnostics										
ARCHITECT Series		●	●		●		●	●	●	●
Beckman Coulter										
Access Series 2/Zi/LX i/Uni/Cel DxL/DxC	●	●	●		●	●	●	●	●	●
AU Series		●			●					
BioMérieux										
VIDAS	●				●			●	●	●
DiaSorin										
LIAISON/LIASON XL					●			●	●	●
Ortho Clinical Diagnostics										
VITROS Series		●			●			●		
VITROS ECI/Microwell Series		●	●		●		●	●		●
Roche Diagnostics										
Cobas 6000 Series/COBAS INTEGRA		●	●		●			●	●	●
Cobas e Systems	●									
e170	●									
Elecsys Systems	●	●	●		●	●	●	●	●	●
Hitachi Systems		●			●					
MODULAR Systems		●			●					
Siemens										
ADVIA Series		●			●			●		
ADVIA Centaur Series		●	●	●	●	●	●	●	●	●
Atellica Solution					●			●	●	
BN Series					●					
Dimension Vista		●	●		●		●		●	
Dimension Series		●	●		●				●	●
IMMULITE Series		●	●	●	●	●	●	●	●	●
Stratus			●							
Tosoh										
AIA Series		●	●		●			●	●	●
Other										
POCT Methods			●							

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Immunology/Protein Controls

Immunology/Protein assays: the more sample types you run, the more you'll want Bio-Rad QC

Immunology/Protein Controls

Liquichek Immunology Control	58
Lyphocheck Immunology Plus Control	58
Liquichek Elevated CRP Control	59
Liquichek Rheumatoid Factor Control	59
Liquichek Spinal Fluid Control	60
Lyphocheck Allergen sIgE Control	60
Liquichek Autoimmune Controls	61

Additional Information

Target CRP Levels in Bio-Rad Controls	59
Controls for Popular Instruments Chart	62

See Also

- **Pages 73-78** IntelliQ Quality Control Products
- **Pages 93-98** QC Products in Dimension Vista vials

Did You Know?

- **Immunological proteins** can indicate disorders of the immune system through either elevated or reduced concentrations
- **An intricate interaction** of multiple proteins plays a part in the pathology and clinical systems of a disorder

For More Information

- **Brochure** Comprehensive Quality Control for Immunology (Q-1220)
- **Booklet** Bio-Rad Quality Control Products in Dimension Vista Vials (Q-1214)
- **Brochure** IntelliQ (Q-1665)

Liquichek Immunology Control



- Provides assayed values for most major integrated immunoassay platforms
- Contains more than 30 serum proteins and analytes, including Anti-Cyclic Citrullinated Peptide (Anti-CCP) and Rheumatoid Factor
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2–8°C for most analytes

POCT Methods Listed

Ordering Information

Cat #	Description
591	Level 1 6 x 1 mL
592	Level 2 6 x 1 mL
593	Level 3 6 x 1 mL
590X	Trilevel MiniPak (1 of each level) 3 x 1 mL
594	Level 1 6 x 3 mL
595	Level 2 6 x 3 mL
596	Level 3 6 x 3 mL



For Liquichek tube control see page 78.

For Dimension Vista vials, see page 96.

Analytes

α-1-Acid Glycoprotein	Antithrombin III (AT III)	Cystatin C ¹	Kappa Light Chain
α-1-Antitrypsin	Apolipoprotein A-1	Ferritin	Lambda Light Chain
α-2-Macroglobulin	Apolipoprotein B	Haptoglobin	Lipoprotein (a)
β-2-Microglobulin	C1 Inhibitor	Hemopexin*	Prealbumin
ADNase B	Ceruloplasmin	Immunoglobulin A (IgA)	Properdin Factor B**
Albumin	CH50*	Immunoglobulin E (IgE)	Protein (Total)
Anti-Cyclic Citrullinated Peptide (Anti-CCP)	Complement C3	Immunoglobulin G (IgG)	Retinol Binding Protein (RBP)
Antistreptolysin O (ASO)	Complement C4	Immunoglobulin G Subclasses 1–4	Rheumatoid Factor
	CRP	Immunoglobulin M (IgM)	Soluble Transferrin Receptor (sTfR)*
			Transferrin

¹No claims are made regarding performance or stability.

**Values are not provided.

¹Endogenous levels only.

Lyphocheck Immunology Plus Control



- Contains 22 serum proteins and related analytes
- Lyophilized, human serum based
- 3 year shelf life at 2–8°C
- 15 day reconstituted stability at 2–8°C

POCT Methods Listed

Ordering Information

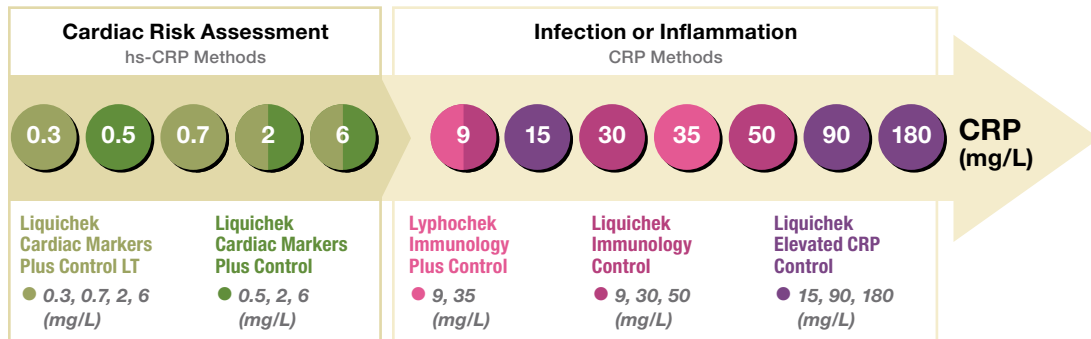
Cat #	Description
430	Bilevel (6 of each level) 12 x 1 mL
430X	Bilevel MiniPak (1 of each level) 2 x 1 mL

Analytes

α-1-Acid Glycoprotein	Ceruloplasmin	Immunoglobulin A (IgA)	Prealbumin
α-1-Antitrypsin	Complement C1q*	Immunoglobulin E (IgE)	Retinol Binding Protein (RBP)
α-2-Macroglobulin	Complement C3	Immunoglobulin G (IgG)	Rheumatoid Factor
β-2-Microglobulin	Complement C4	Immunoglobulin M (IgM)	Transferrin
Albumin	CRP	Kappa Light Chain	
Antistreptolysin O (ASO)	Haptoglobin	Lambda Light Chain	

¹No claims are made regarding performance or stability.

Target CRP Levels in Bio-Rad Controls



Values reflect typical assayed values for these products. Recovered values may vary depending on methodology.

Liquichek Elevated CRP Control



- For monitoring the precision of C-Reactive Protein (CRP) assays as a general marker for infection and inflammation
- Target CRP levels of 15, 90 and 180 mg/L
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C

Ordering Information

Cat #	Description
254	Level 1 12 x 1 mL
255	Level 2 12 x 1 mL
256	Level 3 12 x 1 mL
255X	Trilevel MiniPak (1 of each level) 3 x 1 mL

Analyte

CRP

Liquichek Rheumatoid Factor Control



- For monitoring the precision of Rheumatoid Factor testing procedures including nephelometric and latex agglutination methods
- Target Rheumatoid Factor levels of 34, 79 and 150 U/mL
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C

Ordering Information

Cat #	Description
501	Level 1 6 x 2 mL
502	Level 2 6 x 2 mL
503	Level 3 6 x 2 mL
502X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analyte

Rheumatoid Factor

Liquichek Spinal Fluid Control



- Multi-analyte control with relevant concentrations for cerebrospinal fluid tests
- Level 2 positive for oligoclonal bands, used as an aid in diagnosing Multiple Sclerosis
- Liquid, human based
- 2 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
751	Level 1 6 x 3 mL
752	Level 2 6 x 3 mL
750X	Bilevel MiniPak (1 of each level) 2 x 3 mL



For Dimension Vista vials, see page 60.

Analytes

Albumin	Immunoglobulin A (IgA)	Lactate (Lactic Acid)	Protein Electrophoresis*
Chloride	Immunoglobulin G (IgG)	Lactate Dehydrogenase (LDH)	Sodium
Glucose	Immunoglobulin M (IgM)	Protein (Total)	

*Prealbumin, Albumin, α-1-Globulin, α-2-Globulin, β-Globulin, γ-Globulin.

Lyphocheck Allergen sIgE Control



- Multi-analyte control designed to monitor the precision of *in vitro* allergy test systems
- Provides assayed values for 15 commonly tested allergen-specific IgE antibodies
- Insert listings for fully-automated allergy diagnostic test systems
- Human sourced material
- 3 year shelf life at 2-8°C
- 28 day reconstituted stability at 2-8°C

Ordering Information

Cat #	Description
12000141	Negative 6 x 2 mL
12000142	Panel A 6 x 2 mL
12000143	Negative MiniPak 1 x 2 mL
12000144	Panel A MiniPak 1 x 2 mL

Analytes

D1	House Dust Mite (<i>Dermatophagoides pteronyssinus</i>)	G2	Bermuda Grass (<i>Cynodon dactylon</i>)
D2	House Dust Mite (<i>Dermatophagoides farinae</i>)	G3	Cocksfoot/Orchard Grass (<i>Dactylis glomerata</i>)
E1	Cat Dander (<i>Felis domesticus</i>)	G6	Timothy Grass (<i>Phleum pratense</i>)
E3	Horse Dander (<i>Equus caballus</i>)	M3	Mold (<i>Aspergillus fumigatus</i>)
E5	Dog Dander (<i>Canis familiaris</i>)	M6	Mold (<i>Alternaria tenuis</i>)
F1	Egg White (<i>Gallus spp.</i>)	T3	Birch (<i>Betula</i>)
F2	Cow Milk (<i>Bos. spp.</i>)	W6	Mugwort (<i>Artemisia vulgaris</i>)
F13	Peanut (<i>Arachis hypogaea</i>)		

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Autoimmune Controls



- Individual unassayed pattern and detection controls for monitoring indirect immunofluorescent testing of antinuclear antibodies (ANA) and autoantibodies associated with systemic autoimmune diseases
- Liquid, human serum based
- 2 year shelf life at 2–8°C
- 6 month open-vial stability at 2–8°C

Package Description

- Negative and weak positive controls packaged separately
- 0.5 mL per vial

Ordering Information

Cat #	Description
107	ANA Control, Homogeneous Pattern 3 x 0.5 mL
108	ANA Control, Speckled Pattern 3 x 0.5 mL
111	ANA Control, Nucleolar Pattern 3 x 0.5 mL
112	ANA Control, Centromere Pattern 3 x 0.5 mL
118	ANA Control, Mitotic Spindle Pattern 2 x 0.5 mL
113	Anti-SS-B Control 2 x 0.5 mL
114	Anti-SS-A Control 2 x 0.5 mL
115	Anti-Sm Control 2 x 0.5 mL
116	Anti-RNP Control 2 x 0.5 mL
117	Anti-Scl-70 Control 2 x 0.5 mL
119	Anti-nDNA Control 3 x 0.5 mL
127	Anti-Mitochondrial Control 3 x 0.5 mL
129	Anti-Smooth Muscle Control 3 x 0.5 mL
130	Autoimmune Negative Control 3 x 0.5 mL
131	ANA Controls Set, Positive 4 x 0.5 mL (Homogeneous, Speckled, Centromere and Nucleolar Patterns)

Use Bio-Rad's Immunology/Protein Controls on these popular instruments

Manufacturer/Instrument(s)	Elevated CRP	Immunology (Liquid)	Immunology Plus (Lyophilized)	Rheumatoid Factor	Spinal Fluid
Abbott Diagnostics					
Aeroset			●		
ARCHITECT Series	●	●	●	●	●
Beckman Coulter					
AU Series	●	●	●	●	●
UniCel DxC Series	●	●	●		●
Image	●	●	●	●	●
Ortho Clinical Diagnostics					
VITROS Series	●	●	●	●	●
Roche Diagnostics					
Cobas 6000 Series/COBAS INTEGRA	●	●	●	●	●
Hitachi/MODULAR Systems	●	●	●	●	●
Siemens					
ADVIA Series	●	●	●	●	●
Atellica Solution		●			
BN Series	●	●	●	●	●
Dimension Vista	●	●			●
Dimension Series	●	●	●		●
IMMULITE Series		●			

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



Infectious Disease Controls

Multi-analyte controls that provide consolidation and simplify QC management practices

Hepatitis & Retrovirus

VIROTROL I . . . . .	.64
Assayed VIROTROL I-C, I-E & I-F . . . . .	.64
VIROTROL II . . . . .	.65
Assayed VIROTROL II-B . . . . .	.65
VIROTROL III . . . . .	.65
VIROTROL IV . . . . .	.65
VIROTROL HIV-1 Ag . . . . .	.66
VIROTROL HIV-1 gO . . . . .	.66
VIROTROL HIV-2 . . . . .	.66
VIROTROL PLUS-R . . . . .	.66
VIROCLEAR . . . . .	.67
VIROTROL HAV-IgM . . . . .	.67
VIROTROL HBc-IgM . . . . .	.67
VIROTROL HBeAg . . . . .	.67

Congenital/Pediatric Diseases

VIROTROL ToRCH . . . . .	.68
VIROTROL ToRCH-M . . . . .	.68
VIROCLEAR ToRCH . . . . .	.68
Liquichek ToRCH Plus Control . . . . .	.69
VIROTROL MuMZ and VIROCLEAR MuMZ . . . . .	.69

Respiratory

VIROTROL SARS-CoV . . . . .	.70
VIROCLEAR SARS-CoV . . . . .	.70
VIROTROL SARS-CoV-2 . . . . .	.70
VIROTROL SARS-CoV-2 . . . . .	.70
PneumoTrol . . . . .	.70

Sexually Transmitted Diseases

VIROTROL Syphilis LR-A . . . . .	.71
VIROTROL RPR Panel . . . . .	.71

Specialty Infectious Disease

VIROTROL EBV . . . . .	.71
VIROCLEAR EBV . . . . .	.71
PyloriTrol . . . . .	.72
VIROTROL Chagas . . . . .	.72
VIROTROL Lyme . . . . .	.72
VIROTROL WNV . . . . .	.72

Did You Know?

- **Our liquid** controls are ready-to-use
- **Our controls** offer an extended shelf-life at refrigerated temperatures and may reduce the number of crossover studies throughout the year

For More Information

- **Booklet** Infectious Disease Controls for Serology Testing (Q-1565)
- **Flyer** VIROTROL and VIROCLEAR SARS-CoV Controls, RUO (Q-1676)
- **Flyer** VIROTROL and VIROCLEAR SARS-CoV-2 Controls, IVD/CE (Q-1676-CE)

VIROTROL I



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C
- Available in multiple configurations and fill sizes

Ordering Information

Catalog #	Description
00100A	Single Level/Dropper Bottle. 1 x 5 mL
00100B	Single Level/Dropper Bottle. 1 x 5 mL
00100C	Single Level/Dropper Bottle. 1 x 5 mL
00100E	Single Level/Dropper Bottle. 1 x 5 mL
00100F	Single Level/Dropper Bottle. 1 x 5 mL
00100G	Single Level/Dropper Bottle. 1 x 5 mL
00100H	Single Level/Dropper Bottle. 1 x 5 mL
00101B	Single Level/Tube 10 x 4 mL
00101C	Single Level/Tube 10 x 4 mL
00101E	Single Level/Tube 10 x 4 mL
00101F	Single Level/Tube 10 x 4 mL
00102B	Single Level/Dropper Bottle. 2 x 20 mL
00102C	Single Level/Dropper Bottle. 2 x 20 mL

Analytes

Anti-CMV	Anti-HIV-1
Anti-HBc	Anti-HTLV-I
Anti-HCV	HBsAg

Assayed VIROTROL I-C Assayed VIROTROL I-E Assayed VIROTROL I-F



- Assayed quality controls
- Human serum based
- Values provided for popular automated methods
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Available outside the United States only.

Ordering Information

Cat #	Description
Assayed VIROTROL I-C	
00164	Single Level/Dropper Bottle. 1 x 5 mL
Assayed VIROTROL I-E	
00166	Single Level/Dropper Bottle. 1 x 5 mL
Assayed VIROTROL I-F	
00168	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Anti-CMV*	Anti-HIV-1
Anti-HBc	Anti-HTLV-I*
Anti-HCV	HBsAg

*Values not provided.

Did you know . . .
Over 35 million people are living with HIV worldwide.

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

VIROTROL II



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C
- Available in multiple configurations and fill sizes

Ordering Information

Catalog #	Description
00104A	Single Level/Dropper Bottle. 1 x 5 mL
00104B	Single Level/Dropper Bottle. 1 x 5 mL
00115A	Single Level/Tube 10 x 4 mL
00115B	Single Level/Tube 10 x 4 mL

Analytes

Anti-HAV
Anti-HBs

Assayed VIROTROL II-B



- Assayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Available outside the United States only.

Ordering Information

Catalog #	Description
00152	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Anti-HAV
Anti-HBs

VIROTROL III



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00110A	Single Level/Dropper Bottle. 1 x 5 mL
00110C	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Anti-HAV
HAV-IgM
HBc-IgM

VIROTROL IV



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00111	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Anti-HBe

VIROTROL HIV-1 Ag



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00108A	Single Level/Dropper Bottle. 1 x 5 mL
00108B	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

HIV-1 Ag

VIROTROL HIV-1 gO



- An unassayed control used to detect antibodies to HIV-1 group O
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00113	Single Level/Tube 5 x 4 mL
00113X	Single Level/Tube 1 x 4 mL

Analytes

Anti-HIV-1 group O

VIROTROL HIV-2



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00105A	Single Level/Dropper Bottle. 1 x 5 mL
00105B	Single Level/Dropper Bottle. 1 x 5 mL
00105C	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

Anti-HIV-2

VIROTROL PLUS-R



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
12000538	Single Level/Tube 5 x 4 mL
12000539	Single Level/Tube 1 x 4 mL

Analytes

Anti-CMV	Anti HTLV I/II
Anti-HBc	Anti- <i>Treponema pallidum</i> (Syphilis)
Anti-HCV	HBsAg
Anti-HIV 1/2	

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

VIROCLEAR



- An unassayed, non-reactive quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C
- Available in multiple configurations and fill sizes

Ordering Information

Cat #	Description
00106	Single Level/Dropper Bottle. 1 x 5 mL
00107	Single Level/Dropper Bottle. 2 x 20 mL
00112	Single Level/Tube 10 x 4 mL

Analytes

Non-reactive for:

Anti-CMV	Anti-HCV	HAV-IgM	Non-treponemal Antibodies (Syphilitic Reagin)
Anti-HAV	Anti-HIV-1	HBC-IgM	<i>Treponema pallidum</i> (Syphilis) IgG
Anti-HBc	Anti-HIV-2	HBeAg	<i>Treponema pallidum</i> (Syphilis) IgM
Anti-HBe	Anti-HTLV-I	HBsAg	<i>Treponema pallidum</i> (Syphilis) Total
Anti-HBs	Anti-HTLV-II	HIV-1 Ag	

VIROTROL HAV-IgM



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00142A	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

HAV-IgM

VIROTROL HBc-IgM



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00143	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

HBc-IgM

VIROTROL HBeAg



- An unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00144	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

HBeAg

VIOTROL ToRCH



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00109	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Cytomegalovirus (CMV) IgG	Rubella Virus IgG
Herpes Simplex Virus Type 1 (HSV-1) IgG	<i>Toxoplasma gondii</i> IgG
Herpes Simplex Virus Type 2 (HSV-2) IgG	

VIOTROL ToRCH-M



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C (Cat #00117A) or 18 month shelf life at 2–8°C (Cat #00117B)
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
00117A	Single Level/Dropper Bottle. 1 x 5 mL
00117B	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Cytomegalovirus (CMV) IgG	Herpes Simplex Virus Type 1 (HSV-1) IgG	Rubella Virus IgG	<i>Toxoplasma gondii</i> IgG
Cytomegalovirus (CMV) IgM	Herpes Simplex Virus Type 2 (HSV-2) IgG	Rubella Virus IgM	<i>Toxoplasma gondii</i> IgM

VIROCLEAR ToRCH



- An unassayed, non-reactive quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
00118	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Non-reactive for:			
Cytomegalovirus (CMV) IgG	Herpes Simplex Virus Type 1 (HSV-1) IgM	Herpes Simplex Virus Type 2 (HSV-2) IgM	<i>Toxoplasma gondii</i> IgG
Cytomegalovirus (CMV) IgM	Herpes Simplex Virus Type 2 (HSV-2) IgG	Rubella Virus IgG	<i>Toxoplasma gondii</i> IgM
Herpes Simplex Virus Type 1 (HSV-1) IgG		Rubella Virus IgM	

Did you know . . .

Testing both IgG and IgM ToRCH analytes? VIROCLEAR ToRCH is non-reactive for all ToRCH IgG and IgM analytes.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek ToRCH Plus Control



- An unassayed, bilevel control used to monitor the precision of the most widely used serology test methods
- Liquid, human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C
- Positive and negative levels packaged separately

Ordering Information

Catalog #	Description
239	Positive 3 x 3 mL
239X	Positive MiniPak 1 x 3 mL
227	Positive* 3 x 3 mL
227X	Positive MiniPak* 1 x 3 mL
228	Negative 3 x 3 mL
228X	Negative MiniPak 1 x 3 mL

*Assayed control available outside the United States only.

Analytes

Cytomegalovirus (CMV) IgG
 Epstein-Barr Virus (EBV) IgG
Helicobacter pylori IgG
 Herpes Simplex Virus Type 1 (HSV-1) IgG
 Herpes Simplex Virus Type 2 (HSV-2) IgG

Rubella Virus IgG
 Syphilis RPR
Toxoplasma gondii IgG
Treponema pallidum (Syphilis) IgG
 Varicella Zoster Virus (VZV) IgG

VIROTROL MuMZ and VIROCLEAR MuMZ



- Unassayed quality controls
- Use VIROTROL MuMZ as a reactive control and VIROCLEAR MuMZ as a non-reactive control for the analytes listed at right
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
VIROTROL MuMZ	
00119	Single Level/Dropper Bottle. 1 x 5 mL
VIROCLEAR MuMZ	
00133	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Mumps Virus IgG
 Rubeola Virus (Measles) IgG
 Varicella Zoster Virus (VZV) IgG

Refer to pages 146-147

The Molecular/Infectious Disease Analyte Control Index can help you choose the ToRCH control that's right for your lab.

Did you know . . .

That Varicella Zoster Virus causes Chicken Pox as well as Shingles?

VIROTROL SARS-CoV



- An unassayed reactive control
- Human plasma based
- 2 year shelf life at 2-8°C
- 30 day open-vial stability at 2-8°C

For research use only.
Not for use in diagnostic procedures.

Ordering Information

12013881 Single Level/Tube 1 x 4 mL

Analytes

SARS-CoV-2 Total IgG/IgM
SARS CoV-2 IgG

VIROCLEAR SARS-CoV



- An unassayed negative control
- Human plasma based
- 2 year shelf life at 2-8°C
- 30 day open-vial stability at 2-8°C

For research use only.
Not for use in diagnostic procedures.

Ordering Information

12013883 Single Level/Tube 1 x 4 mL

Analytes

SARS-CoV-2 Total IgG/IgM
SARS CoV-2 IgG

VIROTROL SARS-CoV-2



- An unassayed reactive control
- Human plasma based
- 2 year shelf life at 2-8°C
- 60 day open-vial stability at 2-8°C

IVD/CE Mark

Ordering Information

200300A Single Level/Tube 1 x 4 mL
 200305A Single Level/Tube 5 x 4 mL
 200300B Single Level/Tube 1 x 4 mL
 200305B Single Level/Tube 5 x 4 mL
 200300C Single Level/Tube 1 x 4 mL
 200305C Single Level/Tube 5 x 4 mL

Analytes

SARS-CoV-2 Total IgG/IgM
SARS CoV-2 IgG

VIROCLEAR SARS-CoV-2



- An unassayed negative control
- Human plasma based
- 2 year shelf life at 2-8°C
- 60 day open-vial stability at 2-8°C

IVD/CE Mark

Ordering Information

200500 Single Level/Tube 1 x 4 mL
 200505 Single Level/Tube 5 x 4 mL

Analytes

SARS-CoV-2 Total IgG/IgM
SARS CoV-2 IgG

PneumoTrol



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2-8°C
- 60 day open-vial stability at 2-8°C

Ordering Information

Catalog #	Description
00129	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Chlamydia trachomatis IgG
Mycoplasma pneumoniae IgG
Mycoplasma pneumoniae IgM

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

VIROTROL Syphilis LR-A



- A low reactive (LR), unassayed quality control
- Human serum based
- 3 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
00171	Single Level/Tube 5 x 4 mL
00171X	Single Level/Tube 1 x 4 mL

Analyte

Anti-*Treponema pallidum* (Syphilis)

VIROTROL RPR Panel



- An unassayed quality control
- VIROTROL RPR Panel consists of one non-reactive member, one minimally reactive member, and one moderately to highly reactive titratable member
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
01400	Three Levels/Vial 3 x 1.5 mL

Analyte

Non-treponemal Antibodies (Syphilitic Reagin)

VIROTROL EBV



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00128A	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

EBNA IgG
Epstein-Barr Virus (VCA) IgG
Epstein-Barr Virus (VCA) IgM

VIROCLEAR EBV



- An unassayed, non-reactive quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00131	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Non-reactive for:
EBNA IgG
EBV EA IgG
Epstein-Barr Virus (VCA) IgG
Epstein-Barr Virus (VCA) IgM

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

PyloriTrol



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00121	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

Helicobacter pylori IgG

VIROTROL Chagas



- An unassayed, reactive quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00125	Single Level/Tube 5 x 4 mL
00125X	Single Level/Tube 1 x 4 mL

Analyte

Trypanosoma cruzi (*T. cruzi*) Antibodies

VIROTROL Lyme



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00132	Single Level/Dropper Bottle. 1 x 5 mL

Analyte

Borrelia burgdorferi IgG

VIROTROL WNV



- An unassayed quality control
- Human serum based
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00116	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

West Nile Virus IgG
West Nile Virus IgM

Did you know . . .
Chagas is transmitted by the triatomine bug and infects between 7 and 8 million people globally each year.

Did you know . . .
West Nile Virus is transmitted via mosquito? 80% of people infected will be asymptomatic, however, WNV can cause a fatal neurological disease.

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.



InteliQ

Simplify your QC workflow with load-and-go-efficiency and robust data management

Quality Control Products

InteliQ Assayed Multiqual Control	74
InteliQ Cardiac Markers Plus Control LT.	75
InteliQ Ethanol/Ammonia Control	75
InteliQ Homocysteine Control	76
InteliQ Immunology Control	76
InteliQ Specialty Immunoassay Control	77
InteliQ Tumor Marker Control	77
Liquichek Immunoassay Plus Control	78
Liquichek Urine Chemistry Control	78

Additional Information

Overview of product features	74
--	----

See Also

- **Pages 142-145** Analyte Chart: InteliQ Controls

Did You Know?

- **Discover more about XML** value assignment for next generation platforms at www.qcnet.com/InteliQ

For More Information

- **Brochure** InteliQ (Q-1665)
- **Flyer** eInserts XML (Q-1662)
- **Flyer** Analyte Chart (Q-1228)
- **Website** www.qcnet.com/InteliQ

InteliQ Assayed Multiquel Control



- Provides comprehensive range of 80 analytes to maximize testing efficiency for automated platforms
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes





Ordering Information

Cat #	Description	
12008256	Level 1	12 x 3 mL
12008257	Level 2	12 x 3 mL
12008258	Level 3	12 x 3 mL
12008259	Trilevel MiniPak (1 of each level)	3 x 3 mL

Analytes

α-1-Antitrypsin	Bilirubin (Total)	Gentamicin	Potassium
α-1-Globulin	Calcium	Glucose	Prealbumin
α-2-Globulin	Calcium (Ionized)	Haptoglobin	Protein Serum (Total)
β-Globulin	Carbamazepine	Immunoglobulin A (IgA)	Salicylate
γ-Globulin	Carbon Dioxide (CO ₂)	Immunoglobulin G (IgG)	Sodium
γ-Glutamyltransferase (GGT)	Ceruloplasmin	Immunoglobulin M (IgM)	T3 (Total)
Acetaminophen	Chloride	Iron	T3 Uptake/T Uptake
Acid Phosphatase (Total)	Cholesterol (HDL)	Iron (TIBC)	T4 (Free)
Albumin	Cholesterol (LDL)	Iron (UIBC)	T4 (Total)
Albumin-to-Globulin Ratio	Cholesterol (Total)	Lactate (Lactic Acid)	Theophylline
Alkaline Phosphatase	Cholinesterase	Lactate Dehydrogenase (LDH)	Thyroid Stimulating Hormone (TSH)
ALT/SGPT	Complement C3	LAP Arylamidase	Tobramycin
Amikacin	Complement C4	Lipase	Transferrin
Amylase	Copper	Lithium	Triglycerides
Amylase (Pancreatic)	Cortisol	Magnesium	Urea
Apolipoprotein A-I	Creatine Kinase (CK)	Osmolality	Urea Nitrogen (BUN)
Apolipoprotein B	Creatinine	Phenobarbital	Uric Acid
AST/SGOT	Digoxin	Phenytoin	Valproic Acid
Bilirubin (Direct)	Ethanol	Phospholipids	Vitamin B ₁₂
Bilirubin (Neonatal)	Ferritin	Phosphorus	Zinc

InteliQ Quality Controls and Unity software offer you the following benefits:

<p>InteliQ Tubes</p> 	<ul style="list-style-type: none"> ▪ Eliminate manual pour-off with ready-to-use “load and go” convenience to minimize handling errors ▪ Reduce use of consumables and minimize laboratory waste ▪ Conveniently store refrigerated on-board the analyzer*
<p>InteliQ Barcode Labels</p> 	<ul style="list-style-type: none"> ▪ Each InteliQ tube is labeled with a unique sample identifier that provides traceability ▪ Eliminates manual QC order entry and prevents handling errors for a simpler, more efficient workflow
<p>eData</p> 	<ul style="list-style-type: none"> ▪ Import value assignment data to the analyzer via XML data files with Bio-Rad’s proprietary format for embedded data security ▪ Eliminates manual data input and prevents transcription errors ▪ Provides open-vial stability information for available analytes
<p>Unity</p> 	<ul style="list-style-type: none"> ▪ Access the industry leading Unity data management program and global peer group comparisons for greater confidence in reliability of patient results ▪ Use advanced Unity software tools to support your lab’s risk management program and simplify compliance reporting to achieve quality goals

*Optional Atellica Solution Sample Handler.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

InteliQ Cardiac Markers Plus Control LT



- Multi-analyte control designed to monitor precision of cardiac assessment assays.
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 20 day open-vial stability at 2-8°C for most analytes

NEW Analyte

Ordering Information

12009955	Level 1	6 x 3 mL
12009958	Level 1A	6 x 3 mL
12009959	Level 1B	6 x 3 mL
12009960	Level 1C	6 x 3 mL
12009956	Level 2	6 x 3 mL
12009957	Level 3	6 x 3 mL
12009961	Level 1 MiniPak	1 x 3 mL
12009964	Level 1A MiniPak	1 x 3 mL
12009965	Level 1B MiniPak	1 x 3 mL
12009966	Level 1C MiniPak	1 x 3 mL
12009962	Level 2 MiniPak	1 x 3 mL
12009963	Level 3 MiniPak	1 x 3 mL

Analytes

BNP
 CK (Total)
 CK-MB Isoenzyme
 CRP
 Digitoxin

Myoglobin
 NT-proBNP
 Troponin I
Troponin I*
Troponin T

InteliQ Ethanol/Ammonia Control



- Normal, elevated and toxic concentrations of Ethanol and Ammonia to monitor precision across the clinical range
- 2 year shelf life at 2-8°C
- 13 day open-vial stability at 2-8°C for Ammonia
- 3 day open-vial stability at 2-8°C for Ethanol

Ordering Information

Cat #	Description	
12008299	Level 1	6 x 2 mL
12008300	Level 2	6 x 2 mL
12008301	Level 3	6 x 2 mL
12008302	Trilevel MiniPak (1 of each level)	3 x 2 mL

Analytes

Ammonia
 Ethanol



XML value assignment available for next generation platforms

My eInserts XML software creates an eXtensible Markup Language (XML) file based on the instrument, control product, and lot number you select. The XML file contains value assignment data for next generation platforms, such as the Siemens Healthineers Atellica Solution.

Please refer to the eInserts XML flyer for step-by-step instructions.

Visit www.myinserts.com for easy access to your eData

InteliQ Homocysteine Control



- Monitors precision of Homocysteine assays
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C

Ordering Information

Cat #	Description
12004309	Level 1 6 x 1 mL
12004310	Level 2 6 x 1 mL
12004311	Level 3 6 x 1 mL
12004312	Trilevel MiniPak (1 of each level) 3 x 1 mL

Analyte

Homocysteine

InteliQ Immunology Control



- Comprehensive menu of serum proteins and analytes, including Rheumatoid Factor.
- Liquid human serum based
- 2 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C for most analytes

NEW Analytes

Ordering Information

Cat #	Description
12009941	Level 1 6 x 2 mL
12009942	Level 2 6 x 2 mL
12009943	Level 3 6 x 2 mL
12009944	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

α-1-Acid Glycoprotein (AAG)
 α-1-Antitrypsin (AAT)
 α-2-Macroglobulin
 β-2-Microglobulin
 ADNase B
 Albumin
 Antistreptolysin O (ASO)
 Anti-Cyclic Citrullinated Peptide (Anti-CCP)

Antithrombin III
 Apolipoprotein A-1
 Apolipoprotein B
 C1 Inhibitor
 Ceruloplasmin
 Complement C3
 Complement C4
 C-Reactive Protein (CRP)
 Cystatin C*

Ferritin
 Haptoglobin
 Immunoglobulin A (IgA)
 Immunoglobulin E (IgE)
 Immunoglobulin G (IgG)
 Immunoglobulin G Subclasses 1-4
 Immunoglobulin G (IgM)
 Kappa Light Chain
 Lambda Light Chain

Lipoprotein (a)
 Prealbumin
 Properdin Factor B
 Protein Serum (Total)
 Retinol Binding Protein (RBP)
 Rheumatoid Factor
 Transferrin

*Endogenous levels only.

InteliQ Specialty Immunoassay Control



- Multi-analyte control for monitoring the precision of specialty immunoassay testing
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C for most analytes

Ordering Information

Cat #	Description	
12008276	Level LTA	6 x 4 mL
12008277	Level 1	6 x 4 mL
12008278	Level 2	6 x 4 mL
12008279	Level 3	6 x 4 mL
12008280	Four Level MiniPak (1 of each level)	4 x 4 mL

Analytes

25-Hydroxy Vitamin D
 Anti-Thyroglobulin (Anti-Tg)
 Anti-Thyroperoxidase (Anti-TPO)
 C-Peptide

Erythropoietin (EPO)
 Insulin Growth Factor I (IGF-I)/Serratomedin C
 Intact PTH
 Osteocalcin

InteliQ Tumor Marker Control



- Comprehensive, assayed, multi-analyte control
- Monitors precision of immunoassay-based oncology testing procedures
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 30 day open-vial stability at 2-8°C for most analytes

Ordering Information

Cat #	Description	
12008289	Level 1	6 x 2 mL
12008290	Level 2	6 x 2 mL
12008291	Level 3	6 x 2 mL
12008292	Trilevel MiniPak (1 of each level)	3 x 2 mL

Analytes

α-Fetoprotein (AFP)
 β-2-Microglobulin
 β-hCG
 CA 15-3
 CA 19-9
 CA 27.29
 CA 72-4*
 CA 125
 Carcinoembryonic Antigen (CEA)
 Cyfra 21-1*
 Ferritin
 hCG

hCG (Total)
 hCG (Intact)
 HE4
 Her-2/neu
 Insulin Growth Factor I (IGF-I)
 PAP
 ProGRP*
 Prolactin
 PSA (Free)
 PSA (Total)
 SCC*
 Thyroglobulin (Tg)

*International Use Only

QC for Workflow Solutions

Liquichek Immunoassay Plus Control



- Offers a wide range of popular immunoassay analytes
- Provides an efficient solution for laboratories that focus on routine testing
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes

Ordering Information

Cat #	Description
12004319	Level 1 12 x 4 mL
12004320	Level 2 12 x 4 mL
12004321	Level 3 12 x 4 mL
12004322	Trilevel MiniPak (1 of each level) 3 x 4 mL

Analytes

Acetaminophen	FSH	Phenobarbital	T4 Total
AFP	Gentamicin	Phenytoin	Testosterone
Carbamazepine	hCG	Progesterone	Theophylline
CEA	IgA	Prolactin	TSH
CK-MB Isoenzyme	IgE	PSA	Tobramycin
Cortisol	IgG	Salicylate	Valproic Acid
DHEA-Sulfate	IgM	SHBG	Vancomycin
Digoxin	Insulin	T3 Free	Vitamin B ₁₂
Estradiol	Iron	T3 Total	
Ferritin	Lithium	T3 Uptake	
Folate	Luteinizing Hormone (LH)	T4 Free	

Liquichek Urine Chemistry Control



- Monitors precision of general urine chemistry testing
- Human urine based
- Offers 19 analytes
- 2 year shelf life at 2-8°C
- 30 day open-vial stability at 2-8°C for all analytes

Ordering Information

Cat #	Description
12004329	Level 1 12 x 4 mL
12004330	Level 2 12 x 4 mL
12004331	Bilevel Minipak (1 of each level) 2 x 4 mL

Analytes

Amylase	Glucose	pH	Specific Gravity
Calcium	hCG (Qualitative)	Phosphorus	Urea
Chloride	Magnesium	Potassium	Urea Nitrogen (BUN)
Cortisol	Microalbumin	Protein (Total)	Uric Acid
Creatinine	Osmolality	Sodium	

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.



Molecular Controls

Monitor the performance of *in vitro* nucleic acid amplification methods for commonly tested viral load assays, healthcare associated infections and sexually transmitted infections

Molecular Controls

Amplichek I	80
Amplichek II	81
Amplichek STI	81
AmpliTrol CT/GC	82
AmpliPROBE CT/GC	82
AmpliClear	82

Did You Know?

- **Our new Amplichek** quality controls contain intact pathogens to monitor the entire testing process, including cell lysis and extraction

For More Information

- **Booklet** Amplichek Molecular Quality Controls (Q-1643)
- **Website**
www.qcnet.com/molecular

Amplichek I



- Assayed multi-analyte quality control to monitor the performance of popular viral load assays
- Each control lot provides expected range for assays shown in the chart below
- Contains intact, inactivated viral particles to monitor the full NAT process from extraction to amplification and detection
- Convenient single use configuration to reduce contamination risk
- Liquid, human plasma matrix, similar to patient samples
- 12 month shelf life at -20°C to -70°C

Ordering Information

Catalog #	Description	Quantity
12000527	Negative	10 x 1.2 mL
12000528	Level 1	10 x 1.2 mL
12000529	Level 2	10 x 1.2 mL
12000530	Level 3	10 x 1.2 mL
12000531	4 Level MiniPak (one of each level)	4 x 1.2 mL

Analytes

Hepatitis B Virus (HBV)
 Hepatitis C Virus (HCV)
 Human Immunodeficiency Virus Type 1 (HIV-1)

This product is not intended for use with blood donor screening assays in the U.S. or Canada.

Product Level Selection by Instrument

Manufacturer/Assay(s)	Level	Negative	Level 1 (Low Positive)	Level 2 (Low Positive)	Level 3 (High Positive)
	Roche				
COBAS AmpliPrep / COBAS TaqMan HBV Test v2.0		●	●		●
COBAS AmpliPrep / COBAS TaqMan HCV Test		●	●		●
COBAS AmpliPrep / COBAS TaqMan HIV-1 Test v2.0		●	●		●
Abbott Diagnostics					
m2000 RealTime HBV		●		●	●
m2000 RealTime HCV		●		●	●
m2000 RealTime HIV-1		●		●	●

See package insert for current assays and assigned ranges.

Guideline

“... Quality control materials should be different from the calibrator materials to ensure that the QC procedure provides an independent assessment of the measurement procedure’s performance in its entirety, including the procedure for calibration of the measurement.”

CLSI Guidance Document C24-A3, Statistical Quality Control for Quantitative Measurement Procedures: Principles and Definitions; Approved Guideline.

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

Amplichek II



- Liquid, multi-analyte quality control designed to monitor the performance of *in vitro* nucleic acid test systems for Healthcare Associated Infections (HAI)
- Use with multiple specimen types and sampling tools including swabs and transfer pipets
- Convenient single use configuration to minimize contamination
- Contains intact, inactivated bacteria to monitor the full NAT process from extraction to amplification and detection
- Negative, Levels 1 and 2 are suitable for Cepheid Xpert assays
- 2 year shelf life at 2-8°C

Contact your local Bio-Rad office for additional assay compatibility and Level selection information.

Ordering Information

Catalog #	Description	Quantity
12000201	Negative	10 x 0.2 mL
12000202	Level 1	10 x 0.2 mL
12000203	Level 2	10 x 0.2 mL
12000204	Level 3	10 x 0.2 mL
12000575	Negative MiniPak	1 x 0.2 mL
12000576	Level 1 MiniPak	1 x 0.2 mL
12000577	Level 2 MiniPak	1 x 0.2 mL
12000578	Level 3 MiniPak	1 x 0.2 mL

Analytes

Clostridium difficile (C diff.)
Methicillin-resistant *Staphylococcus aureus* (MRSA)
Methicillin-sensitive *Staphylococcus aureus* (MSSA)
Vancomycin-resistant *enterococci* (VRE or vanR)

Product Level Selection by Analyte

- Reactive
- Non-reactive

Analytes

Analyte	Level	Negative* (Non-reactive)	Level 1 (MSSA)	Level 2 (Low Positive)	Level 3 (High Positive)
<i>Clostridium difficile</i> (C diff.) genes: Toxin B, Binary Toxin, TcdC		●	●	●	●
Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) genes: SPA, SCCmec, mecA		●	●	●	●
Methicillin-Sensitive <i>Staphylococcus aureus</i> (MSSA) gene: SPA		●	●		
Vancomycin-Resistant <i>enterococci</i> (VRE or vanR) genes: vanA, vanB**		●	●	●	●

*Contains Methicillin Sensitive *Staphylococcus epidermidis* (MSSE).
**Not available in the USA.

Amplichek STI



- Liquid, multi-analyte quality control designed to monitor the performance of *in vitro* nucleic acid test systems for sexually transmitted infections (STI)
- Suitable for popular assays and a variety of specimen sample types
- Convenient single use configuration to minimize contamination
- Use to monitor multiple assay steps including lysis, nucleic acid extraction and amplification
- Positive level prepared from intact, inactivated bacteria and human cell lines containing high risk HPV genotypes 16, 18 and 68
- 2-year shelf life at -20 to -70C

Ordering Information

Catalog #	Description	Quantity
12000991	Negative	10 x 0.2 mL
12000992	Positive	10 x 0.2 mL
12000993	Negative MiniPak	1 x 0.2 mL
12000994	Positive MiniPak	1 x 0.2 mL

Analytes

Chlamydia trachomatis (CT)
Human Papillomavirus (HPV)
Neisseria gonorrhoeae (NG or GC)

AmpliTrol CT/GC



- Unassayed quality control for DNA amplification assays
- Suitable for BD ProbeTec ET CT/NG
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
00126	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Chlamydia trachomatis (CT)
Neisseria gonorrhoeae (GC)

AmpliPROBE CT/GC



- Unassayed quality control for nucleic acid amplification assays
- Suitable for Hologic Aptima CT and NG assays
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
00138	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Chlamydia trachomatis (CT)
Neisseria gonorrhoeae (GC)

AmpliClear



- Unassayed, non-reactive quality control that serves as a companion to AmpliPROBE CT/GC and AmpliTrol CT/GC
- 2 year shelf life at 2–8°C
- 60 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
00127	Single Level/Dropper Bottle. 1 x 5 mL

Analytes

Non-reactive for:
Chlamydia trachomatis (CT)
Neisseria gonorrhoeae (GC)

Did You Know. . .
 ISO 15189 suggests that the use of independent third party control materials should be considered, either instead of, or in addition to, any control materials supplied by the reagent or instrument manufacturer.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.



Premium Controls

Consolidated controls address the complex needs of your multi-discipline laboratory

Premium Controls

Liquid Assayed Multiqual Premium	84
Liquichek Immunoassay Premium Control.	85

Additional Information

Controls for Popular Instruments Chart	86
--	----

See Also

- **Page 53** for Liquichek Tumor Marker Control

Did You Know?

- **Our Premium Controls** contain cross-disciplinary analytes for simple, quick and efficient QC testing on integrated immunochemistry systems

For More Information

- **Brochure** Premium Controls for Immunochemistry (Q-1215)
- **Brochure** Independent and Complete Control for Immunoassay (Q-1219)

Liquid Assayed Multiqual Premium



- Combination of 96 analytes, including General Chemistry, Immunology and Therapeutic Drug Monitoring (TDM) analytes
- Introduces a new level of efficiency by combining multiple high-usage quality controls
- Reduces QC set-up time, eliminates waste and provides cost and labor savings
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes
- 30 day unopened stability at 2-8°C for most analytes

Ordering Information

Cat #	Description
284	Level 1 6 x 5 mL
285	Level 2 6 x 5 mL
286	Level 3 6 x 5 mL
285X	Trilevel MiniPak (1 of each level) 3 x 5 mL

Analytes

General Chemistry

Acid Phosphatase (Total)
 Albumin
 Alkaline Phosphatase (ALP)
 Alpha-Hydroxybutyrate Dehydrogenase (αHBDH)
 ALT/SGPT
 Amylase
 Amylase (Pancreatic)
 AST/SGOT
 Bile Acids
 Bilirubin (Direct)
 Bilirubin (Neonatal)
 Bilirubin (Total)
 Calcium (Total)
 Calcium (Ionized)
 Carbon Dioxide (CO₂)
 Chloride
 Cholesterol (HDL)
 Cholesterol (LDL)
 Cholesterol (Total)
 Cholinesterase
 Copper
 Creatine Kinase (CK)
 Creatinine
 Ethanol
 GGT

Glucose
 Glutamate Dehydrogenase (GLDH)*
 Iron
 Iron (TIBC)
 Iron (UIBC)
 Lactate (Lactic Acid)
 Lactate Dehydrogenase (LDH)
 LAP Arylamidase
 Lipase
 Magnesium
 Osmolality
 Phosphorus
 Phospholipids
 Potassium
 Protein (Total)
 Sodium
 Triglycerides
 Urea
 Urea Nitrogen (BUN)
 Uric Acid
 Zinc

Immunology

Alpha-1-Antitrypsin
 Alpha-1-Acid Glycoprotein (AAG)
 Anti-CCP

ASO
 Apolipoprotein A-1
 Apolipoprotein B
 β-2-Microglobulin
 Ceruloplasmin
 C-Reactive Protein (CRP)
 Complement C3
 Complement C4
 Cystatin C
 Globulin
 Haptoglobin
 Immunoglobulin A (IgA)
 Immunoglobulin G (IgG)
 Immunoglobulin M (IgM)
 Kappa Light Chain
 Lambda Light Chain
 Prealbumin
 Protein Electrophoresis
 Transferrin

TDM

Acetaminophen
 Amikacin
 Caffeine
 Carbamazepine
 Digoxin
 Disopyramide
 Gentamicin

Lidocaine
 Lithium
 Methotrexate
 NAPA
 Phenobarbital
 Phenytoin
 Procainamide
 Quinidine
 Salicylate
 Theophylline
 Tobramycin
 Valproic Acid
 Vancomycin

Immunoassay

Cortisol
 Ferritin
 T3 Uptake / T Uptake
 T3 (Total)
 T4 (Free)
 T4 (Total)
 TSH
 Vitamin B₁₂

*Not available for diagnostic use in the United States.



Did you know . . .

You can optimize your core laboratory performance by using our family of Premium Controls.

Liquichek Immunoassay Premium Control



- Combination of 62 analytes including routine Immunoassay, Specialty Immunoassay, Therapeutic Drug Monitoring (TDM) and Tumor Marker analytes
- Introduces a new level of efficiency by combining multiple high-usage quality controls
- Reduces QC set-up time, eliminates waste and provides cost and labor savings
- Liquid, human serum based
- 2 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes
- 28 day unopened stability at 2-8°C for most analytes

Ordering Information

Cat #	Description
27110	Trilevel (2 of each level) 6 x 5 mL
27111	Level 1 6 x 5 mL
27112	Level 2 6 x 5 mL
27113	Level 3 6 x 5 mL
27110X	MiniPak (1 of each level). 3 x 5 mL

Analytes

Immunoassay

Acid Phosphatase (Prostatic)
AFP
Cortisol
DHEA-Sulfate
Estradiol
Estriol (Free)
Ferritin
Folate
FSH
hCG (Total Beta)
hGH
Insulin
LH
Progesterone
Prolactin
T3 Uptake/T Uptake
T3 (Free)
T3 (Total)

T4 (Free)
T4 (Total)
TBG
Testosterone
TSH
Vitamin B₁₂

Immunology

IgA
IgE
IgG
IgM

Specialty Immunoassay

25-Hydroxy Vitamin D (Total)
SHBG

TDM

Acetaminophen
Amikacin
Caffeine

Carbamazepine (Tegretol)
Digoxin
Disopyramide
Ethosuximide
Gentamicin
Lidocaine
Lithium
NAPA (N-Acetyl Procainamide)
Phenobarbital
Phenytoin
Phenytoin (Free)
Primidone
Procainamide
Quinidine
Salicylate
Theophylline
Tobramycin
Tricyclic Antidepressant (TCA)
Screen

Valproic Acid
Valproic Acid (Free)
Vancomycin

Tumor Marker

β-2-Microglobulin
CA 125
CA 15-3
CA 19-9
CEA (Carcinoembryonic Antigen)
Cyfra 21-1*
PSA (Free)
PSA (Total)

*Not available for diagnostic use in the United States.



Use Bio-Rad's Premium Controls on these popular instruments

Manufacturer/Instrument(s)	Liquid Assayed Multiqual Premium	Liquichek Immunoassay Premium
Abbott Diagnostics		
ARCHITECT cSystems	●	●
ARCHITECT iSystems	●	●
Beckman Coulter		
Access 2	●	●
AU Systems	●	●
Synchron DxC Systems	●	●
Unicel Dxl Series	●	●
Ortho Clinical Diagnostics		
VITROS Microslide & Microtip Series	●	●
VITROS Microwell Series		●
Roche Diagnostics		
cobas c Systems	●	●
Cobas E Systems	●	●
COBAS INTEGRA	●	●
Elecsys/E 170/E Systems	●	●
Hitachi/MODULAR Systems	●	●
Siemens		
ADVIA Centaur		●
ADVIA Chemistry Systems	●	
BN Series	●	●
Dimension Series	●	●
Dimension Vista Systems	●	●
IMMULITE		●

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



QC Data Management Solutions

Optimize Your Laboratory Performance as a Member of the World's Largest Community of QC Users

Software Products

Unity Real Time LT	88, 89
UnityWeb	88, 89
Unity Real Time	88, 90
Unity Real Time online	88, 90
WebConnect	89
UnityConnect	90
Bio-Rad Mission: Control	91
Westgard Advisor	91
Unity Alert	91
Unity Interlaboratory Reports	92

Did You Know?

- **Web-based software** solutions eliminate the need to install and update software locally, and reduce the amount of support necessary from on-site IT staff

For More Information

- **Booklet** Unity Interlaboratory Program (Q-1144)
- **Brochure** QC Data Management Solutions (Q-1181)
- **Brochure** QC Data Management Solutions for Lab Supervisors (Q-1190)
- **Flyer** Unity Alert (Q-1180)
- **Flyer** Westgard Advisor (Q-1608)
- **Flyers** Bio-Rad Mission: Control (Q-1638 and Q-1642)
- **Website**
www.qcnet.com/datamanagement

Join over 29,000 of your peers who already use the Unity Interlaboratory Program, the most robust program for clinical labs

Bio-Rad Quality Controls are part of the Unity Program with industry-leading features for benchmarking laboratory performance. Whether a lab produces five hundred or five million results a year, the lab director bears ultimate responsibility for the accuracy and timeliness of each test result.¹

A patient risk approach to QC means planning your QC based on the type or method of the test and its impact on patient outcomes when a failure is detected. As the world's leader in clinical laboratory QC, we've established the foundation to help you make the transition to patient-focused QC.

- Benefit from peer data generated from more than 50,000 instruments worldwide
- Utilize real-time access to peer group comparisons to help with troubleshooting
- Consolidate your entire laboratory into one QC system

- Facilitate run-time decisions with optimized Westgard rules
- Facilitate compliance with simple tools to review rule violations and document corrective actions
- Define your own quality requirements and track key quality performance indicators
- Automate QC data from Instruments, Middleware and/or LIS systems with Unity Connectivity

This sophisticated software includes best-in-class tools to support releasing results, benchmarking laboratory performance, and designing your QC system. Unity enables you to work smarter, making it possible to achieve optimum lab practice for your QC workflow. Reducing manual QC data management tasks with software automation frees your staff to focus on more critical tasks. Unity ultimately helps your team deliver objectives more efficiently and with greater ease.

Choose From Four Unity Solutions

Bio-Rad Laboratories offers several options for participation in the Unity Interlaboratory Program. Refer to the product comparison grid below to help determine which solution is the most appropriate for your laboratory.

	Basic User Options		Advanced User Options	
	UnityWeb	Unity Real Time LT	Unity Real Time online	Unity Real Time
Type of Solution				
Web Service (Web-based)	X		X	
Desktop Software		X		X
Unity Interlaboratory Reports				
Monthly Reports	X	X	X	X
InstantQC Reports	X	X	X	X
Basic Intralaboratory Charts & Reports				
Westgard Rules	X	X	X	X
Various Charts and Reports	X	X	X	X
Additional Features				
Westgard Advisor (Subscription sold separately)	X		X	X
Bench Review with Data Review Report	X	X	X	X
Supervisor Data Review with Data Review Report			X	X
Analytical Goals			X	X
Dynamic Data Set Comparisons			X	X
Database Platform				
Bio-Rad Hosted	X		X	
Installed on Local Laboratory PC		X		X
Connectivity (Sold separately)				
WebConnect	X		X	
UnityConnect	X	X	X	X

Want to know more? Discover the power of Unity Solutions at www.qcnet.com/datamanagement/

¹Malone B. A New Approach to Quality Control. AACC. 2011;37:11. Available at: <http://www.aacc.org/publications/cln/2011/november/Pages/ANewApproachtoQualityControl.aspx#>. Accessed June 14, 2013. Refer to myInSerts.com or the package insert of currently available lots for specific analyte and stability claims.



Basic



Advanced



Desktop based



Web based



Mobile



Basic User Options

Unity Real Time LT



Entry-Level Desktop QC Data Management Solution

- Basic QC rules, charts and reports
- Configurable Levey-Jennings charts
- Upgrade easily to Unity Real Time for more advanced tools and features
- Upload QC data points from an LIS, middleware or instrument (optional)

Ordering Information

Cat #	Description
804	Installation Package.Single use
805-1	Unity Real Time LT. Annual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

UnityWeb



Entry-Level Online QC Data Management Solution

- No software to install and maintain
- Use basic QC rules, charts and reports
- Upgrade easily to Unity Real Time online for more advanced tools and features
- Upload QC data points from an LIS, middleware or instrument (optional)

Ordering Information

Cat #	Description
870-1	UnityWeb. Annual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

WebConnect



A web-based connectivity solution that allows laboratories to easily upload QC data from LIS systems, middleware and/or instruments directly into Unity Real Time online or UnityWeb

- Eliminate manual keying of data
- Standard LIS QC reports can be used
- No software to install

Ordering Information

Cat #	Description
870-W1	WebConnect 2.0 Annual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use



Compliance Requirements

"The laboratory shall design quality control procedures that verify the attainment of the intended quality of results."

– ISO 15189:2012(E), Subclause 5.6.2.1

Advanced User Options

Unity Real Time



Expert QC Data Management Solution for Desktop Users

- Facilitate compliance under CLIA and ISO 15189
- Improve real-time bench and supervisor QC data review
- Implement best QC rules when used with Westgard Advisor
- Run validation with comprehensive audit trails
- Advanced charts and reports for data analysis
- Reduce non-essential retests with Analytical Goal options
- Upload QC data points from an LIS, middleware or instrument (optional)
- RiLiBÄK module available to comply with German regulations
- GOST module available to comply with Russian regulations

Ordering Information

Cat #	Description
804	Installation PackageSingle use
804-1	Unity Real Time Annual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

Unity Real Time online



Expert QC Data Management Solution for Online Users

- Facilitate compliance under CLIA and ISO 15189
- Improve real-time bench and supervisor QC data review
- Implement best QC rules when used with Westgard Advisor
- Run validation with comprehensive audit trails
- Advanced charts and reports for data analysis
- Reduce non-essential retests with Analytical Goal options
- Upload QC data points from an LIS, middleware or instrument (optional)

Ordering Information

Cat #	Description
804-W1	Unity Real Time online Annual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

UnityConnect



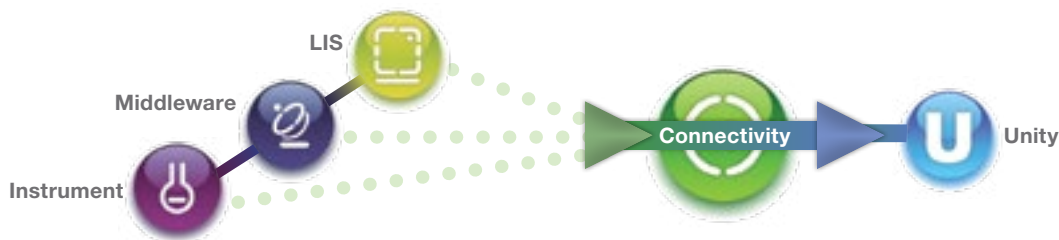
A connectivity solution that allows QC data from LIS systems, middleware and/or instruments to be quickly and easily imported into Unity software, enabling interlaboratory program comparison

- Eliminate manual keying of QC data
- Standard LIS QC reports can be used
- Automatic data import and real-time connection
- Transparent to the flow of data to the LIS
- Capture and analyze QC data economically from laboratory instruments not connected to the LIS
- Easy-to-install optional interface hardware
- Choose from soft, serial and ethernet connections

Ordering Information

Cat #	Description
820-1	UnityConnect Software Annual subscription
858i	Additional Software TrainingSingle use

Hardware solutions available for serial and network devices. Contact your Bio-Rad sales representative for recommendation.



Contact your Bio-Rad sales representative for region-specific information.

 **Advanced User Options**

Bio-Rad Mission: Control  

Take the guesswork out of your QC strategy

Employing a robust quality control system is an essential step for any laboratory hoping to provide reliable results for appropriate patient care. Unfortunately for clinical laboratories, selecting the right QC rules and frequency can be challenging, and questions often arise.

- How often should controls be run for specific assays—is there an optimal frequency?
- How can QC be managed to minimize the risk of releasing incorrect patient results?

Bio-Rad Mission: Control is the first objective risk management solution for quality control in laboratories. The intuitive interface allows users to focus on patient safety by assessing the risk of reporting incorrect patient results in their laboratory.

Bio-Rad Mission: Control allows you to:

- Determine your laboratory’s Risk Management Index (RMI)
- Evaluate your test method performance based on your QC results
- Quantify the likelihood and severity of reporting incorrect patient results
- Assess how much you can lower your risk, based on instrument performance
- Create a QC Plan by confidently selecting rules and frequency that fit your risk tolerance



Minimize your risk of reporting unreliable patient results

A patient risk approach to Quality Control is a progressive step toward improving quality assurance and patient care. Bio-Rad can help you understand what this means for your laboratory and how to take steps to implement an effective approach for Quality Control within your analytical test phase.

For more information, visit www.qcnet.com/missioncontrol

Ordering Information

Cat #	Description
11000002	Mission: Control.Annual Subscription
11000005	Mission: Control.Subscription and Service Bundle

Westgard Advisor   

Automatic QC Rules Selection Engine

- Recommend and automatically apply best QC rules with patented technology
- Easy step-by-step automatic rule selection capabilities
- Reduce false rejections and desensitization to false error flags
- Save time and money by reducing unnecessary repeats and troubleshooting
- Improve laboratory test quality with optimally selected QC rules
- Available as an optional module with Unity QC data management solutions

Ordering Information

Cat #	Description
811-1	Westgard AdvisorAnnual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

Unity Alert  

Continuously Monitor QC Status

- Notifications of missing QC runs can help to ensure proper monitoring of instrument performance
- Notifications of new violations can be useful for troubleshooting and monitoring problem analytes
- Alert rules are easy to set up and customize for specific instruments or tests
- Receive emails remotely to stay informed of QC issues in your laboratory
- Color-coded displays help draw attention to the most urgent QC issues
- Notifications are provided even when Unity Real Time is not in use
- Available as an optional module with Unity Real Time

Ordering Information

Cat #	Description
806-1	Unity AlertAnnual subscription
825i	Unity Remote Installation & Training.Single use
858i	Additional Software TrainingSingle use

Contact your Bio-Rad sales representative for region-specific information.

Unity Interlaboratory Reports

There has never been a better time to be a member of the world's largest QC peer group program

Bio-Rad drives innovation in the development of Quality Control for the clinical laboratory and we're raising the bar again. It's time to take a fresh look at your Unity peer reports. Redesigned formats make reports easier than ever to read. The addition of color, graphics and statistical information allows you to interpret your data with ease, enabling prompt action to potential problems. Condensed report formats require fewer pages and view equally well printed in color or black and white.

Unity Interlaboratory Program Reports Feature:

- Logical arrangement of data provides a quick and intuitive read
- Data consolidation and imagery simplifies interpretation of lab data

List of Available Reports

- Monthly Evaluation
- Laboratory Performance Overview
- Laboratory Comparison Report
- Laboratory Histogram
- Bias & Imprecision Histogram
- Worldwide Report
- Statistical Profile Report
- Affiliated Laboratory Comparison Report
- Affiliated Laboratory Comparison Report: Abbreviated Summary
- Affiliated Data Exception Report
- Urinalysis Reports
- Qualitative Worldwide Report
- Blood Typing/Serum Indices Report
- InstantQC Report

Contact your Bio-Rad Sales Representative or visit QCNet.com for more information.

Unity January 2019 • Lab 12345

Monthly Evaluation
Immunoassay Plus • Lot 12345 • Exp 01-Jan-2021

Associated Regional Laboratory
123 Main Street
Anytown, NY 12345-6789
Attention: Lab Supervisor

Please review your QC reports for January 2019.

! The tests listed below may require investigation or review !

Centamycin Immunoturbidimetric ug/mL	Level	Lab	Peer	Method
Siemens Dimension RXL				
Peer CVR	0.9			
Method CVR	0.4			
Peer SDI	-2.1			
Method SDI	-1.6			

Data Exclusion: Lab Mean = 2.15
Acceptable values are 2.1841 to 3.5306
This data was not used as part of the Unity worldwide statistical database.

Warning: Acceptable values are above -2.0, below 2.0

This level is within established parameters

Level	Lab	Peer	Method
1	2.15	2.80	3.00
	SD 0.14	0.170	0.253
	CV 6.5	6.0	8.4
	# Points 31	6797	20391
	# Labs 223	670	

Level	Lab	Peer	Method
2	5.54	5.98	6.31
	SD 0.171	0.209	0.469
	CV 3.1	3.5	7.4
	# Points 32	6588	19764
	# Labs 220	659	

Level	Lab	Peer	Method
3	7.94	7.87	8.13
	SD 0.215	0.273	0.575
	CV 2.7	3.5	7.1
	# Points 33	6797	20391
	# Labs 223	670	

Unity January 2019 • Lab 12345

Laboratory Comparison Report
Immunoassay Plus • Lot 12345 • Exp 01-Jan-2021

Associated Regional Laboratory
123 Main Street
Anytown, NY 12345-6789
Attention: Lab Supervisor

Carbamazepine (Epzoral) Immunoturbidimetric ug/mL	Level	Mon	Cum	Your Lab Mon	Your Lab Cum	Peer Group Mon	Peer Group Cum	Method Group Mon	Method Group Cum
Siemens Dimension EXL									
Peer CVR	0.9	1.8				2.99	2.99	2.90	2.90
Method CVR	0.8	1.7				0.170	0.372	0.196	0.209
Peer SDI	0.10	-0.12				5.7	12.5	6.6	7.0
Method SDI	0.45	0.4				33	316	6794	53336
						# Points	226	20382	160K
						# Labs	308	677	925

Level	Mon	Cum	Peer Group Mon	Peer Group Cum	Method Group Mon	Method Group Cum
1	8.75	8.66	8.73	8.88	8.77	8.75
	SD 0.314	0.366	0.369	0.402	0.414	0.448
	CV 3.6	4.2	4.2	4.5	4.7	5.1
	# Points 34	294	6412	50441	19236	151K
	# Labs 222	303			666	909

Level	Mon	Cum	Peer Group Mon	Peer Group Cum	Method Group Mon	Method Group Cum
2	14.41	14.53	14.54	14.68	14.47	14.45
	SD 0.391	0.890	0.588	0.691	0.640	0.730
	CV 2.7	6.1	4.0	4.5	4.4	5.1
	# Points 33	294	6794	53336	20382	160K
	# Labs 226	308			677	925

Diroxin BA ng/mL	Level	Mon	Cum	Your Lab Mon	Your Lab Cum	Peer Group Mon	Peer Group Cum	Method Group Mon	Method Group Cum

Receive on-demand InstantQC Reports via QCNet today!

InstantQC Reports allow you to compare your QC results to other laboratories at any time, with real-time peer information. On-demand reports are particularly useful for troubleshooting problems with test system performance.



Customers agree:

"The documentation of Bio-Rad Controls using the Unity QC Program has been well accepted by CAP inspectors. Worry-free QC."
— Laboratory Director, Health Center

"To compare our data with a substantial peer group ensures that we are turning out reliable patient data."
— Laboratory Supervisor, School of Medicine

"The reports are clean and easy to read and understand. For each test, Unity Reports for our lab show a summary of our data, our instrument group, and our method group—reports are simple."
— Clinical Chemist, Hospital Laboratory



QC Products in Dimension Vista Vials

Rely on Bio-Rad controls and QC performance for routine quality control of Vista assays

Quality Control Products

Liquid Assayed Multiqual Control	94
Liquichek Cardiac Markers Plus Control LT	94
Liquichek Diabetes Control	95
Liquichek Ethanol/Ammonia Control	95
Liquichek Immunoassay Plus Control	96
Liquichek Immunology Control	96
Liquichek Pediatric Control	97
Liquichek Spinal Fluid Control	97
Liquichek Tumor Marker Control	98
Liquichek Urine Chemistry Control	98

See Also

- **Pages 148-149** Analyte Chart: QC Products in Dimension Vista Vials

Controls in Vista vials allow Dimension Vista customers to

- **Access extensive** Unity peer group reports and comparisons
- **Scan 2D barcodes** to automatically set-up QC with Vista assigned values to prevent transcription errors
- **Alleviate manual pour-off** tasks to minimize handling errors and reduce the cost of extra consumables
- **Monitor analytes** that are specific to the Dimension Vista test menu

For More Information

- **Booklet** Bio-Rad Quality Control Products in Dimension Vista Vials (Q-1214)
- **Flyer** Dimension Vista Controls Analyte Chart (Q-1223)

Liquid Assayed Multiqual Control



- Provides a comprehensive range of chemistry analytes for monitoring the precision of general chemistry test procedures
- Liquid, human serum based
- 5 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 3 year shelf life when stored at -20°C to -50°C

Ordering Information

Cat #	Description
337	Level 1 12 x 2.5 mL
338	Level 2 12 x 2.5 mL
339	Level 3 12 x 2.5 mL
338X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Analytes

General Chemistry

Albumin
 Alkaline Phosphatase (ALP)
 ALT/SGPT
 Amylase
 AST/SGOT
 Bilirubin (Direct)
 Bilirubin (Total)
 Calcium (Total)
 Chloride
 Cholesterol (HDL)
 Cholesterol (LDL)
 Cholesterol (Total)
 CO₂
 Creatine Kinase
 Creatinine
 Ethanol

GGT
 Glucose
 Iron
 Iron (TIBC)
 Lactate (Lactic Acid)
 Lactate Dehydrogenase (LDH)
 Lipase
 Magnesium
 Phosphorus
 Potassium
 Protein (Total)
 Pseudocholinesterase
 Sodium
 Triglycerides
 Urea Nitrogen
 Uric Acid

Immunology

Alpha-1-Antitrypsin
 Apolipoprotein A-1
 Apolipoprotein B
 Ceruloplasmin
 Complement C3
 Complement C4
 Haptoglobin
 Immunoglobulin A (IgA)
 Immunoglobulin G (IgG)
 Immunoglobulin M (IgM)
 Prealbumin
 Transferrin
Therapeutic Drug Monitoring
 Acetaminophen
 Carbamazepine
 Digoxin

Gentamicin
 Lithium
 Phenobarbital
 Phenytoin
 Salicylate
 Theophylline
 Tobramycin
 Valproic Acid
Immunoassay
 Ferritin
 T3 (Total)
 T3 Uptake/T-Uptake
 T4 (Free)
 T4 (Total)
 TSH
 Vitamin B₁₂

Liquichek Cardiac Markers Plus Control LT



- A comprehensive cardiac assessment control
- Level 1C Troponin I values at or near the 99th percentile upper reference limit (URL) of Troponin I LOCI method
- Value assigned for hs-CRP
- Liquid, human serum based
- 10 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 3 year shelf life when stored at -20°C to -50°C

Ordering Information

Cat #	Description
297	Level 1C 6 x 2.5 mL
298	Level 2 6 x 2.5 mL
299	Level 3 6 x 2.5 mL
298X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Analytes

CK (Total)
 CK-MB Isoenzyme
 CRP
 Digitoxin
 Myoglobin
 NT-proBNP
 Troponin I



Did You Know . . .

Siemens Healthineers recommends the family of Bio-Rad Controls in Dimension Vista vials for your Quality Control needs.

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Diabetes Control



- Monitors the precision of Hemoglobin A1C
- Available in three critical levels
- Liquid, human whole blood based
- 14 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 3 year shelf life when stored at -10°C to -50°C

Ordering Information

Cat #	Description
291	Level 1 6 x 2 mL
292	Level 2 6 x 2 mL
293	Level 3 6 x 2 mL
292X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analyte

Hemoglobin A1C

Liquichek Ethanol/Ammonia Control



- Offers normal, elevated and toxic concentrations of Ethanol and Ammonia
- 20 day open-vial (punctured) stability for both analytes when stored at 2–8°C
- 2 year shelf life when stored at 2–8°C

Ordering Information

Catalog #	Description
271	Level 1 6 x 2.5 mL
272	Level 2 6 x 2.5 mL
273	Level 3 6 x 2.5 mL
272X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

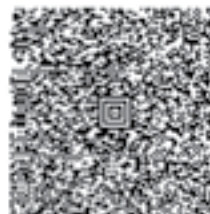
Analytes

Ammonia
Ethanol

Product Insert Table and 2D Barcode

Scan 2D barcodes with Vista values for easy, efficient QC product set-up

Analyte	Lot 45611V			Units	Lot 45611V		
	Mean	Range			Mean	Range	SI
Ascorbic Acid	23.8	20.9 – 26.7		µg/mL	150	130 – 170	µmol/L
Bovine Serum Albumin (BSA)	26.0	22.8 – 29.2		g/L	0.434	0.377 – 0.490	µg/mL
Bilirubin	2.45	2.26 – 2.66		g/L	24.8	22.8 – 26.8	g/L
Alkaline Phosphatase (ALP)	37.8	32.4 – 43.2		U/L	0.031	0.274 – 0.389	µkat/L
Alpha-1-Antitrypsin (A1)	33.7	30.3 – 36.9		mg/dL	0.037	0.033 – 0.408	g/L
Amylase	40.1	36.2 – 44.0		U/L	0.070	0.035 – 0.126	µkat/L
Amylopectin (A1-1)	37.5	30.8 – 44.2		mg/dL	0.075	0.035 – 0.140	g/L
Amylopectin (A1-2)	41.4	36.9 – 45.9		mg/dL	0.034	0.030 – 0.408	g/L
Aspartate Aminotransferase (ASAT)	36.6	30.9 – 42.3		U/L	0.012	0.017 – 0.107	µkat/L
Bilirubin, Direct	0.210	0.100 – 0.320		mg/dL	3.09	1.71 – 5.67	µmol/L
Bilirubin, Total	0.010	0.010 – 0.100		mg/dL	13.4	8.72 – 12.8	µmol/L
Cl Complement (%)	89.3	82.0 – 96.7		mg/dL	0.003	0.003 – 0.007	g/L
Cl Complement (%)	14.8	13.4 – 16.2		mg/dL	0.148	0.134 – 0.162	g/L
Calcium, Total	6.10	5.89 – 6.51		mg/dL	1.52	1.42 – 1.63	mmol/L
Catecholamine	1.92	2.89 – 4.86		µg/mL	19.6	12.5 – 26.8	µmol/L
Carbon Dioxide (CO ₂)	13.8	14.2 – 17.5		mg/dL	11.8	14.2 – 17.5	mmol/L



Note: All barcodes should be scanned on the package insert prior to implementing a new lot of Vista vial products for purposes of updating the quality control data.

Liquichek Immunoassay Plus Control



- Efficient solution for QC of routine Immunoassay and Therapeutic Drug Monitoring analytes
- Liquid, human serum based
- 4 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 2 year shelf life when stored at -20°C to -50°C

Ordering Information

Catalog #	Description
267	Level 1 12 x 2.5 mL
268	Level 2 12 x 2.5 mL
269	Level 3 12 x 2.5 mL
268X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Analytes

Therapeutic Drug Monitoring

Acetaminophen
Amikacin
Caffeine
Carbamazepine
Digoxin
Gentamicin
Lidocaine
Lithium
N-Acetylprocainamide (NAPA)
Phenobarbital
Phenytoin
Procainamide

Salicylate
Theophylline
Tobramycin
Tricyclic Antidepressants (TCA)
Screen
Valproic Acid
Vancomycin

Immunology

Immunoglobulin A (IgA)
Immunoglobulin E (IgE)
Immunoglobulin G (IgG)
Immunoglobulin M (IgM)

Immunoassay

Alphafetoprotein (AFP)
CEA
Estradiol
Ferritin
Folate
FSH
hCG-β Subunit
LH
Prolactin
PSA
PSA (Free)
T3 (Free)

T3 (Total)
T3 Uptake/T-Uptake
T4 (Free)
T4 (Total)
TSH
Vitamin B₁₂

Cardiac

CK-MB Isoenzyme

General Chemistry

Iron

Liquichek Immunology Control



- Comprehensive control to monitor the precision of serum proteins and related analyte test procedures
- Liquid, human serum based
- 5 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 2 year shelf life when stored at -20°C to -50°C

Ordering Information

Catalog #	Description
281	Level 1 6 x 2.5 mL
282	Level 2 6 x 2.5 mL
283	Level 3 6 x 2.5 mL
282X	Trilevel MiniPak (1 of each level) 3 x 2.5 mL

Analytes

α-1-Acid Glycoprotein
α-1-Antitrypsin
α-2-Macroglobulin
β-2-Microglobulin
Albumin
Antistreptolysin O (ASO)
Apolipoprotein A-1

Apolipoprotein B
C1 Inhibitor
Ceruloplasmin
Complement C3
Complement C4
CRP
Cystatin C

Ferritin
Haptoglobin
Immunoglobulin A (IgA)
Immunoglobulin E (IgE)
Immunoglobulin G (IgG)
Immunoglobulin G Subclasses 1–4
Immunoglobulin M (IgM)

Kappa Light Chain
Lambda Light Chain
Prealbumin
Protein (Total)
Retinol Binding Protein (RBP)
Rheumatoid Factor
Transferrin

Liquichek Pediatric Control



- Monitors precision of analyte test procedures at higher concentrations important for neonatal testing
- Suitable for monitoring high Bilirubin levels important for adult liver disease.
- Liquid
- 14 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 3 year shelf life when stored at -20°C to -50°C

Ordering Information

Catalog #	Description
176	Level 1 6 x 2.5 mL
177	Level 2 6 x 2.5 mL
178X	Bilevel MiniPak (1 of each level) 2 x 2.5 mL

Analytes

Bilirubin (Direct)	Glucose
Bilirubin (Total)	Magnesium
Caffeine	Potassium
Calcium	Sodium
Chloride	Theophylline

Liquichek Spinal Fluid Control



- Multi-analyte control with relevant concentrations of analytes for cerebrospinal fluid tests
- Liquid, human based
- 30 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 2 year shelf life at 2–8°C

Ordering Information

Catalog #	Description
303	Level 1 6 x 2.5 mL
304	Level 2 6 x 2.5 mL
302X	Bilevel MiniPak (1 of each level) 2 x 2.5 mL

Analytes

Albumin	Lactate (Lactic Acid)
Chloride	Lactate Dehydrogenase (LDH)
Glucose	Protein (Total)
Immunoglobulin G (IgG)	Sodium

Did You Know. . .

Liquid Assayed Multiquel (pg. 97) and Liquichek Immunology Control (pg. 97) complement Liquichek Spinal Fluid Control for analytes also tested in serum. See individual product pages for more information.

Liquichek Tumor Marker Control



- Monitors the precision of tumor marker testing procedures
- Liquid, human based
- 10 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 2 year shelf life when stored at -20°C to -50°C

Ordering Information

Cat #	Description
27114	Level 1 6 x 2 mL
27115	Level 2 6 x 2 mL
27116	Level 3 6 x 2 mL
27115X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

Alphafetoprotein (AFP)	Ferritin
β-2-Microglobulin	hCG
CA 15-3	Prolactin
CA 19-9	PSA (Free)
CA 125	PSA (Total)
Carcinoembryonic Antigen (CEA)	

Liquichek Urine Chemistry Control



- Monitors the precision of general urine chemistry testing procedures
- Includes Amylase and Creatinine
- Liquid, human urine based
- 30 day open-vial (punctured) stability for all analytes when stored at 2–8°C
- 2 year shelf life when stored refrigerated at 2–8°C

Ordering Information

Cat #	Description
195	Level 1 12 x 2.5 mL
196	Level 2 12 x 2.5 mL
198X	Bilevel MiniPak (1 of each level) 2 x 2.5 mL

Analytes

Amylase	Phosphorus
Calcium	Potassium
Chloride	Protein (Total)
Creatinine	Sodium
Glucose	Urea Nitrogen
Magnesium	Uric Acid
Microalbumin	

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.



Therapeutic Drug Monitoring Controls

Be more confident when reporting TDM results with Bio-Rad's reliable QC products, regardless of what platform you use

TDM Controls

Liquichek Whole Blood Immunosuppressant Control	100
Lyphocheck Whole Blood Immunosuppressant Control	100
Liquichek Therapeutic Drug Monitoring Control.	101
Lyphocheck Therapeutic Drug Monitoring Control	101

Additional Information

Controls for Popular Instruments Chart	102
--	-----

See Also

- **Pages 18-21** for TDM analytes in Serum Chemistry controls
- **Pages 50-54** for TDM analytes in Immunoassay controls
- **Pages 84-85** for TDM analytes in Premium Controls

Did You Know?

- **Bio-Rad controls** provide assigned values for over 50 TDM methods to aid in providing consistently reliable results

For More Information

- **Brochure** Whole Blood Immunosuppressant Controls (Q-1604)
- **Brochure** Premium Controls for Immunochemistry (Q-1215)

Liquichek Whole Blood Immunosuppressant Control



- Multiple levels ranging from low to very high immunosuppressant concentrations
- Compatible with chromatography and most immunoassay methods
- Liquid, human blood based
- 3 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes

Ordering Information

Cat #	Description
12000404	Level 1 6 x 2 mL
12000405	Level 2 6 x 2 mL
12000406	Level 3 6 x 2 mL
12000407	Level 4 6 x 2 mL
12000408	Four Level MiniPak (1 of each level) 4 x 2 mL

Lyphochek Whole Blood Immunosuppressant Control



- Multiple levels ranging from low to very high immunosuppressant concentrations
- Compatible with chromatography and most immunoassay methods.
- Lyophilized, human blood based
- 3 year shelf life at 2-8°C
- 14 day reconstituted stability at 2-8°C
- 30 day reconstituted stability at -20°C to -70°C

Ordering Information

Cat #	Description
274	Level 1 6 x 2 mL
275	Level 2 6 x 2 mL
276	Level 3 6 x 2 mL
277	Level 4 6 x 2 mL
278	Level 5 6 x 2 mL
279X	Five Level MiniPak (1 of each level) 5 x 2 mL

Analytes for Liquichek and Lyphochek Whole Blood Immunosuppressant Controls

Cyclosporine Everolimus* Sirolimus Tacrolimus (FK 506)

*Available in Liquichek Whole Blood Immunosuppressant Control only. Refer to myeinserts.com or the package insert of currently available lots for specific analyte and stability claims.

	Liquichek Whole Blood Immunosuppressant Control				Lyphochek Whole Blood Immunosuppressant Control				
	Level 1	Level 2	Level 3	Level 4	Level 1	Level 2	Level 3	Level 4	Level 5
Catalog Number	12000404	12000405	12000406	12000407	274	275	276	277	278
Everolimus		•	•	•					
Cyclosporine Sirolimus Tacrolimus	•	•	•		•	•	•		
Extended/High range methods, including chromatography: Cyclosporine Tacrolimus				•				•	•

Refer to the package insert for instrument-specific ranges for each level.



Did you know . . .

Both Liquichek and Lyphochek Whole Blood Immunosuppressant Controls include high levels of Cyclosporine, suitable for C2 monitoring.

Refer to myeinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Therapeutic Drug Monitoring Control (TDM)



- For labs that run a high volume of serum therapeutic drug tests or prefer dedicated TDM controls
- Includes markers for monitoring thyroid function and some esoteric drugs
- Liquid, human serum based
- 3 year shelf life at -20°C to -70°C
- 180 day unopened-vial stability at 2–8°C for most analytes
- 30 day open-vial stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
724	Trilevel (4 of each level) 12 x 5 mL
725	Level 1 12 x 5 mL
726	Level 2 12 x 5 mL
727	Level 3 12 x 5 mL
724X	Trilevel MiniPak (1 of each level) 3 x 5 mL

Analytes

Acetaminophen	Digoxin	Nortriptyline*	T4 (Free)*
Amikacin	Disopyramide	Phenobarbital	T4 (Total)
Amitriptyline*	Estriol (Total)*	Phenytoin	Theophylline
Caffeine	Ethosuximide	Phenytoin (Free)	Thyroid Stimulating Hormone (TSH)
Carbamazepine	Flecainide*	Primidone	Tobramycin
Carbamazepine (Free)	Gentamicin	Procainamide	Tricyclic Antidepressants (TCA)
Chloramphenicol	Haloperidol*	Propranolol	Screen
Clonazepam*	Imipramine*	Quinidine	Valproic Acid
Cortisol	Lidocaine	Salicylate	Valproic Acid (Free)
Cyclosporine*	Lithium	T3 (Free)	Vancomycin
Desipramine	Methotrexate	T3 (Total)	
Diazepam	N-Acetylprocainamide (NAPA)	T3 Uptake/T-Uptake	

*No claims are made regarding performance or stability.

Lymphochek Therapeutic Drug Monitoring Control (TDM)



- For labs that run a high volume of serum therapeutic drug tests or prefer dedicated TDM controls
- Contains over 40 analytes including markers for monitoring thyroid function
- Human serum based
- 3 year shelf life at 2–8°C
- 30 day reconstituted stability at 2–8°C for most analytes

Ordering Information

Cat #	Description
450	Trilevel (4 of each level) 12 x 5 mL
451	Level 1 12 x 5 mL
452	Level 2 12 x 5 mL
453	Level 3 12 x 5 mL
450X	Trilevel MiniPak (1 of each level) 3 x 5 mL

Analytes

Acetaminophen	Disopyramide	Nortriptyline	T4 (Total)
Amikacin	Estriol (Total)*	Phenobarbital	Theophylline
Amiodarone*	Ethosuximide	Phenytoin	Thyroid Stimulating Hormone (TSH)
Amitriptyline	Flecainide*	Phenytoin (Free)	Tobramycin
Caffeine	Gentamicin	Primidone	Tricyclic Antidepressants (TCA)
Carbamazepine	Haloperidol*	Procainamide	Screen
Carbamazepine (Free)	Imipramine	Propranolol	Valproic Acid
Chloramphenicol	Lidocaine	Quinidine	Valproic Acid (Free)
Cortisol	Lithium	Salicylate	Vancomycin
Cyclosporine	Methotrexate	T3 (Total)	
Desipramine	N-Acetylprocainamide (NAPA)	T3 Uptake/T-Uptake	
Digoxin	Netilmicin*	T4 (Free)	

*No claims are made regarding performance or stability.

Did you know . . .

Serum based therapeutic drug testing analytes are also available in Bio-Rad's Premium, Immunoassay and Serum Chemistry Controls.

Use Bio-Rad's Therapeutic Drug Monitoring Controls on these popular instruments

Manufacturer/Instrument(s)	TDM (Liquid)	TDM (Lyophilized)	Whole Blood Immunosuppressant (Liquid)	Whole Blood Immunosuppressant (Lyophilized)
Abbott Diagnostics				
ARCHITECT Series	●	●	●	●
Beckman Coulter				
AU Series	●	●	●	●
UniCel DxC Series	●	●		
Ortho Clinical Diagnostics				
VITROS Series	●	●		
Roche Diagnostics				
Cobas 6000 Series/COBAS INTEGRA	●	●		
Elecsys		●		
Hitachi Systems/ MODULAR Systems	●	●		●
Siemens				
ADVIA Series	●	●		
ADVIA Centaur Series	●	●	●	●
Dimension Vista	●	●	●	●
Dimension Series	●	●	●*	●
IMMULITE Series	●	●		
Viva/V-Twin/Viva-E	●	●	●	●
Other				
Chromatography	●	●	●	●

*Required for Dimension Tacrolimus (TAC DF107)
If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.



Put your data to work—it may be more valuable than you think!

You may be eligible to become a partner in product development and evaluation of new control lots while earning extra money for your laboratory. To learn more visit QCNet.com/ProductStudies/



Toxicology Controls

Bio-Rad has the expertise to assist your laboratory in choosing the right control for your method of analysis

Drugs-of-Abuse Controls

Liquichek Qualitative Urine Toxicology Control	104
Liquichek Urine Toxicology Negative Control	104
Liquichek Opiate Control	105
Liquichek Urine Toxicology Screen Controls	106-108
Liquichek Urine Toxicology Confirm Controls	109

Specialty Controls

Lyphocheck Drug Free Serum	110
Lyphocheck Benzo/TCA Control–Set B	110
Liquichek Serum Volatiles Control	111
Lyphocheck Urine Metals Control	111
Lyphocheck Whole Blood Metals Control	111
Lyphocheck Whole Blood Control	112

Additional Information

Controls for Popular Specialty Toxicology Instruments Chart	112
--	-----

Did You Know?

- **Bio-Rad Drugs-of-Abuse Controls** meet SAMHSA* and other agency guidelines and are made from human urine with pH, specific gravity and creatinine concentrations that fall within the limits of normal human urine
- **Certificates of Analysis** are available upon request. Please contact your Bio-Rad technical support representative for more information

For More Information

- **Brochure** Urine Toxicology Controls (Q-1551)
- **Brochure** Controls for Trace Metals Testing (Q-1552)
- **Flyer** Liquichek Opiate Control (Q-1627)

*United States Substance Abuse and Mental Health Services Administration.

Liquichek Qualitative Urine Toxicology Control, Negative and Positive

Use with qualitative urine drug panels, including POCT methods such as the Bio-Rad TOX/See



- Human urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–25°C

POCT Methods Listed

Ordering Information

Cat #	Description
454	Negative Level 6 x 3 mL
455	Positive Level 6 x 3 mL
454X	Bilevel MiniPak (1 of each level) 2 x 3 mL

Qualitative Control

- Drug-free Negative or Strong Positive
- Smaller packaging
- Room temperature stable up to 30 days after opening

Analyte Target Values

Analytes	Negative* (ng/mL)	Positive (ng/mL)
Amphetamines		
d-Amphetamine	<50	2,000
d-Methamphetamine	<50	2,000
3, 4-Methylenedioxymethamphetamine (MDMA)	<75	750
Barbiturates		
Secobarbital	<50	1,000
Benzodiazepines		
Nordiazepam	<50	3,000
Oxazepam	<50	1,000
Cannabinoids		
11-Nor- Δ -9-THC-9-COOH	<3	150
Cocaine		
Benzoylcegonine	<30	4,000
Ethanol (mg/dL)	<20	250
Lysergic Acid Diethylamide (LSD)	<0.1	2.0
Methadone	<75	750
Methaqualone	<50	750
Opiates		
Morphine (Free)	<50	3,000
Oxycodone	<50	150
Phencyclidine (PCP)	<5	200
Propoxyphene	<50	750
Tricyclic Antidepressants		
Nortriptyline	<20	2,000

*Negative level has been tested and found to be negative for the analytes listed in the package insert. Values above represent the testing method's Limit of Quantitation (LOQ).

Liquichek Urine Toxicology Negative Control

Use with Screening or Confirmatory methods



- Confirmed negative by GC-MS, LC-MS or other methods for 32 common drugs or drug metabolites
- Human urine
- 3 year shelf life at 2–8°C
- 60 day open-vial stability when stored refrigerated at 2–8°C

Ordering Information

Cat #	Description
460	Negative Control 10 x 20 mL
460X	MiniPak 1 x 20 mL

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Opiate Control



- Contains eight drugs or drug metabolites, at concentrations above and below assay cutoffs
- This control has been tested by GC/MS, LC/MS/MS and other methods to confirm the recovery of drug concentration
- Representative values for screening and confirmatory methods provided
- Human urine
- 3 year shelf-life at -20°C to -70°C
- 30 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
12005786	Level 1 6 x 5 mL
12005787	Level 2 6 x 5 mL
12002594	Level 1 MiniPak 1 x 5 mL
12002595	Level 2 MiniPak 1 x 5 mL

Gravimetric Reference Values

Analyte (ng/mL)	Level 1	Level 2
6-Monoacetylmorphine (6-MAM, Heroin Metabolite)	7.5	12.5
Buprenorphine	5	15
EDDP (Methadone Metabolite)	50	150
Fentanyl	0.25	0.75
Meperidine*	100	300
Methadone	150	450
Oxycodone	50	150
Tramadol*	100	300

*International use only.



Opiate Control

Targeted for analytes tested in pain management or opioid treatment and compliance programs.

Liquichek Urine Toxicology Controls

SCREEN CONTROLS



Levels S1 & S2 Levels S1E & S2E

- Human urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Ordering Information

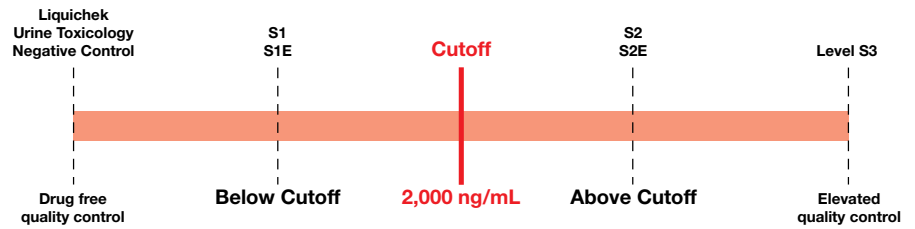
Cat #	Description
438	Level S1E 10 x 10 mL
439	Level S2E 10 x 10 mL
461	Level S1 10 x 10 mL
462	Level S2 10 x 10 mL

MiniPaks also available



Determine your cutoff

Controls on this page recommended for High Opiate cutoff (2,000 ng/mL)



Gravimetric Reference Values

Select the controls best suited for your Benzodiazepine assays

Analytes (ng/mL)	Level S1E	Level S2E	Level S1	Level S2
	<i>Example assays may include:</i>	<i>(e.g. Siemens EMIT II, EMIT DAT & Ortho VITROS)</i>		<i>(e.g. Roche OnLine)</i>
	Lormetazepam		Nordiazepam	
Amphetamines				
d-Amphetamine	–	–	750	1,250
d-Methamphetamine	750	1,250	–	–
MDMA (Ecstasy)	–	–	–	–
Barbiturates				
Secobarbital	150	375	150	375
Benzodiazepines				
Lormetazepam	150	375	–	–
Nordiazepam	–	–	75	375
Oxazepam	–	–	–	–
Cannabinoids				
11-Nor- Δ -9-THC-9-COOH	37.5	65	37.5	65
Cocaine				
Benzoylcegonine	225	375	225	375
Ethanol (mg/dL)	40	70	40	70
Lysergic Acid Diethylamide (LSD)	0.3	0.8	0.3	0.8
Methadone	225	375	225	375
Methaqualone	225	375	225	375
Opiates				
Morphine (Free)	1,500	2,500	1,500	2,500
Phencyclidine (PCP)	19	31	19	31
Propoxyphene	225	375	225	375
Tricyclic Antidepressants				
Nortriptyline	750	1,250	750	1,250

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Urine Toxicology Controls

SCREEN CONTROLS



Levels S1E & S2E Low Opiate Levels S1 & S2 Low Opiate

- Human urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Levels S10 & S20 Low Opiate

- Human urine
- 2 year shelf life at -20 to -70°C
- 30 day open-vial stability at 2–8°C
- 45 day closed-vial stability at 2–8°C

Ordering Information

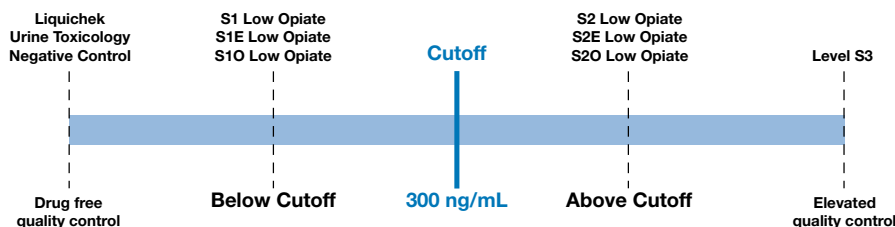
Cat #	Description
423	Level S1E Low Opiate 10 x 10 mL
424	Level S2E Low Opiate 10 x 10 mL
466	Level S1 Low Opiate 10 x 10 mL
467	Level S2 Low Opiate 10 x 10 mL
683	Level S10 Low Opiate 10 x 10 mL
706	Level S20 Low Opiate 10 x 10 mL

MiniPaks also available



Determine your cutoff

Controls on this page recommended for Low Opiate cutoff (300 ng/mL)



Gravimetric Reference Values

Select the controls best suited for your Benzodiazepine assays

Analytes (ng/mL)	Level S1E Low Opiate	Level S2E Low Opiate	Level S1 Low Opiate	Level S2 Low Opiate	Level S10 Low Opiate	Level S20 Low Opiate
	<i>(e.g.: Siemens EMIT II & EMIT DAT, Ortho VITROS)</i> Lormetazepam		<i>(e.g.: Roche OnLine)</i> Nordiazepam		<i>(e.g.: Abbott Multigent, Thermo DRI)</i> Oxazepam	
Amphetamines						
d-Amphetamine	–	–	750	1,250	–	–
d-Methamphetamine	750	1,250	–	–	750	1,250
MDMA (Ecstasy)	–	–	–	–	–	–
Barbiturates						
Secobarbital	150	375	150	375	150	375
Benzodiazepines						
Lormetazepam	150	375	–	–	–	–
Nordiazepam	–	–	75	375	–	–
Oxazepam	–	–	–	–	100	300
Cannabinoids						
11-Nor- Δ -9-THC-9-COOH	37.5	65	37.5	65	37.5	65
Cocaine						
Benzoylcegonine	225	375	225	375	225	375
Ethanol (mg/dL)	40	70	40	70	40	70
Lysergic Acid Diethylamide (LSD)	0.3	0.8	0.3	0.8	0.3	0.8
Methadone	225	375	225	375	225	375
Methaqualone	225	375	225	375	225	375
Opiates						
Morphine (Free)	225	375	225	375	225	375
Phencyclidine (PCP)	19	31	19	31	19	31
Propoxyphene	225	375	225	375	225	375
Tricyclic Antidepressants						
Nortriptyline	750	1,250	750	1,250	–	–

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Urine Toxicology Controls

SCREEN CONTROLS



Levels S1S & S2S

- Contains six drugs of abuse at concentrations 20-25% below and above SAMHSA's recommended cutoff levels
- Human urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
409	Level S1S 10 x 10 mL
419	Level S2S 10 x 10 mL

MiniPaks also available



Determine your cutoff

Levels S1S & S2S recommended for labs running SAMHSA* cutoffs



Level S3

- An elevated control for most urine Drugs-of-Abuse cutoffs
- For Low Opiate Cutoff
- Human Urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Ordering Information

Catalog #	Description
463	Level S3 10 x 10 mL

MiniPaks also available



Determine your cutoff

Level S3 recommended for labs that need an Elevated/Strong Positive control

Gravimetric Reference Values

Analytes (ng/mL)	Level S1S	SAMHSA* Screen Cutoffs	Level S2S	Level S3
Amphetamines				
d-Amphetamine	–	–	–	2,000
d-Methamphetamine	375	500	625	–
MDMA (Ecstasy)	375	500	625	–
Barbiturates				
Secobarbital	–	–	–	1,000
Benzodiazepines				
Lormetazepam	–	–	–	–
Nordiazepam	–	–	–	1,000
Oxazepam	–	–	–	–
Cannabinoids				
11-Nor-Δ-9-THC-9-COOH	37.5	50	65	125
Cocaine				
Benzoylcegonine	113	150	185	500
Ethanol (mg/dL)	–	–	–	250
Lysergic Acid Diethylamide (LSD)	–	–	–	2.0
Methadone	–	–	–	750
Methaqualone	–	–	–	750
Opiates				
Morphine (Free)	1,500	2,000	2,500	750
Phencyclidine (PCP)	19	25	31	200
Propoxyphene	–	–	–	750
Tricyclic Antidepressants				
Nortriptyline	–	–	–	2,000

*United States Substance Abuse and Mental Health Services Administration.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Urine Toxicology Controls

CONFIRM CONTROLS



- Human urine
- 3 year shelf life at 2–8°C
- 30 day open-vial stability at 2–8°C

Level C1

Contains drugs at the Limit of Quantitation (LOQ) or at very low concentrations

Levels C2 & C2 Low Opiate

Contains drugs at 20–25% below confirmatory drug cutoff levels

Levels C3 & C3 Low Opiate

Contains drugs at 20–25% above confirmatory drug cutoff levels

Level C4

Contains drugs at elevated concentrations

Ordering Information

MiniPaks also available

Catalog #	Description	Catalog #	Description
441	Level C1 10 x 20 mL	444	Level C4 10 x 20 mL
442	Level C2 10 x 20 mL	468	Level C2 Low Opiate . . . 10 x 20 mL
443	Level C3 10 x 20 mL	469	Level C3 Low Opiate . . . 10 x 20 mL

Gravimetric Reference Values

Designed for SAMHSA* Cutoff

Analytes (ng/mL)	Level C1	Level C2	Level C3	Level C4	Level C2 Low Opiate	Level C3 Low Opiate
d-Amphetamine	100	188	312	750	375	625
d-Methamphetamine	100	188	312	750	375	625
3, 4-Methylenedioxymethamphetamine (MDMA)	100	188	312	750	–	–
3, 4-Methylenedioxyamphetamine (MDA)	100	188	312	750	–	–
3, 4-Methylenedioxy-N-ethylamphetamine (MDEA)	100	188	312	750	–	–
Amobarbital	80	150	250	1,200	150	250
Butalbital	80	150	250	1,200	150	250
Pentobarbital	80	150	250	1,200	150	250
Phenobarbital	80	150	250	1,200	150	250
Secobarbital	80	150	250	1,200	150	250
Alpha-Hydroxyalprazolam	80	225	375	1,000	225	375
Nordiazepam	80	225	375	1,000	225	375
Oxazepam**	**	**	**	**	**	**
11-Nor-Δ-9-THC-9-COOH	6	11.5	18.5	150	11.5	18.5
Benzoyllecgonine	40	75	125	300	115	185
Ethanol (mg/dL)	20	40	70	250	40	70
Lysergic Acid Diethylamide (LSD)	0.2	0.35	0.65	4.0	0.35	0.65
Methadone	120	225	375	1,000	225	375
EDDP (Methadone Metabolite)**	**	**	**	**	**	**
Methaqualone	120	225	375	1,000	225	375
6-Monoacetylmorphine**	**	**	**	**	**	**
Codeine	120	1,500	2,500	4,000	225	375
Morphine-3-β-d-Glucuronide	120	1,500	2,500	4,000	225	375
Phencyclidine (PCP)	10	19	31	100	19	31
Norpropoxyphene	120	225	375	1,000	225	375
Propoxyphene	120	225	375	1,000	225	375

*United States Substance Abuse and Mental Health Services Administration.
 **Analyte present, no claims are made regarding performance or stability.

Bio-Rad Controls for Lead, Alcohol, Environmental Toxins and Other Specialty Tests



Bio-Rad offers QC solutions for the unique challenges of specialty toxicology testing, such as drug-free baseline serum or a control suitable for the special needs of analytical methods. Other specialty controls are available for monitoring drugs, lead, metals and volatile compounds.

Lyphochek Drug Free Serum



- Tested by HPLC and other methods
- Found to be drug free for more than 60 therapeutic drugs and illicit compounds
- Human serum
- 3 year shelf life at 2–8°C
- 10 day reconstituted stability at 2–8°C

Ordering Information

Catalog #	Description
456	Single Level 12 x 10 mL
456X	MiniPak 1 x 10 mL

Analytes

Acetaminophen	Desipramine	Meperidine	Phenytion
Alprazolam	Desmethyldoxepin	Methadone	Primidone
Amikacin	Diazepam	Methamphetamine	Procainamide
Amitriptyline	Digitoxin	Methaqualone	Propoxyphene
Amphetamine	Digoxin	Methotrexate	Propranolol
Caffeine	Disopyramide*	Methyprylon	Pyrimidine
Cannabinoids	Doxepin	Morphine	Quinidine
Carbamazepine	Ethosuximide	N-Acetylprocainamide (NAPA)	Quinine
Chloramphenicol	Flecainide	Nicotine	Salicylate
Chlordiazepoxide	Gentamicin	Norclomipramine	Secobarbital
Cimetidine	Glutethimide	Nordiazepam	Theophylline
Clomipramine	Haloperidol	Nordoxepin	Tobramycin
Clonazepam	Hydromorphone	Nortriptyline	Trazodone
Cocaine	Ibuprofen	Oxazepam	Valproic Acid
Codeine	Imipramine	Phencyclidine (PCP)	Vancomycin
Cyclosporine	Lidocaine	Phenobarbital	
Desalkylflurazepam	Lithium	Phenothiazines	

*No claim is made for expected value or stability.

Lyphochek Benzo/TCA Control–Set B



- Used in conjunction with separation techniques, such as chromatography or mass spectrometry in identification and quantification of benzodiazepine and tricyclic antidepressant drugs
- Compatible with Roche COBAS INTEGRA Serum Benzodiazepines Assay for Alprazolam measurements
- Human serum based
- 3 year shelf life at 2–8°C
- 14 day reconstituted stability at 2–8°C

Ordering Information

Catalog #	Description
663	Level 1 6 x 5 mL
664	Level 2 6 x 5 mL
665X	Bilevel MiniPak (1 of each level) 2 x 5 mL

Analytes

Alprazolam	Norclomipramine
Clomipramine	Trazodone

Clonazepam has been added to this product as a service to laboratories that wish to investigate this analyte. No claims are made regarding performance or stability.

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Liquichek Serum Volatiles Control



- Value assigned for volatile substances by multiple methods, including GC and clinical methods (Ethanol)
- Serum based
- 3 year shelf life at 2–8°C
- 10 day open-vial stability at 2–8°C

Ordering Information

Cat #	Description
383	Level 1 6 x 5 mL
384	Level 2 6 x 5 mL
385X	Bilevel MiniPak (1 of each level) 2 x 5 mL

Analytes

Acetone	Ethylene Glycol	Isopropanol (Isopropyl Alcohol)	Methanol (Methyl Alcohol)
Ethanol			

Lymphocheck Urine Metals Control



- Supports toxicological environmental and industrial testing by providing assayed values of critical trace elements, heavy metals and organic metabolites by AA, GC-MS, HPLC and ICP-MS
- Human urine
- 3 year shelf life at 2–8°C
- 5 day reconstituted stability at 2–8°C
- 30 day reconstituted stability at -10°C to -20°C

Ordering Information

Catalog #	Description
400	Level 1 10 x 25 mL
405	Level 2 10 x 25 mL
402X	Bilevel MiniPak (1 of each level) 2 x 25 mL

Analytes

5-Aminolevulinic Acid (ALA)	Cobalt	Mandelic Acid	Phenylglyoxylic Acid
Aluminum	Copper	Manganese	Selenium
Antimony	Fluoride	Mercury	Thallium
Arsenic	Hippuric Acid	Nickel	Trichloroacetic Acid
Cadmium	Lead	Pentachlorophenol	Zinc
Chromium	Magnesium	Phenol	

Lymphocheck Whole Blood Metals Control



- Contains major heavy metals of toxicological and environmental significance for whole blood analysis
- Assayed values for Lead include AA, ASV, ICP-MS and IDMS
- Human whole blood based
- 3 year shelf life at 2–8°C
- 14 day reconstituted stability at 2–8°C

Ordering Information

Catalog #	Description
527	Level 1 6 x 2 mL
528	Level 2 6 x 2 mL
529	Level 3 6 x 2 mL
528X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

Arsenic	Mercury
Cadmium	Thallium
Lead	

Refer to myInserTs.com or the package insert of currently available lots for specific analyte and stability claims.

Lyphocek Whole Blood Control



- Assayed values for Red Cell Folate for common clinical methods
- Assayed values for Lead include AA, ASV, ICP-MS
- Human whole blood based
- 3 year shelf life at 2–8°C
- 2 day reconstituted stability at 2–8°C (Folate)
- 14 day reconstituted stability at 2–8°C (Lead)
- 30 day reconstituted stability at -10° to -20°C

Ordering Information

Catalog #	Description
561	Level 1 6 x 2 mL
562	Level 2 6 x 2 mL
563	Level 3 6 x 2 mL
560X	Trilevel MiniPak (1 of each level) 3 x 2 mL

Analytes

Lead	Red Cell Folate	Serotonin*
------	-----------------	------------

*No claims are made regarding performance or stability.

Use Bio-Rad's Specialty Toxicology Controls on these popular instruments

Manufacturer/Instrument(s)	Drug Free Serum	Serum Volatiles	Urine Metals	Whole Blood Metals	Benzo/TCA Set B	Whole Blood Control
Abbott Diagnostics						
ARCHITECT Series		●				
Beckman Coulter						
Access Series/UniCel DxI						●
AU Series		●				
UniCel DxC Series	●	●				
Ortho Clinical Diagnostics						
VITROS Series		●				
VITROS ECI						●
Roche Diagnostics						
Cobas 6000 Series/COBAS INTEGRA		●			●	
Elecsys Systems						●
Hitachi Systems		●				
Siemens						
ADVIA Systems		●				
ADVIA Centaur Systems	●					●
Dimension Vista	●	●				
Dimension Series		●				
IMMULITE Series						●
V-Twin/Viva-E Series	●					
Tosoh						
AIA Series						●
Other						
AA, AA Graphite Furnace			●	●		●
GC, GC-MS	●	●	●			
ICP-MS			●	●		●
LC-MS/MS, HPLC	●				●	

If your instrument model is not listed, please contact your nearest Bio-Rad office for current control information.

Glossary

AA = Atomic Absorption

GC, GC-MS = Gas Chromatography, Gas Chromatography-Mass Spectrometry

ICP-MS = Inductively Coupled Plasma-Mass Spectrometry

LC-MS/MS, HPLC = Liquid Chromatography-Mass Spectrometry/Mass Spectrometry, High Performance Liquid Chromatography

Refer to myelnserts.com or the package insert of currently available lots for specific analyte and stability claims.



Urinalysis Controls

Versatile packaging and comprehensive analytes for today's laboratory

Urinalysis Controls

qUAntify Advance Control	114
qUAntify Plus Control	114
Liquichek Urinalysis Control	115

Did You Know?

- **Bio-Rad Urinalysis** controls are available in a variety of convenient packaging options, including dropper bottles, flip-top squeeze bottles and centrifuge tubes

For More Information

- **Brochure** Urinalysis Controls (Q-1508)

qUantify Advance Control



- Available in an easy-to-use plastic squeeze bottle
- Dipstick tests include Pregnancy and Microalbumin
- Human urine solution
- 18 month shelf life at 2-8°C
- 31 day open-vial stability at 2-25°C, including ketones

Ordering Information

Cat #	Description
12007028	Bilevel (3 of each level) 6 x 12 mL
12007029	Bilevel MiniPak (1 of each level) 2 x 12 mL

Analytes

Albumin	Glucose	Nitrite	Specific Gravity
Ascorbic Acid	Hemoglobin (HGB)	pH	Urobilinogen
Bilirubin	Ketones	Pregnancy (hCG)	
Blood	Leukocytes	Protein (Total)	
Creatinine	Microalbumin	Protein-to-Creatinine Ratio	

qUantify Plus Control

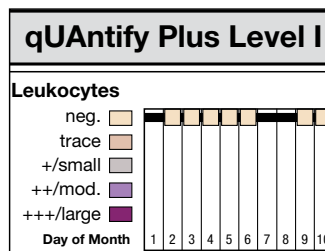


- Choose from a conical 12 mL tube or 120 mL flip top squeeze bottle
- Both options can be used for urine dipstick and microscopic testing
- Liquid
- 2 year shelf life at 2-8°C
- 31 day open-vial stability at 2-25°C for most analytes

POCT Methods Listed

Ordering Information

Catalog #	Description
995	Bilevel (5 of each level)/Tube 10 x 12 mL
995X	Bilevel MiniPak (1 of each level)/Tube. 2 x 12 mL
962	Bilevel (2 of each level)/Bottle 4 x 120 mL
963	Level 1/Bottle. 4 x 120 mL
964	Level 2/Bottle. 4 x 120 mL
962X	Bilevel MiniPak (1 of each level)/Bottle. 2 x 120 mL



Example Peer Group Report

Analytes

Albumin	Microscopics (RBC, WBC, Crystals, Casts)
Albumin-to-Creatinine Ratio	Nitrite
Ascorbic Acid*	pH
Bilirubin	Pregnancy (hCG)
Blood	Protein (Total)
Creatinine	Protein-to-Creatinine Ratio
Glucose	Specific Gravity
Hemoglobin (HGB)	Urobilinogen
Ketones	
Leukocytes	
Microalbumin	

*Tested and found to be negative.



Optimize your Urinalysis workflow by choosing from our diverse selection of user-friendly Urinalysis Controls.

Liquichek Urinalysis Control



- Ready-to-use urine control formulated to monitor the precision of dipstick and microscopic analyzers
- Available in 12 mL glass vials
- Liquid, human urine based
- 2.5 year shelf life at 2–8°C
- 30 day open-vial stability at 2–25°C

Ordering Information

Catalog #	Description
435	Bilevel (6 of each level) 12 x 12 mL
436	Level 1 12 x 12 mL
437	Level 2 12 x 12 mL
435X	Bilevel MiniPak (1 of each level) 2 x 12 mL

Analytes

Bilirubin	Ketones	Nitrite	Protein-to-Creatinine Ratio
Blood	Leukocytes	Osmolality	Specific Gravity
Clarity	Microalbumin	pH	Urobilinogen
Color	Microscopics (RBC, WBC, Crystals, Casts)	Pregnancy (hCG)	
Creatinine		Protein (Total)	
Glucose			

Dispenser Tips for Screw Caps



- For controls fitted with a screw cap closure
- Disposable plastic tips enable fluid delivery directly from glass vial
- Reduces risk of product contamination that may be introduced via pipetting
- Easy and convenient to use

Ordering Information

Catalog #	Description
987000	Dispenser Tips for Screw Caps 100/Package

Dispenser Tips for Crimp Seals



- For controls fitted with a metal crimp seal and stopper
- Plastic tips allow the glass vial to be used as a dropper bottle
- Easy and convenient to use

Ordering Information

Catalog #	Description
588	Dispenser Tips for Crimp Seals 50/Package

Blood Gas Ampule Breaker



- Designed to reduce the risk of injury when opening blood gas ampules
- Easy and convenient to use
- Reusable

Ordering Information

Catalog #	Description
587	Blood Gas Ampule Breaker 1 each

Quality Control Tray



- 28-position durable acrylic tray to prepare or transport controls
- Accommodates up to 10 large and 18 standard sized control vials or dropper bottles
- Dimensions: 10" x 9.5" x 1.25" (25.4 cm x 24.1 cm x 3.2 cm)

Ordering Information

Catalog #	Description
12000846	Quality Control Tray 1 unit

Unity Binder



- Keep your Unity Interlaboratory Program reports organized and readily available
- 2 inch Capacity
- 3-Ring for Letter Size (8.5 x 11 inches)
- Monthly Tabs Provided

To request a binder, please call your local Bio-Rad office.

Refer to myinserts.com or the package insert of currently available lots for specific analyte and stability claims.



Resources

Analyte Charts

Control Analyte Index	118
Blood Gas Controls Analyte Index	140
Cardiac Assessment Controls Analyte Index	140
Hematology Controls Analyte Index	141
InteliQ Analyte Index	142
Molecular/Infectious Disease Controls Analyte Index	146
QC Products in Dimension Vista Vials Analyte Index	148
External Quality Assurance Services (EQAS) Analyte Index	150

Indexes

Alphabetical Index	154
Catalog Number Index	156

Additional Information

How to Place an Order	161
Chemical Hazard Communication	162
CE Marking and Labeling Symbols	163
Legal Notices	164
Worldwide Contact Information	Inside Back Cover

Did You Know?

- **Bio-Rad controls** offer over **560** analytes

Control Analyte Index

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ▶ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

	140	140	141	146	142	104	60	54	55	19	18	84	61	110	26	27	30	30	110	59	55	21	54	30	31	26	55	50	51	85	58	
	See Blood Gas Chart	See Cardiac Assessment Chart	See Hematology Chart	See Infectious Disease/Molecular Chart	See InteliQ Chart	See Urine Toxicology Charts	Allergen sigE	AMH	Anemia	Assayed Chemistry	Assayed Multiquant	Assayed Multiquant Premium	Autoimmune	Benzo/TCA-Set B	Coagulation	D-dimer	Diabetes (Liquid)	Diabetes (Lyophilized)	Drug Free Serum	Elevated CRP	Endocrine	Ethano/Ammonia	Fertility	Hemoglobin A1C Linearity Set	Hemoglobin A ₂	Hemostasis	Hypertension Markers	Immunoassay Plus (Liquid)	Immunoassay Plus (Lyophilized)	Immunoassay Premium	Immunology (Liquid)	
Ammonia				●																		●										
Amobarbital					●																											
AMP (Cyclic)																																
Amphetamines					●															▶												
Amylase				●					●	●	●																					
Amylase (Alpha)									●	●	●																					
Amylase (Pancreatic)				●					●	●	●																					
ANA, Centromere Pattern													●																			
ANA, Homogeneous Pattern													●																			
ANA, Mitotic Spindle Pattern													●																			
ANA, Nucleolar Pattern													●																			
ANA, Speckled Pattern													●																			
Androstenedione																												●	●			
Androsterone																																
Angiotensin I																												▲	○			
Anti-CCP												○																				●
Anti-Cytomegalovirus (CMV)				●																												
Anti-HAV				●																												
Anti-HBc				●																												
Anti-HBe				●																												
Anti-HBs				●																												
Anti-HCV				●																												
Anti-HIV-1				●																												
Anti-HIV-2				●																												
Anti-HTLV-I				●																												
Anti-HTLV-I/II				●																												
Anti-HTLV-II				●																												
Anti-Mitochondrial													●																			
Anti-Mullerian Hormone								●																								
Anti-nDNA													●																			
Anti-RNP													●																			
Anti-Scl-70													●																			
Anti-Sm													●																			
Anti-Smooth Muscle													●																			
Anti-SS-A													●																			
Anti-SS-B													●																			
Anti-Thyroglobulin (Anti-Tg)				●																								▲	▲			
Anti-Thyropoxidase (Anti-TPO)				●																								▲	▲			
Anti-Treponema pallidum (Syphilis)				●																												
Antimony																																
Antistreptolysin O (ASO)				●								○																				●
Antithrombin III (AT III)															●												●					●
Apolipoprotein A-1				○					○	○	○																					●
Apolipoprotein B				○					○	○	○																					●
Arsenic																																●
Ascorbic Acid																																
AST/SGOT				●					●	●	●																					
Autoimmune Negative													●																			
Barbiturates					●																											
Basophils (BASO)			●																													
Benzodiazepines					●									●																		

Control Analyte Index

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ▶ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

	140	140	141	146	142	104	60	54	55	19	18	84	61	110	26	27	30	30	110	59	55	21	54	30	31	26	55	50	51	85	58
	See Blood Gas Chart	See Cardiac Assessment Chart	See Hematology Chart	See Infectious Disease/Molecular Chart	See IntelliQ Chart	See Urine Toxicology Charts	Allergen sigE	AMH	Anemia	Assayed Chemistry	Assayed Multiquant	Assayed Multiquant Premium	Autoimmune	Benzo/TCA-Set B	Coagulation	D-dimer	Diabetes (Liquid)	Diabetes (Lyophilized)	Drug Free Serum	Elevated CRP	Endocrine	Ethano/Ammonia	Fertility	Hemoglobin A1C Linearity Set	Hemoglobin A ₂	Hemostasis	Hypertension Markers	Immunoassay Plus (Liquid)	Immunoassay Plus (Lyophilized)	Immunoassay Premium	Immunology (Liquid)
CK (Total)		●																													
CK-MB Isoenzyme		●			●						▲																	●			
Clarity																															
Clomipramine														●						▶											
Clonazepam																				▶											
Clostridium difficile (C diff)				●																											
CO ₂					●					●	●	●																			
Cobalt																															
Cocaine						●																									
Cocaine Metabolite						●																									
Codeine						●																									
Color																															
Complement C1q																															
Complement C3					○					○	○	○																			●
Complement C4					○					□	○	○																			●
Copper					○					○	○	○																			
Coproporphyrin																															
Cortisol					●					●	●	●																●	●	●	●
Creatine Kinase (CK)					●					●	●	●																			
Creatinine					●	◆				●	●	●																			
CRP		●			●					●	●	●									●										●
Crystals																															
Cyclosporine																													●	▲	
Cyfra 21-1*					●																									●	
Cystatin C					○							○																			○
Cystine																															
Cytomegalovirus (CMV) IgG				●																											
Cytomegalovirus (CMV) IgM				●																											
D1 House Dust Mite (D. pteronyssinus)							●																								
D2 House Dust Mite (D. farinae)							●																								
d-Amphetamine						●																									
D-dimer																●															
d-Methamphetamine						●																									
Dehydroepiandrosterone (DHEA)																													▲	▲	
Deoxypyridinoline (DPD)																															
Desalkylflurazepam																															
Desipramine																														▲	▲
Desmethylloperin																															
DHEA Sulfate						●																							●	●	●
Diazepam																															
Digitoxin		●			●																			●							
Digoxin					●					●	●	●																	●	●	●
Disopyramide												●																		▲	▲
Dopamine																															
Doxepin																															
E1 Cat Dander (Felis domesticus)							●																								
E3 Horse Dander (Equus caballus)							●																								
E5 Dog Dander (Canis familiaris)							●																								
EBNA IgG				●																											
EBV EA-D IgG				●																											
Ecstasy (MDMA)						●																									
EDDP (Methadone Metabolite)						■																									

*International use only.

Control Analyte Index

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ▶ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

	140	140	141	146	142	104	60	54	55	19	18	84	61	110	26	27	30	30	110	59	55	21	54	30	31	26	55	50	51	85	58	
	See Blood Gas Chart	See Cardiac Assessment Chart	See Hematology Chart	See Infectious Disease/Molecular Chart	See InteliQ Chart	See Urine Toxicology Charts	Allergen sigE	AMH	Anemia	Assayed Chemistry	Assayed Multiquant	Assayed Multiquant Premium	Autoimmune	Benzo/TCA-Set B	Coagulation	D-dimer	Diabetes (Liquid)	Diabetes (Lyophilized)	Drug Free Serum	Elevated CRP	Endocrine	Ethanol/Ammonia	Fertility	Hemoglobin A1C Linearity Set	Hemoglobin A ₂	Hemostasis	Hypertension Markers	Immunoassay Plus (Liquid)	Immunoassay Plus (Lyophilized)	Immunoassay Premium	Immunology (Liquid)	
Eosinophils (EOS)			●																													
Epinephrine																						●										
Epstein-Barr Virus (VCA) IgG				●																												
Epstein-Barr Virus (VCA) IgM			●																													
Erythrocyte Sedimentation Rate (ESR)			●																													
Erythropoietin (EPO)				●																												
Estradiol				●																			●						●	●	●	
Estradiol (Free)																							●						●	●	●	
Estradiol (Total)																							▲						▲	▲	●	
Estrogen (Total)																													▲	●		
Ethanol				●	●						●	●										●										
Ethosuximide																				▶									●	●	●	
Ethylene Glycol																																
Etiocannabinolone																																
Everolimus																																
F1 Egg White (<i>Gallus spp.</i>)							●																									
F2 Cow Milk (<i>Bos. spp.</i>)							●																									
F13 Peanut (<i>Arachis hypogaea</i>)							●																									
Factors II, V, VII, VIII, IX, X, XI and XII																											●					
Fentanyl																																
Ferritin				○				●		○	○												●						●	●	●	●
Fibrinogen															●											●						
Flecainide																				▶									▲	▲		
Fluoride																																
Folate				●				●																					●	●	●	
Folate (RBC)																																
Fructosamine																													□	□		
FSH				●																			●						●	●	●	
G2 Bermuda Grass (<i>Cynodon dactylon</i>)							●																									
G3 Cocksfoot/Orchard Grass (<i>Dactylis glomerata</i>)							●																									
G6 Timothy Grass (<i>Phleum pratense</i>)							●																									
Gastrin																														●		
Gentamicin				●					●	●	●								▶										●	●	●	
GGT				●					●	●	●																					
GLDH									○																							
Globulin									○	○	○																					
Glucagon																														▲		
Glucose	●								●	●	●																					
Glucose (Hexokinase)				●																												
Glutethimide						■														▶												
Granulocytes (GRAN)			●																													
Haloperidol																																
Haptoglobin				○					○	○	○																				●	
HAV-IgM				●																												
HBC-IgM				●																												
HBDH																																
HBeAg				●																												
HBSAg				●																												
hCG				●																			●						●	●		
hCG (Intact)				●																												
hCG (Total)				●																												
hCG-β Subunit									○														●						●	●	●	

58	20	54	54	31	22	105	21	114	114	22	59	47	111	52	52	60	101	101	53	53	20	19	18	115	56	23	111	112	100	100	111	See page number	
Immunology Plus (Lyophilized)	Lipids	Maternal Serum 1st Trimester	Maternal Serum II	Meter Trax	Microalbumin	Opiate	Pediatric	qUAntify Advance	qUAntify Plus	Quantitative Urine	Rheumatoid Factor	Sedimentation Rate	Serum Volatiles	Specialty Immunoassay (Liquid)	Specialty Immunoassay (Lyophilized)	Spinal Fluid	TDM (Liquid)	TDM (Lyophilized)	Tumor Marker (Liquid)	Tumor Marker Plus (Lyophilized)	Unassayed Chemistry (Liquid)	Unassayed Chemistry (Lyophilized)	Unassayed Multiquant	Urinalysis	Urine Bone Markers	Urine Chemistry	Urine Metals	Whole Blood	Whole Blood Immunosuppressant (Liquid)	Whole Blood Immunosuppressant (Lyoph.)	Whole Blood Metals		
	●	●																			▲	●	●									hCG-β Subunit (Free)	
																																HDL Cholesterol	
																																HE4 (Human Epididymis Protein 4)	
					●																											<i>Helicobacter pylori</i> IgG	
																																Hematocrit (HCT)	
								●	●																							Hemoglobin (HGB)	
					●																											Hemoglobin (Total)	
																																Hemoglobin (Total Glycated)	
																																Hemoglobin A1	
																																Hemoglobin A1C	
																																Hemoglobin A ₂	
																																Hemoglobin Concentration Distribution Width (HDW)	
																																Hemoglobin F	
																																Hemoglobin S	
																																Hemolysis	
																																Hemopexin	
																																Hepatitis B Virus (HBV)	
																																Hepatitis C Virus (HCV)	
																																HER2/neu	
																																Heroin Metabolite	
																																Herpes Simplex Virus Type 1 (HSV-1) IgG	
																																Herpes Simplex Virus Type 1 (HSV-1) IgM	
																																Herpes Simplex Virus Type 2 (HSV-2) IgG	
																																Herpes Simplex Virus Type 2 (HSV-2) IgM	
																																hGH	
																																Hippuric Acid	
																																HIV-1 Ag	
																																Homocysteine	
																																Homogenous Pattern	
	●																															hs-CRP	
																																Human Immunodeficiency Virus Type 1 (HIV-1)	
																																Human Papillomavirus (HPV)	
											●																					HVA	
											▲																					Hydromorphone	
											●																					Hydroxyproline (Free)	
											●																					Hydroxyproline (Total)	
																																Ibuprofen	
																																	Icterus
																																	Imipramine
																																	Immature Reticulocyte Fraction (IRF)
	●																															Immunoglobulin A (IgA)	
	●																															Immunoglobulin E (IgE)	
	●																															Immunoglobulin G (IgG)	
																																Immunoglobulin G Subclasses 1-4	
	●																															Immunoglobulin M (IgM)	
																																Immunoreactive Trypsinogen (IRT)	
																																Inhibin A	
																																Insulin	
																																Insulin Growth Factor I (IGF-I)	
																																Intact PTH	
																																Iron	
																																Iron (TIBC)	

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ◆ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

Control Analyte Index

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ▶ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

	140	140	141	146	142	104	60	54	55	19	18	84	61	110	26	27	30	30	110	59	55	21	54	30	31	26	55	50	51	85	58
	See Blood Gas Chart	See Cardiac Assessment Chart	See Hematology Chart	See Infectious Disease/Molecular Chart	See IntelliQ Chart	See Urine Toxicology Charts	Allergen sigE	AMH	Anemia	Assayed Chemistry	Assayed Multiquant	Assayed Multiquant Premium	Autoimmune	Benzo/TCA-Set B	Coagulation	D-dimer	Diabetes (Liquid)	Diabetes (Lyophilized)	Drug Free Serum	Elevated CRP	Endocrine	Ethanol/Ammonia	Fertility	Hemoglobin A1C Linearity Set	Hemoglobin A ₂	Hemostasis	Hypertension Markers	Immunoassay Plus (Liquid)	Immunoassay Plus (Lyophilized)	Immunoassay Premium	Immunology (Liquid)
Iron (UIBC)					○				●	○	○	○																			
IRT																														▲	
Isopropanol (Isopropyl Alcohol)																															
Kappa Light Chain					●							○																			●
Ketones																															
Lactate (Lactic Acid)	●				●					●	●	●																			
Lactate Dehydrogenase (LDH)					●					●	●	●																			
Lambda Light Chain					●							○																			●
LAP Arylamidase					●					○	○	○																			
Large Unstained Cells (LUC)				●																											
LDH (Total)																															
LDL Cholesterol										●	●	●																			
Lead																															
Leukocytes				●																											
Lidocaine												●							▶										●	●	●
Lipase					●					●	●	●																			
Lipemia																															
Lipoprotein (a)					●																										●
Lithium	●				●					●	●	●								▶											
Lormetazepam						●																									
LSD						●																									
Luteinizing Hormone (LH)					●																		●								
LYMPH (W-SCC & W-SCR)				●																											
Lymphocytes (LYMPH)				●																											
Lysergic Acid Diethylamide (LSD)						●																									
M3 Mold (<i>Aspergillus fumigatus</i>)								●																							
M6 Mold (<i>Alternaria tenuis</i>)								●																							
Magnesium	●				●					●	●	●																			
Mandelic Acid																															
Manganese																															
Marijuana Metabolite						●																									
MDA						●																									
MDEA						●																									
MDMA						●																									
Mean Corpuscular Hemoglobin (MCH)				●																											
Mean Corpuscular Hemoglobin Concentration (MCHC)				●																											
Mean Corpuscular Volume (MCV)				●																											
Mean Corpuscular Volume of Gated Red Blood Cells (MVCg)				●																											
Mean Corpuscular Volume of Reticulocytes (MCVr)				●																											
Mean Hemoglobin Content of All Gated Red Cells (CHg)				●																											
Mean Hemoglobin Content of Reticulocytes (CHR)				●																											
Mean Platelet Volume (MPV)				●																											
Meperidine*																															
Mercury																															
Metanephrine																															
Metanephrine (Total)																															
Methodone						●																									
Methodone Metabolite (EDDP)						■																									
Methamphetamine						●																									
Methanol (Methyl Alcohol)																															
Methaqualone						●																									
Methicillin Resistant Staphylococcus aureus (MRSA)				●																											

*International use only.

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ▶ Tested and found to be negative
- ◆ Specimen validity criteria
- ✖ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

	140	140	141	146	142	104	60	54	55	19	18	84	61	110	26	27	30	30	110	59	55	21	54	30	31	26	55	50	51	85	58	
	See Blood Gas Chart	See Cardiac Assessment Chart	See Hematology Chart	See Infectious Disease/Molecular Chart	See InteliQ Chart	See Urine Toxicology Charts	Allergen sIgE	AMH	Anemia	Assayed Chemistry	Assayed Multiquant	Assayed Multiquant Premium	Autoimmune	Benzo/TCA-Set B	Coagulation	D-dimer	Diabetes (Liquid)	Diabetes (Lyophilized)	Drug Free Serum	Elevated CRP	Endocrine	Ethano/Ammonia	Fertility	Hemoglobin A1C Linearity Set	Hemoglobin A ₂	Hemostasis	Hypertension Markers	Immunoassay Plus (Liquid)	Immunoassay Plus (Lyophilized)	Immunoassay Premium	Immunology (Liquid)	
Methicillin Sensitive Staphylococcus aureus (MSSA)				●																												
Methotrexate												●								▶												
Methyprylon																				▶												
Microalbumin					●																											
Microscopics (RBC, WBC, Crystals, Casts)																																
MID			●																													
Mitochondrial													●																			
Mitotic Spindle Pattern													●																			
Mixed Cell Percent (MXD)			●																													
Monocytes (MONO)			●																													
Morphine						●														▶												
Morphine (Free)						●																										
Morphine-3-β-d-Glucuronide						●																										
Mumps Virus IgG				●																												
MXD (W-MCC & W-MCR)			●																													
Mycoplasma pneumoniae IgG				●																												
Mycoplasma pneumoniae IgM				●																												
Myoglobin		●			●																											
N-Acetylprocainamide (NAPA)												●								▶								●	●	●		
N-Telopeptide (NTx)																																
nDNA													●																			
Neisseria gonorrhoeae (NG or GC)				●																												
Netilmicin																													▲	▲		
Neuron Specific Enolase (NSE)*																																
NEUT (W-LCC & W-LCR)			●																													
NEUT X			●																													
NEUT Y			●																													
Neutrophils (NEUT)			●																													
Nickel																																
Nicotine																																
Nitrite																																
Non-treponemal Antibodies (Syphilitic Reagin)				●																												
Norclomipramine														●						▶												
Nordiazepam						●																										
Nordoxepin																																
Norepinephrine																						●										
Normetanephrine																																
Norpropoxyphene						●																										
Nortriptyline						●																							●	●		
NT-proBNP		●			●																											
Nucleated Red Blood Cells (NRBC)			●																													
Nucleated Red Blood Cells/100 WBC (NRBC/WBC%)			●																													
Nucleolar Pattern													●																			
Oligoclonal Banding (IgG)																																
Opiates						●																										
Osmolality					●					○	●	●																				
Osteocalcin					●																											
Oxazepam						●																										
Oxycodone						●																										
Oxygen Content	●																															
PAP					●					▲	▲																		●	●	●	
PAPP-A																																

*International use only.

58	20	54	54	31	22	105	21	114	114	22	59	47	111	52	52	60	101	101	53	53	20	19	18	115	56	23	111	112	100	100	111	
Immunology Plus (Lyophilized)	Lipids	Maternal Serum 1st Trimester	Maternal Serum II	Meter Trax	Microalbumin	Opiate	Pediatric	qUAntify Advance	qUAntify Plus	Quantitative Urine	Rheumatoid Factor	Sedimentation Rate	Serum Volatiles	Specialty Immunoassay (Liquid)	Specialty Immunoassay (Lyophilized)	Spinal Fluid	TDM (Liquid)	TDM (Lyophilized)	Tumor Marker (Liquid)	Tumor Marker Plus (Lyophilized)	Unassayed Chemistry (Liquid)	Unassayed Chemistry (Lyophilized)	Unassayed Multiqua	Urinalysis	Urine Bone Markers	Urine Chemistry	Urine Metals	Whole Blood	Whole Blood Immunosuppressant (Liquid)	Whole Blood Immunosuppressant (Lyoph.)	Whole Blood Metals	
																																pCO ₂
																																PCT
																																PDW
																																Pentachlorophenol
																																Pentobarbital
																																pH
																																Phencyclidine (PCP)
																																Phenobarbital
																																Phenol
																																Phenothiazines
																																Phenylalanine
																																Phenylglyoxylic Acid
																																Phenytoin
																																Phenytoin (Free)
																																Phospholipids
																																Phosphorus
																																Plasminogen
																																Plateletcrit (PCT)
																																Platelet Distribution Width (PDW)
																																Platelet Volume Distribution Width (PDW)
																																Platelets (PLT)
																																Platelets Impedance Method (PLTI)
																																Platelets, Optical Count (PLTo)
																																pO ₂
																																Porphyrins (Total)
																																Potassium
																																Prealbumin
																																Pregnancy (hCG)
																																Pregnancy (Qualitative)
																																Pregnenetriol
																																Primidone
																																Protein (Total)
																																Protein C (Functional)
																																Protein S (Functional)
																																Protein Serum (Total)
																																Protein-to-Creatinine Ratio
																																Prothrombin Time (PT)
																																PSA (Free)
																																PSA (Total)
																																Pseudothrombin Time (PT)
																																PTH (Intact)

See page number

- Analyte present
- Analyte present in endogenous levels
- Analyte present and no claims are made regarding performance or stability
- Analyte present in endogenous levels and no claims are made regarding performance or stability
- ◆ Tested and found to be negative
- ◆ Specimen validity criteria
- ✳ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

*International use only.

Blood Gas Controls

See page number

	10	10	11
● Analyte present	Blood Gas	Blood Gas Plus E	Blood Gas Plus EGL
Chloride		●	●
Calcium (Ionized)		●	●
Glucose			●
Lactate (Lactic Acid)			●
Lithium			●
Magnesium			●
pCO ₂	●	●	●
pH	●	●	●
pO ₂	●	●	●
Potassium		●	●
Sodium		●	●

Cardiac Assessment Controls

See page number

	14	15	15	14	15	16
● Analyte present ■ Analyte present and no claims are made regarding performance or stability	Cardiac Markers Plus LT	Cardiac Markers Plus	Cardiac Markers LT	Cardiac Troponins	CK/LD Isoenzyme	Homocysteine
Albumin					●	
BNP	●	●				
CK (Total)	●	●			●	
CK Electrophoresis					●	
CK-MB Isoenzyme	●	●	●		●	
CRP	●	●				
Digitoxin	●	●	●			
Globulin					●	
Homocysteine	■	■	■			●
LD Electrophoresis					●	
LD-1 Isoenzyme					●	
LDH					●	
Myoglobin	●	●	●			
NT-proBNP	●	●	●			
Protein (Total)					●	
Protein Electrophoresis					●	
Troponin I	●	●	■	●		
Troponin T	●	●	●	●		

Hematology Controls

See page number

	42	43	44	45	46	46	42	42	43	44	45	47
	Hematology (A)	Hematology (C)	Hematology (S)	Hematology (X)	Hematology-16	Hematology-16T	Reticulocyte (A)	Reticulocyte (A-I)	Reticulocyte (C)	Reticulocyte (S)	Reticulocyte (X)	Sedimentation Rate
Basophils (BASO or BA)	●	●	●	●								
Cellular Hemoglobin Concentration Mean (CHCM)			●									
Cellular Hemoglobin Concentration Mean of Gated Red Blood Cells (CHCMg)										●		
Cellular Hemoglobin Concentration Mean of Reticulocytes (CHCMr)										●		
Eosinophils (EOS or EO)	●	●	●	●								
Erythrocyte Sedimentation Rate (ESR)												●
Granulocytes (GRAN)	●				●	●						
Hematocrit (HCT)	●	●	●	●	●	●						
Hemoglobin (HGB)	●	●	●	●	●	●						
Hemoglobin Concentration Distribution Width (HDW)			●									
Immature Reticulocyte Fraction (IRF)							●	●	●		●	
Large Unstained Cells (LUC)			●									
LYMPH (W-SCC & W-SCR)						●						
Lymphocytes (LYMPH or LY)	●	●	●	●	●	●						
Mean Corpuscular Hemoglobin (MCH)	●	●	●	●	●	●						
Mean Corpuscular Hemoglobin Concentration (MCHC)	●	●	●	●	●	●						
Mean Corpuscular Volume (MCV)	●	●	●	●	●	●						
Mean Corpuscular Volume of Gated Red Blood Cells (MCVg)										●		
Mean Corpuscular Volume of Reticulocytes (MCVr)										●		
Mean Hemoglobin Content of All Gated Red Cells (CHg)										●		
Mean Hemoglobin Content of Reticulocytes (CHr)										●		
Mean Platelet Volume (MPV)	●	●	●	●	●	●						
Mean Reticulocyte Volume (MRV)									●			
MID	●				●	●						
Monocytes (MONO or MO)	●	●	●	●	●							
MXD (W-MCC & W-MCR)						●						
NEUT (W-LCC & W-LCR)						●						
Neutrophils (NEUT or NE)	●	●	●	●								
NEUT X			●									
NEUT Y			●									
NRBC/100 WBC (NRBC percent of WBC Count)	●											
Nucleated Optical Count (NOC)	●											
Nucleated Red Blood Cells (NRBC)	●			▲								
Platelet Distribution Width (PDW)	✘	✘										
Plateletcrit (PCT)	✘	✘										
Platelets (PLT)	●	●	●	●	●	●						
Platelets Impedance Method (PLTI)	●											
Platelets, Optical Count (PLT-o)				▲								
Red Blood Cell Distribution Width (RDW)	●	●	●		●	●						
Red Blood Cell Distribution Width-CV (RDW-CV)				●	●							
Red Blood Cell Distribution Width-SD (RDW-SD)		●		●	●							
Red Blood Cells (RBC)	●	●	●	●	●	●		●	●		●	
Red Blood Cells, Optical (RBCo)	●											
Reticulocyte (Retic)							●	●	●	●	●	
Spun HCT (Spun Hematocrit)						●						
Total Red Blood Cell Counts in Retic Channel (Retic RBC)										●		
White Blood Cells (WBC)	●	●	●	●	●	●						
White Blood Cells Counts Measured in Perox Channel (WBCP Perox)			●									
White Impedance Count (WIC)	●											
White Optical Count	●											

- Analyte present
- ✘ Values not for diagnostic use
- ▲ No claim is made for expected value or stability

InteliQ

See page number

- Analyte available
- Analyte present in endogenous levels

Test Menu	Analytes	74	75	75	76	76	77	77	78	78
		InteliQ Assayed Multiquant	InteliQ Cardiac Markers Plus LT	InteliQ Ethanol/Ammonia	InteliQ Homocysteine	InteliQ Immunology	InteliQ Specialty Immunoassay	InteliQ Tumor Marker	Liquichek Immunoassay Plus	Liquichek Urine Chemistry
Anemia	Ceruloplasmin	○				●				
	Erythropoietin (EPO)						●			
	Ferritin	○				●		●	●	
	Folate								●	
	Vitamin B ₁₂	○							●	
Bone Metabolism	25-Hydroxy Vitamin D						●			
	Intact PTH						●			
	Osteocalcin						●			
Cancer/Oncology	α-Fetoprotein (AFP)								●	
	CA 15-3							●		
	CA 19-9							●		
	CA 27.29							●		
	CA 72-4*							●		
	CA 125							●		
	Carcinoembryonic Antigen (CEA)							●		
	CEA								●	
	Cyfra 21-1*							●		
	HE4							●		
	HER-2/neu							●		
	PAP							●		
	ProGRP*							●		
	PSA (Free)							●	●	
	PSA (Total)							●	●	
SCC*							●			
Thyroglobulin							●			
Cardiac	BNP		●							
	CK (Total)		●							
	CK-MB Isoenzyme		●						●	
	CRP		●							
	Digitoxin		●							
	Myoglobin		●							
	NT-proBNP		●							
	Troponin I**		●							
	Troponin T		●							
Diabetes	C-Peptide						●			
	Insulin								●	
Fertility/Pregnancy	DHEA-S								●	
	Estradiol								●	
	FSH								●	
	hCG							●	●	
	LH								●	
	Progesterone								●	
	Prolactin							●	●	
	SHBG (Sex Hormone Binding Globulin)								○	
Testosterone								●		

* International use only.
 ** Available high-sensitivity Troponin I.

InteliQ

See page number

- Analyte available
- Analyte present in endogenous levels

Test Menu

Analytes

		74	75	75	76	76	77	77	78	78
		InteliQ Assayed Multiquel	InteliQ Cardiac Markers Plus LT	InteliQ Ethanol/Ammonia	InteliQ Homocysteine	InteliQ Immunology	InteliQ Specialty Immunoassay	InteliQ Tumor Marker	Liquichek Immunoassay Plus	Liquichek Urine Chemistry
General Chemistry	α-1-Antitrypsin	○								
	α-1-Globulin	○								
	α-2-Globulin	○								
	β-Globulin	○								
	γ-Globulin	○								
	γ-Glutamyltransferase (GGT)	●								
	Acid Phosphatase (Total)	●								
	Albumin	●					●			
	Albumin-to-Globulin Ratio	○								
	Alkaline Phosphatase	●								
	ALT/SGPT	●								
	Ammonia				●					
	Amylase	●								●
	Amylase (Pancreatic)	●								
	AST/SGOT	●								
	Bilirubin (Direct)	●								
	Bilirubin (Neonatal)	●								
	Bilirubin (Total)	●								
	Calcium	●								●
	Calcium (Ionized)	●								
	Carbon Dioxide (CO ₂)	●								
	Chloride	●								●
	Cholesterol (HDL)	●								
	Cholesterol (LDL)	●								
	Cholesterol (Total)	●								
	Cholinesterase	○								
	Copper	○								
	Creatine Kinase (CK)	●		●						
	Creatinine	●								●
	Glucose	●								●
	Iron	●							○	
	Iron (TIBC)	○								
	Iron (UIBC)	○								
	Lactate (Lactic Acid)	●								
	Lactate Dehydrogenase (LDH)	●								
	LAP Arylamidase	●								
	Lipase	●								
	Magnesium	●								●
	Microalbumin									●
	Osmolality	●								●
	Phospholipids	●								
	Phosphorus	●								●
	Potassium	●								●
Protein (Total)	●								●	
Sodium	●								●	
Triglycerides	●									
Urea	●								●	
Urea Nitrogen (BUN)	●								●	
Uric Acid	●								●	

InteliQ

See page number

- Analyte available
- Analyte present in endogenous levels

Test Menu	Analytes	74	75	75	76	76	77	77	78	78
		InteliQ Assayed Multiquant	InteliQ Cardiac Markers Plus LT	InteliQ Ethanol/Ammonia	InteliQ Homocysteine	InteliQ Immunology	InteliQ Specialty Immunoassay	InteliQ Tumor Marker	Liquichek Immunoassay Plus	Liquichek Urine Chemistry
Growth	Insulin Growth Factor I (IGF-I)/Somatomedin C						●	●		
Inflammation	Antistreptolysin O (ASO)					●				
	CRP		●			●				
	Immunoglobulin E (IgE)					●			●	
Metabolic	Cortisol	●							●	●
	Homocysteine				●					
Reproductive Endocrinology	hCG							●		●
	hCG (Intact)							●		
	hCG (Total)							●		
	Prolactin							●		
Therapeutic Drug Monitoring	Amikacin	●								
	Carbamazepine	●							●	
	Digitoxin		●							
	Digoxin	●							●	
	Gentamicin	●							●	
	Lithium	●							●	
	Phenobarbital	●							●	
	Phenytoin	●							●	
	Theophylline	●							●	
	Tobramycin	●							●	
	Valproic Acid	●							●	
	Vancomycin								●	
Thyroid	Anti-Thyroglobulin (Anti-Tg)						●			
	Anti-Thyropoxidase (Anti-TPO)						●			
	T3 (Free)								●	
	T3 (Total)	●							●	
	T3 Uptake/T Uptake	●							●	
	T4 (Free)	●							●	
	T4 (Total)	●							●	
	Thyroglobulin							●		
	Thyroid Stimulating Hormone (TSH)	●							●	
T-Uptake										
Toxicology: DOA	Acetaminophen	●							●	
	Ethanol	●		●						
	Salicylate	●							●	
	Zinc	●								

InteliQ

See page number

- Analyte available
- Analyte present in endogenous levels

Test Menu

Analytes

		74	75	75	76	76	77	77	78	78	
		InteliQ Assayed Multiquel	InteliQ Cardiac Markers Plus LT	InteliQ Ethanol/Ammonia	InteliQ Homocysteine	InteliQ Immunology	InteliQ Specialty Immunoassay	InteliQ Tumor Marker	Liquichek Immunoassay Plus	Liquichek Urine Chemistry	
Specific Proteins	α-1-Acid Glycoprotein (AAG)					●					
	α-1-Antitrypsin (AAT)	○				●					
	α-2-Macroglobulin					●					
	ADNase B					●					
	Anti-Cyclic Citrullinated Peptide (Anti-CCP)					●					
	Antithrombin III (AT III)					●					
	Apolipoprotein A-1	○				●					
	Apolipoprotein B	○				●					
	β-2-Microglobulin					●		●			
	C1 Inhibitor					●					
	Complement C3	○				●					
	Complement C4	○				●					
	Cystatin C					○					
	Haptoglobin	○				●					
	IgG Subclass 1					●					
	IgG Subclass 2					●					
	IgG Subclass 3					●					
	IgG Subclass 4					●					
	Immunoglobulin A (IgA)	○				●			○		
	Immunoglobulin G (IgG)	○				●			○		
	Immunoglobulin M (IgM)	○				●			○		
	Kappa Light Chain					●					
	Lambda Light Chain					●					
	Lipoprotein (a)					●					
	pH										●
	Prealbumin	○					●				
	Properdin Factor B						●				
Protein Serum (Total)	●					●					
Retinol Binding Protein (RBP)						●					
Rheumatoid Factor						●					
Specific Gravity										●	
Transferrin	○					●					

See page number

Molecular & Infectious Disease Controls

- Analyte present
- Negative for analyte

	Molecular										Infectious Disease													
	Positive Controls					Negative Controls					Positive Controls													
	80	81	81	82	82	80	81	81	82	82	64	64	64	65	69	70	72	72	71	67	67	67	66	66
Amplichek I	Amplichek II	Amplichek STI	AmpIProbe CT/GC	AmpITrol CT/GC	Amplichek I	Amplichek II	Amplichek STI	Ampliclear	Assayed VIROCONTROL I-C	Assayed VIROCONTROL I-E	Assayed VIROCONTROL I-F	Assayed VIROCONTROL II-B	Liq. ToRCH Plus	PneumoTrol	PyloTrol	VIROCONTROL Chagas	VIROCONTROL EBV	VIROCONTROL HAV-IgM	VIROCONTROL HBe-IgM	VIROCONTROL HBeAg	VIROCONTROL HIV-1 Ag	VIROCONTROL HIV-1 gO		
Anti-Cytomegalovirus (Anti-CMV)										●	●	●												
Anti-HAV													●											
Anti-HBc										●	●	●												
Anti-HBe																								
Anti-HBs													●											
Anti-HCV										●	●	●												
Anti-HIV-1										●	●	●												
Anti HIV-1/2																								
Anti-HIV-1 gO																								●
Anti-HIV-2																								
Anti-HTLV-I										●	●	●												
Anti-HTLV-I/II																								
Anti-HTLV-II																								
Anti-Treponema pallidum (Syphilis)																								
Borrelia burgdorferi IgG																								
Chlamydia trachomatis		●	●	●			■	■																
Chlamydia trachomatis IgG														●										
Clostridium difficile (C. diff.)		●					■																	
Cytomegalovirus (CMV) IgG													●											
Cytomegalovirus (CMV) IgM																								
EBNA IgG																		●						
EBV EA-D IgG																								
Epstein-Barr Virus (VCA) IgG													●											
Epstein-Barr Virus (VCA) IgM																		●						
HAV-IgM																			●					
HBc-IgM																				●				
HBeAg																								
HBsAg										●	●	●									●			
Helicobacter pylori IgG													●		●									
Hepatitis B Virus (HBV)	●						■																	
Hepatitis C Virus (HCV)	●						■																	
Herpes Simplex Virus Type 1 (HSV-1) IgG														●										
Herpes Simplex Virus Type 1 (HSV-1) IgM																								
Herpes Simplex Virus Type 2 (HSV-2) IgG														●										
Herpes Simplex Virus Type 2 (HSV-2) IgM																								
HIV-1 Ag																								●
Human Immunodeficiency Virus Type 1 (HIV-1)	●						■																	
Human Papillomavirus (HPV)		●						■																
Measles Virus (Rubeola) IgG																								
Methicillin Resistant Staphylococcus aureus (MRSA)		●					■																	
Methicillin Sensitive Staphylococcus aureus (MSSA)		●					■																	
Mumps Virus IgG																								
Mycoplasma pneumoniae IgG																		●						
Mycoplasma pneumoniae IgM																		●						
Neisseria gonorrhoeae (NG or GC)		●	●	●			■	■																
Non-treponemal Antibodies (Syphilitic Reagin)																								
Rubella Virus IgG														●										
Rubella Virus IgM																								
SARS-CoV-2 Total IgG/IgM and SARS-CoV-2 IgG																								
Syphilis RPR														●										
Toxoplasma gondii IgG														●										
Toxoplasma gondii IgM																								
Treponema pallidum (Syphilis) IgG																								
Treponema pallidum (Syphilis) IgM																								
Trypanosoma cruzi (T. cruzi)																		●						
Vancomycin Resistant Enterococci (VRE or vanR)		●					■																	
Varicella Zoster Virus (VZV) IgG																								
West Nile Virus IgG & West Nile Virus IgM														●										

Infectious Disease																				
66	64	65	65	65	72	70	66	70	71	71	68	68	72	69	67	71	70	70	68	
Positive Controls													Negative Controls							
VIROCONTROL HIV-2	VIROCONTROL I	VIROCONTROL II	VIROCONTROL III	VIROCONTROL IV	VIROCONTROL Lyme	VIROCONTROL MuMmZ	VIROCONTROL PLUS-R	VIROCONTROL SARS-CoV Controls	VIROCONTROL RPR Panel	VIROCONTROL Syphilis IgA	VIROCONTROL TORCH	VIROCONTROL TORCH-M	VIROCONTROL WNV	Liq. TORCH Plus	VIROCLEAR	VIROCLEAR EBV	VIROCLEAR MuMmZ	VIROCLEAR SARS-CoV Controls	VIROCLEAR TORCH	
	●						●								■					Anti-Cytomegalovirus (Anti-CMV)
		●	●												■					Anti-HAV
	●						●								■					Anti-HBc
															■					Anti-HBe
			●												■					Anti-HBs
	●						●								■					Anti-HCV
	●														■					Anti-HIV-1
							●													Anti HIV-1/2
																				Anti-HIV-1 gO
●															■					Anti-HIV-2
	●														■					Anti-HTLV-I
							●													Anti-HTLV-I/II
															■					Anti-HTLV-II
						●									■					Anti-Treponema pallidum (Syphilis)
																				Borrelia burgdorferi IgG
																				Chlamydia trachomatis
																				Chlamydia trachomatis IgG
												●	●		■					Clostridium difficile (C. diff.)
																			■	Cytomegalovirus (CMV) IgG
																			■	Cytomegalovirus (CMV) IgM
																	■			EBNA IgG
																■				EBV EA-D IgG
															■	■				Epstein-Barr Virus (VCA) IgG
																■				Epstein-Barr Virus (VCA) IgM
				●											■					HAV-IgM
			●												■					HBc-IgM
	●						●								■					HBeAg
															■					HBsAg
															■					Helicobacter pylori IgG
																				Hepatitis B Virus (HBV)
																				Hepatitis C Virus (HCV)
												●	●		■					Herpes Simplex Virus Type 1 (HSV-1) IgG
																				Herpes Simplex Virus Type 1 (HSV-1) IgM
												●	●		■					Herpes Simplex Virus Type 2 (HSV-2) IgG
																				Herpes Simplex Virus Type 2 (HSV-2) IgM
															■					HIV-1 Ag
																				Human Immunodeficiency Virus Type 1 (HIV-1)
																				Human Papillomavirus (HPV)
						●												■		Measles Virus (Rubeola) IgG
																				Methicillin Resistant Staphylococcus aureus (MRSA)
																				Methicillin Sensitive Staphylococcus aureus (MSSA)
						●												■		Mumps Virus IgG
																				Mycoplasma pneumoniae IgG
																				Mycoplasma pneumoniae IgM
																				Neisseria gonorrhoeae (NG or GC)
										●						■				Non-treponemal Antibodies (Syphilitic Reagin)
												●	●		■					Rubella Virus IgG
													●							Rubella Virus IgM
							●												■	SARS-CoV-2 Total IgG/IgM and SARS-CoV-2 IgG
										●					■					Syphilis RPR
												●	●		■					Toxoplasma gondii IgG
													●							Toxoplasma gondii IgM
							●			●					■	■				Treponema pallidum (Syphilis) IgG
							●			●					■					Treponema pallidum (Syphilis) IgM
																				Trypanosoma cruzi (T. cruzi)
						●									■					Vancomycin Resistant Enterococci (VRE or vanR)
														●			■			Varicella Zoster Virus (VZV) IgG
																				West Nile Virus IgG & West Nile Virus IgM

See page number

Molecular & Infectious Disease Controls

- Analyte present
- Negative for analyte

See page number

QC Products in Dimension Vista Vials

- Analyte available
- Analyte present in endogenous levels

	94	95	96	97	98					
	Assayed Multiquant	Cardiac Markers Plus LT	Diabetes	Ethanol/Ammonia	Immunoassay Plus	Immunology (Liquid)	Pediatric	Spinal Fluid	Tumor Marker	Urine Chemistry
α-1-Acid Glycoprotein					●					
α-1-Antitrypsin	○				●					
α-2-Macroglobulin					●					
β-2-Microglobulin					●				●	
Acetaminophen	●				●					
Albumin	●				●		●			
Alcohol (Ethanol)	●			●						
Alkaline Phosphatase (ALP)	●									
Alphafetoprotein (AFP)					●				●	
ALT/SGPT	●									
Amikacin					●					
Ammonia				●						
Amylase	●									●
Antistreptolysin O (ASO)					●					
Apolipoprotein A-1	○				●					
Apolipoprotein B	○				●					
AST/SGOT	●									
Bilirubin (Direct)	●						●			
Bilirubin (Total)	●						●			
C1 Inhibitor					●					
CA 15-3									●	
CA 19-9									●	
CA 125									●	
Caffeine					●		●			
Calcium							●			●
Calcium (Total)	●									
Carbamazepine	●				●					
CEA					●				●	
Ceruloplasmin	○				●					
Chloride	●						●	●		●
Cholesterol (HDL)	●									
Cholesterol (LDL)	●									
Cholesterol (Total)	●									
CK (Total)		●								
CK-MB Isoenzyme		●			●					
CO ₂	●									
Complement C3	○				●					
Complement C4	○				●					
Creatine Kinase (CK)	●									
Creatinine	●									●
CRP		●			●					
Cystatin C					●					
Digitoxin		●								
Digoxin	●				●					
Estradiol					●					
Ethanol	●			●						
Ferritin	○				●	●			●	
Folate					●					
FSH					●					
Gentamicin	●				●					
GGT	●									
Glucose	●						●	●		●
Haptoglobin	○				●					
hCG									●	

See page number

QC Products in Dimension Vista Vials

- Analyte available
- Analyte present in endogenous levels

	94	95	96	97	98						
	Assayed Multiquant	Cardiac Markers Plus LT	Diabetes	Ethanol/Ammonia	Immunoassay Plus	Immunoassay Plus	Immunology (Liquid)	Pediatric	Spinal Fluid	Tumor Marker	Urine Chemistry
hCG-β Subunit					●						
Hemoglobin A1C			●								
Immunoglobulin A (IgA)	○				○	●					
Immunoglobulin E (IgE)					●	●					
Immunoglobulin G (IgG)	○				○	●			●		
Immunoglobulin G Subclasses 1-4						●					
Immunoglobulin M (IgM)	○				○	●					
Iron	●				○						
Iron (TIBC)	○										
Kappa Light Chain						●					
Lactate (Lactic Acid)	●								●		
Lactate Dehydrogenase (LDH)	●								●		
Lambda Light Chain						●					
Lidocaine					●						
Lipase	●										
Lithium	●				●						
Luteinizing Hormone (LH)					●						
Magnesium	●							●			●
Microalbumin											●
Myoglobin		●									
N-Acetylprocainamide (NAPA)					●						
NT-proBNP		●									
Phenobarbital	●				●						
Phenytoin	●				●						
Phosphorus	●										●
Potassium	●							●			●
Prealbumin	○					●					
Procainamide					●						
Prolactin					●					●	
Protein (Total)	●					●			●		●
PSA					●					●	
PSA (Free)					●					●	
Pseudocholinesterase	○										
Retinol Binding Protein (RBP)						●					
Rheumatoid Factor						●					
Salicylate	●				●						
Sodium	●							●	●		●
T3 (Free)					●						
T3 (Total)	●				●						
T3 Uptake/T-Uptake	●				●						
T4 (Free)	●				●						
T4 (Total)	●				●						
Theophylline	●				●			●			
Tobramycin	●				●						
Transferrin	○					●					
Tricyclic Antidepressants (TCA) Screen					●						
Triglycerides	●										
Troponin I		●									
TSH	●				●						
Urea Nitrogen	●										●
Uric Acid	●										●
Valproic Acid	●				●						
Vancomycin					●						
Vitamin B ₁₂	○				●						

EQAS Programs

See page number

- Analyte present
- ◐ Pilot analyte

	34			35			36			37		38			39		
	Blood Gas	Blood Typing	Cardiac Markers	Clin. Chemistry (Monthly)	Coagulation	Ethanol/Ammonia	Hematology	Hemoglobin	HIV/Hepatitis	Immunoassay (Monthly)	Lipids	Serum Proteins	Syphilis/Chagas	TDM	ToRCH/EBV/MUMZ	Urinalysis	Urine Chemistry
5-Hydroxyindoleacetic Acid (HIAA)																	●
11-Deoxycortisol									●								
17-α-OH-Progesterone									●								
25-OH Vitamin D									●								
α-1 Acid Glycoprotein											●						
α-1 Antitrypsin											●						
α-2 Macroglobulin											●						
β-2 Microglobulin									●		●						
ABO Group		●															
Acetaminophen													●				
Acid Phosphatase (Total)				●													
ACTH									●								
Alanine Aminotransferase (ALT/SGPT)				●													
Albumin				●							●					●	
Albumin-to-Creatinine Ratio																●	
Aldosterone									●								
Alkaline Phosphatase (ALP)				●													
Alphafetoprotein (AFP)									●								
Amikacin													●				
Amitriptyline													●				
Ammonia						●								●			
Amylase (Pancreatic)				●													
Amylase (Total)				●													
Androstenedione									●								
Angiotensin Converting Enzyme (ACE)									●								
Antigen Typing		◐															
Antistreptolysin O (ASO)											●						
Antithrombin III (ATIII)					●												
Anti-HAV								●									
Anti-HBc								●									
Anti-HBe								●									
Anti-HBs								●									
Anti-HCV								●									
Anti-HIV-1								●									
Anti-HIV-1/2								●									
Anti-HIV-2								●									
Anti-HTLV-I								●									
Anti-DNase B												◐					
Antibody Identification		●															
Antibody Screen		●															
Apolipoprotein A-1										●							
Apolipoprotein B										●							
APTT					●												
Aspartate Aminotransferase (AST/SGOT)				●													
Bile Acid				◐													
Bilirubin																●	
Bilirubin (Direct)				●													
Bilirubin (Indirect)				◐													
Bilirubin (Total)				●													
Blood/Hemoglobin																●	
BNP			●														
C-Peptide									●								
C-Reactive Protein (CRP)											●						
CA 15-3									●								
CA 19-9									●								
CA 27.29									●								
CA 125									●								
Caffeine													●				
Calcium (Ionized)	●			●													

EQAS Programs

See page number

- Analyte present
- ▶ Pilot analyte

	34			35			36			37		38			39		
	Blood Gas	Blood Typing	Cardiac Markers	Clin. Chemistry (Monthly)	Coagulation	Ethanol/Ammonia	Hematology	Hemoglobin	HIV/Hepatitis	Immunoassay (Monthly)	Lipids	Serum Proteins	Syphilis/Chagas	TDM	ToRCH/EBV/MuMZ	Urinalysis	Urine Chemistry
Calcium (Total)				●													●
Carbamazepine										●				●			
Carbon Dioxide (CO ₂)				●													
Carcinoembryonic Antigen (CEA)										●							
Ceruloplasmin												●					
Chloride	●			●													●
Cholesterol (HDL)				●													
Cholesterol (LDL)				●								●					
Cholesterol (non-HDL)											▶						
Cholesterol (Total)				●							●						
Cholinesterase				●													
CK-MB			●														
Compatibility (Cross-match)		●															
Complement C3												●					
Complement C4												●					
Copper				●													
Cortisol				●						●							
Cortisol (Free)																	●
Creatine Kinase (CK)				●													
Creatinine				●												●	●
Cyclosporine														●			
Cytomegalovirus (CMV) IgG															●		
Cytomegalovirus (CMV) IgM															●		
DAT (Direct Antiglobulin Test)		●															
D-dimer			●		●												
DHEA										●							
DHEA Sulfate										●							
Digoxin										●				●			
Dopamine																	●
Epinephrine																	●
Epstein-Barr Virus (EBNA) IgG															●		
Epstein-Barr Virus (VCA) IgG															●		
Epstein-Barr Virus (VCA) IgM															●		
Estradiol										●							
Estriol, Free (UE ₃)										●							
Ethanol						●											
Ethosuximide														●			
Factor VIII					●												
Ferritin										●							
Fibrinogen					●												
Folate										●							
Follicle Stimulating Hormone (FSH)										●							
Fructosamine										▶							
Gamma Glutamyltransferase (GGT)				●													
Gastrin										●							
Gentamicin														●			
Glucose	●			●												●	●
Haptoglobin												●					
HAV IgG									●								
HAV IgM									●								
HBeAg									●								
HBeAg									●								
hCG										●							
Hematocrit (HCT)							●										
Hemoglobin A1C								●									
Hemoglobin A ₂								●									
Hemoglobin							●										
Hemoglobin (Total Glycated)								●									

EQAS Programs

See page number

- Analyte present
- Pilot analyte

	34			35			36			37		38			39		
	Blood Gas	Blood Typing	Cardiac Markers	Clin. Chemistry (Monthly)	Coagulation	Ethanol/Ammonia	Hematology	Hemoglobin	HIV/Hepatitis	Immunoassay (Monthly)	Lipids	Serum Proteins	Syphilis/Chagas	TDM	ToRCH/EBV/MUMZ	Urinalysis	Urine Chemistry
Herpes Simplex Virus (HSV-1) IgG															●		
Herpes Simplex Virus (HSV-1/2) IgG															●		
Herpes Simplex Virus (HSV-2) IgG															●		
hGH										●							
HIV-1 Ag								●									
Homocysteine			●														
Homovanillic Acid (HVA)																	●
hs-CRP			●														
IgA												●					
IgE										●		●					
IgG												●					
IgM												●					
INR					●												
Insulin										●							
Intact PTH										●							
Iron				●													
Iron Binding Capacity, Total (TIBC)				●													
Iron Binding Capacity, Unsaturated (UIBC)				●													
Kappa Light Chain												●					
Ketones																●	
Lactate (Lactic Acid)	●			●													
Lactate Dehydrogenase (LDH)				●													
Lambda Light Chain												●					
Leukocytes																●	
LH										●							
Lipase				●													
Lipoprotein (a)											●						
Lithium				●										●			
Magnesium	●			●													●
Mean Corpuscular Hemoglobin (MCH)							●										
Mean Corpuscular Hemoglobin Concentration (MCHC)							●										
Mean Corpuscular Volume (MCV)							●										
Mean Platelet Volume (MPV)							●										
Measles Virus (Rubeola) IgG															●		
Metanephrine																	●
Methotrexate													●				
Microalbumin																	●
Mumps Virus IgG															●		
Myoglobin			●														
Nitrite																●	
Non-Treponemal antibodies													●				
Norepinephrine																	●
Normetanephrine																	●
Nortriptyline														●			
NSE										●							
NT-proBNP			●														
Osmolality				●													●
pCO ₂	●																
pH	●															●	
pO ₂	●																
Phenobarbital										●				●			
Phenytoin										●				●			
Phosphorus				●													●
Plasma Renin Activity (PRA)										●							
Platelets (PLT)							●										
Potassium	●			●													●
Pregnancy (hCG)																●	
Prealbumin												●					
Primidone														●			

EQAS Programs

See page number

- Analyte present
- ◐ Pilot analyte

	34			35			36			37		38		39			
	Blood Gas	Blood Typing	Cardiac Markers	Clin. Chemistry (Monthly)	Coagulation	Ethanol/Ammonia	Hematology	Hemoglobin	HIV/Hepatitis	Immunoassay (Monthly)	Lipids	Serum Proteins	Syphilis/Chagas	TDM	ToRCH/EBV/MuMZ	Urinalysis	Urine Chemistry
Progesterone									●								
Prolactin									●								
Protein C					●												
Protein S					●												
Protein (Total)				●							●						●
Protein-to-Creatinine Ratio																●	
PSA (Free)									●								
PSA (Free/Total Ratio)									●								
PSA (Total)									●								
PT					●												
Red Blood Cells (RBC)							●										
Red Blood Cell Distribution Width (RDW)							●										
Red Blood Cell Distribution Width (RDW-SD)							●										
Renin									●								
Rh(D)	●																
Rheumatoid Factor (RF)		●									●						
Rubella Virus IgG															●		
Rubella Virus IgM															●		
S100 Protein									●								
Salicylate													●				
Sex Hormone Binding Globulin (SHBG)									●								
Sodium	●			●													●
Specific Gravity																●	
T3 Uptake									●								
T-Uptake									●								
Testosterone									●								
Testosterone (Free)									◐								
Theophylline									●				●				
Thrombin Time (TT)					●												
Thyroglobulin (Tg)									◐								
Thyroid Stimulating Hormone (TSH)				●					●								
Thyroxine Binding Globulin (TBG)									●								
Thyroxine, Free (T ₄)				●					●								
Thyroxine (T ₄), Total				●					●								
Tobramycin													●				
Toxoplasma gondii (Toxo) IgG															●		
Toxoplasma gondii (Toxo) IgM															●		
Transferrin				◐					●		●						
Treponema pallidum IgG												●					
Treponema pallidum IgM												●					
Treponema pallidum Total Antibody												●					
Tricyclic Antidepressants (TCA) Screen													●				
Triglycerides				●						●							
Triiodothyronine, Free (T ₃)				●					●								
Triiodothyronine (T ₃), Total				●					●								
Troponin I			●														
Troponin T			●														
Urea				●													◐
Urea Nitrogen				●													●
Uric Acid				●													●
Urobilinogen																●	
Valproic Acid									●				●				
Vancomycin													●				
Vanilylmandelic Acid (VMA)																	●
Varicella Zoster Virus (VZV) IgG															●		
Vitamin B ₁₂									●								
von Willebrand Factor (vWF)					●												
White Blood Cells (WBC)							●										
Zinc				●													

A	
Additional Software Training, Unity	89, 90, 91
Affiliated Data Exception Report, Unity	92
Affiliated Laboratory Comparison Reports, Unity	92
Allergen sIgE Control (Lyphocheck)	60
AMH Control (Liquichek)	54
Amplichek I	80
Amplichek II	81
Amplichek STI	81
AmpliClear	82
AmpliPROBE CT/GC	82
AmpliTrol CT/GC	82
ANA Control, Centromere Pattern (Liquichek)	61
ANA Control, Homogeneous Pattern (Liquichek)	61
ANA Control, Mitotic Spindle Pattern (Liquichek)	61
ANA Control, Nucleolar Pattern (Liquichek)	61
ANA Control, Speckled Pattern (Liquichek)	61
ANA Controls Set, Positive: Homogeneous, Speckled, Centromere and Nucleolar Patterns (Liquichek)	61
Anemia Control (Lyphocheck)	55
Anti-Mitochondrial Control (Liquichek)	61
Anti-nDNA Control (Liquichek)	61
Anti-RNP Control (Liquichek)	61
Anti-Scl-70 Control (Liquichek)	61
Anti-Sm Control (Liquichek)	61
Anti-Smooth Muscle Control (Liquichek)	61
Anti-SS-A Control (Liquichek)	61
Anti-SS-B Control (Liquichek)	61
Assayed Chemistry Control (Lyphocheck)	19
Assayed Multiqual Control (InteliQ)	74
Assayed VIROTROL I-C	64
Assayed VIROTROL I-E	64
Assayed VIROTROL I-F	64
Assayed VIROTROL II-B	65
Autoimmune Negative Control (Liquichek)	61
B	
Barcode Label Generator	3
Benzo/TCA Control-Set B (Lyphocheck)	110
Bias and Imprecision Histogram Report, Unity	92
Bio-Rad Mission: Control	91
Blood Gas Ampule Breaker	116
Blood Gas Control (Liquichek)	10
Blood Gas Plus E Control (Liquichek)	10
Blood Gas Plus EGL Control (Liquichek)	11
Blood Gas Program (EQAS)	34
Blood Typing Program (EQAS)	34
Blood Typing/Serum Indices Report, Unity	92
C	
Cardiac Markers Control LT (Liquichek)	15
Cardiac Markers Plus Control (Liquichek)	15
Cardiac Markers Plus Control LT (InteliQ)	75
Cardiac Markers Plus Control LT (Liquichek)	14, 94
Cardiac Markers Program (EQAS)	34
Cardiac Troponins Control (Liquichek)	14
CK/LD Isoenzyme Control (Liquichek)	15
Clinical Chemistry (Monthly) Program (EQAS)	35
Coagulation Control (Lyphocheck)	26
Coagulation Program (EQAS)	35
Code Lists for Unity	3
D	
D-dimer Control (Liquichek)	27
Diabetes Control (Liquichek)	30, 95
Diabetes Control (Lyphocheck)	30
Dispenser Tips for Crimp Seals	116
Dispenser Tips for Screw Caps	116
Drug Free Serum (Lyphocheck)	110
E	
eInserts XML	3
Elevated CRP Control (Liquichek)	59
Endocrine Control (Lyphocheck)	55
End-of-Cycle Report, EQAS	40
EQAS Online	3
Ethanol/Ammonia Control (InteliQ)	75
Ethanol/Ammonia Control (Liquichek)	21, 95
Ethanol/Ammonia Program (EQAS)	35
F	
Fertility Control (Lyphocheck)	54
H	
Hematology Control (A) (Liquichek)	42
Hematology Control (C) (Liquichek)	43
Hematology Control (S) (Liquichek)	44
Hematology Control (X) (Liquichek)	45
Hematology Program (EQAS)	36
Hematology-16 Control (Liquichek)	46
Hematology-16T Control (Liquichek)	46
Hemoglobin A1C Linearity Set (Lyphocheck)	30
Hemoglobin A ₂ Control (Lyphocheck)	31
Hemoglobin Program (EQAS)	36
Hemostasis Control (Lyphocheck)	26
HIV/Hepatitis Program (EQAS)	36
Homocysteine Control (InteliQ)	76
Homocysteine Control (Liquichek)	16
Hypertension Markers Control (Lyphocheck)	55
I	
Immunoassay (Monthly) Program (EQAS)	37
Immunoassay Plus Control (Liquichek)	50, 78, 96
Immunoassay Plus Control (Lyphocheck)	51
Immunoassay Premium Control (Liquichek)	85
Immunology Control (InteliQ)	76
Immunology Control (Liquichek)	58, 96
Immunology Plus Control (Lyphocheck)	58
InstantQC Report, Unity	92
L	
Laboratory Comparison Report, Unity	92
Laboratory Histogram Report, Unity	92
Laboratory Performance Overview Report, Unity	92
Linearity Web	3, 30
Lipids Control (Liquichek)	20
Lipids Program (EQAS)	37
Liquid Assayed Multiqual	18, 94
Liquid Assayed Multiqual Premium	84
Liquid Unassayed Multiqual	18
M	
Maternal Serum 1st Trimester Control (Liquichek)	54
Maternal Serum II Control (Liquichek)	54
Meter Trax Control	31
Microalbumin Control (Liquichek)	22
Monthly Evaluation Report, Unity	92
My eInserts	3
O	
Online EQAS Resources	3
Opiate Control (Liquichek)	105
P	
P.A.C.E. Credits	8

100

107	ANA Control, Homogeneous Pattern (Liquichek)	61	267	Immunoassay Plus Control (Liquichek), Level 1 (2 mL)	96
108	ANA Control, Speckled Pattern (Liquichek)	61	268	Immunoassay Plus Control (Liquichek), Level 2 (2 mL)	96
111	ANA Control, Nucleolar Pattern (Liquichek)	61	268X	Immunoassay Plus Control (Liquichek), Trilevel MiniPak (2 mL)	96
112	ANA Control, Centromere Pattern (Liquichek)	61	269	Immunoassay Plus Control (Liquichek), Level 3 (2 mL)	96
113	Anti-SS-B Control (Liquichek)	61	271	Ethanol/Ammonia Control (Liquichek), Level 1 (2.5 mL)	95
114	Anti-SS-A Control (Liquichek)	61	272	Ethanol/Ammonia Control (Liquichek), Level 2 (2.5 mL)	95
115	Anti-Sm Control (Liquichek)	61	272X	Ethanol/Ammonia Control (Liquichek), Trilevel MiniPak (2.5 mL)	95
116	Anti-RNP Control (Liquichek)	61	273	Ethanol/Ammonia Control (Liquichek), Level 3 (2.5 mL)	95
117	Anti-Scl-70 Control (Liquichek)	61	274	Whole Blood Immunosuppressant Control (Lyphocheck), Level 1	100
118	ANA Control, Mitotic Spindle Pattern (Liquichek)	61	275	Whole Blood Immunosuppressant Control (Lyphocheck), Level 2	100
119	Anti-nDNA Control (Liquichek)	61	276	Whole Blood Immunosuppressant Control (Lyphocheck), Level 3	100
127	Anti-Mitochondrial Control (Liquichek)	61	277	Whole Blood Immunosuppressant Control (Lyphocheck), Level 4	100
129	Anti-Smooth Muscle Control (Liquichek)	61	278	Whole Blood Immunosuppressant Control (Lyphocheck), Level 5	100
130	Autoimmune Negative Control (Liquichek)	61	279X	Whole Blood Immunosuppressant Control (Lyphocheck), Five Level MiniPak	100
131	ANA Controls Set, Positive: Homogeneous, Speckled, Centromere and Nucleolar Patterns (Liquichek)	61	281	Immunology Control (Liquichek), Level 1 (2.5 mL)	96
144	Hematology-16T Control (Liquichek), Trilevel	46	282	Immunology Control (Liquichek), Level 2 (2.5 mL)	96
144X	Hematology-16T Control (Liquichek), Trilevel MiniPak	46	282X	Immunology Control (Liquichek), Trilevel MiniPak (2.5 mL)	96
146	Cardiac Markers Plus Control LT (Liquichek), Level 1 (3 mL)	14	283	Immunology Control (Liquichek), Level 3 (2.5 mL)	96
146X	Cardiac Markers Plus Control LT (Liquichek), Level 1 MiniPak (3 mL)	14	284	Liquid Assayed Multiqual Premium, Level 1	84
147	Cardiac Markers Plus Control LT (Liquichek), Level 2 (3 mL)	14	285	Liquid Assayed Multiqual Premium, Level 2	84
147X	Cardiac Markers Plus Control LT (Liquichek), Level 2 MiniPak (3 mL)	14	285X	Liquid Assayed Multiqual Premium, Trilevel MiniPak	84
148	Cardiac Markers Plus Control LT (Liquichek), Level 3 (3 mL)	14	286	Liquid Assayed Multiqual Premium, Level 3	84
148X	Cardiac Markers Plus Control LT (Liquichek), Level 3 MiniPak (3 mL)	14	287	Homocysteine Control (Liquichek), Level 1	16
149	Cardiac Markers Plus Control LT (Liquichek), Level Low (3 mL)	14	288	Homocysteine Control (Liquichek), Level 2	16
149X	Cardiac Markers Plus Control LT (Liquichek), Level Low MiniPak (3 mL)	14	288X	Homocysteine Control (Liquichek), Trilevel MiniPak	16
171	Diabetes Control (Liquichek), Level 1 (1 mL)	30	289	Homocysteine Control (Liquichek), Level 3	16
172	Diabetes Control (Liquichek), Level 2 (1 mL)	30	291	Diabetes Control (Liquichek), Level 1 (2 mL)	95
172X	Diabetes Control (Liquichek), Trilevel MiniPak (1 mL)	30	292	Diabetes Control (Liquichek), Level 2 (2 mL)	95
173	Diabetes Control (Liquichek), Level 3 (1 mL)	30	292X	Diabetes Control (Liquichek), Trilevel MiniPak (2 mL)	95
176	Pediatric Control (Liquichek), Level 1 (2.5 mL)	97	293	Diabetes Control (Liquichek), Level 3 (2 mL)	95
177	Pediatric Control (Liquichek), Level 2 (2.5 mL)	97	297	Cardiac Markers Plus Control LT (Liquichek), Level 1C (2.5 mL)	94
178X	Pediatric Control (Liquichek), Bilevel MiniPak (2.5 mL)	97	298	Cardiac Markers Plus Control LT (Liquichek), Level 2 (2.5 mL)	94
180	Cardiac Markers Plus Control (Liquichek), Trilevel	15	298X	Cardiac Markers Plus Control LT (Liquichek), Trilevel MiniPak (2.5 mL)	94
180X	Cardiac Markers Plus Control (Liquichek), Trilevel MiniPak	15	299	Cardiac Markers Plus Control LT (Liquichek), Level 3 (2.5 mL)	94
181	Cardiac Markers Plus Control (Liquichek), Level 1	15			
182	Cardiac Markers Plus Control (Liquichek), Level 2	15			
183	Cardiac Markers Plus Control (Liquichek), Level 3	15			
195	Urine Chemistry Control (Liquichek), Level 1 (2.5 mL)	98	302X	Spinal Fluid Control (Liquichek), Bilevel MiniPak (2.5 mL)	97
196	Urine Chemistry Control (Liquichek), Level 2 (2.5 mL)	98	303	Spinal Fluid Control (Liquichek), Level 1 (2.5 mL)	97
198X	Urine Chemistry Control (Liquichek), Bilevel MiniPak (2.5 mL)	98	304	Spinal Fluid Control (Liquichek), Level 2 (2.5 mL)	97
			313X	Assayed Chemistry Control (Lyphocheck), Bilevel MiniPak	19
			323X	Unassayed Chemistry Control (Human) (Lyphocheck) Bilevel MiniPak (10 mL)	19
227	ToRCH Plus Control (Liquichek), Positive	69	337	Liquid Assayed Multiqual, Level 1 (2.5 mL)	94
227X	ToRCH Plus Control (Liquichek), Positive, MiniPak	69	338	Liquid Assayed Multiqual, Level 2 (2.5 mL)	94
228	ToRCH Plus Control (Liquichek), Negative	69	338X	Liquid Assayed Multiqual, Trilevel MiniPak (2.5 mL)	94
228X	ToRCH Plus Control (Liquichek), Negative MiniPak	69	339	Liquid Assayed Multiqual, Level 3 (2.5 mL)	94
239	ToRCH Plus Control (Liquichek), Positive	69	353X	Pediatric Control (Liquichek), Bilevel MiniPak (4 mL)	21
239X	ToRCH Plus Control (Liquichek), Positive MiniPak	69	354	Pediatric Control (Liquichek), Level 1 (4 mL)	21
254	Elevated CRP Control (Liquichek), Level 1	59	355	Pediatric Control (Liquichek), Level 2 (4 mL)	21
255	Elevated CRP Control (Liquichek), Level 2	59	359	Specialty Immunoassay Control (Liquichek), Level LTA	52
255X	Elevated CRP Control (Liquichek), Trilevel MiniPak	59	359X	Specialty Immunoassay Control (Liquichek), Four Level MiniPak	52
256	Elevated CRP Control (Liquichek), Level 3	59			

200

300

360	Immunoassay Plus Control (Liquichek), Trilevel (5 mL) 50	450X	Therapeutic Drug Monitoring Control (TDM)
360X	Immunoassay Plus Control (Liquichek), Trilevel MiniPak (5 mL) 50	451	(Lyphocheck), Trilevel MiniPak. 101
361	Immunoassay Plus Control (Liquichek), Level 1 (5 mL) 50	452	Therapeutic Drug Monitoring Control (TDM)
362	Immunoassay Plus Control (Liquichek), Level 2 (5 mL) 50	453	(Lyphocheck), Level 1 101
363	Immunoassay Plus Control (Liquichek), Level 3 (5 mL) 50	454	Therapeutic Drug Monitoring Control (TDM)
364	Specialty Immunoassay Control (Liquichek), Level 1 52	455	(Lyphocheck), Level 2 101
365	Specialty Immunoassay Control (Liquichek), Level 2 52	456	Therapeutic Drug Monitoring Control (TDM)
366	Specialty Immunoassay Control (Liquichek), Level 3 52	457	(Lyphocheck), Level 3 101
367	Tumor Marker Plus Control (Lyphocheck), Level 1 53	458	Qualitative Urine Toxicology Control (Liquichek), Negative Level. 104
368	Tumor Marker Plus Control (Lyphocheck), Level 2 53	459	Qualitative Urine Toxicology Control (Liquichek), Bilevel MiniPak. 104
368X	Tumor Marker Plus Control (Lyphocheck), Trilevel MiniPak. 53	460	Qualitative Urine Toxicology Control (Liquichek), Positive Level. 104
369	Tumor Marker Plus Control (Lyphocheck), Level 3 53	461	Drug Free Serum (Lyphocheck). 110
370	Immunoassay Plus Control (Lyphocheck), Trilevel. 51	462	Drug Free Serum (Lyphocheck), MiniPak 110
370X	Immunoassay Plus Control (Lyphocheck), Trilevel MiniPak. 51	463	Urine Toxicology Negative Control (Liquichek) 104
371	Immunoassay Plus Control (Lyphocheck), Level 1 51	464	Urine Toxicology Negative Control (Liquichek), MiniPak 104
372	Immunoassay Plus Control (Lyphocheck), Level 2 51	465	Urine Toxicology Control (Liquichek), Level S1 106
373	Immunoassay Plus Control (Lyphocheck), Level 3 51	466	Urine Toxicology Control (Liquichek), Level S2 106
374X	Microalbumin Control (Liquichek), Bilevel MiniPak 22	467	Urine Toxicology Control (Liquichek), Level S3 108
375X	Quantitative Urine Control (Lyphocheck), Bilevel MiniPak 22	468	Urine Toxicology Control (Liquichek), Level S1 Low Opiate. 107
376	Quantitative Urine Control (Lyphocheck), Level 1, Normal 22	469	Urine Toxicology Control (Liquichek), Level S2 Low Opiate. 107
377	Quantitative Urine Control (Lyphocheck), Level 2, Abnormal 22	470	Urine Toxicology Control (Liquichek), Level C2 Low Opiate. 109
378	Microalbumin Control (Liquichek), Level 1. 22	471	Urine Toxicology Control (Liquichek), Level C3 Low Opiate. 109
379	Microalbumin Control (Liquichek), Level 2. 22	472	Fertility Control (Lyphocheck), Trilevel 54
383	Serum Volatiles Control (Liquichek), Level 1 111	473	Fertility Control (Lyphocheck), Trilevel MiniPak 54
384	Serum Volatiles Control (Liquichek), Level 2 111	474	Fertility Control (Lyphocheck), Level 1. 54
385X	Serum Volatiles Control (Liquichek), Bilevel MiniPak 111	475	Fertility Control (Lyphocheck), Level 2. 54
395X	Urine Chemistry Control (Liquichek), Bilevel MiniPak (10 mL) 23	476	Fertility Control (Lyphocheck), Level 3. 54
397	Urine Chemistry Control (Liquichek), Level 1 (10 mL) 23	477	Hematology Control (X) (Liquichek), Trilevel 45
398	Urine Chemistry Control (Liquichek), Level 2 (10 mL) 23	478	Hematology Control (X) (Liquichek), Trilevel MiniPak. 45
	400		500
400	Urine Metals Control (Lyphocheck), Level 1 111	500	Anemia Control (Lyphocheck), Single Level 55
402	Maternal Serum II (Liquichek), Level 1. 54	500X	Anemia Control (Lyphocheck), MiniPak. 55
402X	Urine Metals Control (Lyphocheck), Bilevel MiniPak 111	501	Rheumatoid Factor Control (Liquichek), Level 1 59
403	Maternal Serum II (Liquichek), Level 2. 54	502	Rheumatoid Factor Control (Liquichek), Level 2 59
403X	Maternal Serum II (Liquichek), Trilevel MiniPak 54	502X	Rheumatoid Factor Control (Liquichek), Trilevel MiniPak. 59
404	Maternal Serum II (Liquichek), Level 3. 54	503	Rheumatoid Factor Control (Liquichek), Level 3 59
405	Urine Metals Control (Lyphocheck), Level 2 111	510X	Blood Gas Plus EGL Control (Liquichek), Trilevel MiniPak. 11
406	Urine Bone Markers Control (Lyphocheck), Bilevel 56	511	Blood Gas Plus EGL Control (Liquichek), Level 1 11
406X	Urine Bone Markers Control (Lyphocheck), Bilevel MiniPak. 56	512	Blood Gas Plus EGL Control (Liquichek), Level 2 11
409	Urine Toxicology Control (Liquichek), Level S1S 108	513	Blood Gas Plus EGL Control (Liquichek), Level 3 11
419	Urine Toxicology Control (Liquichek), Level S2S 108	514	Sedimentation Rate Control (Liquichek), Level 1. 47
423	Urine Toxicology Control (Liquichek), Level S1E Low Opiate 107	514X	Sedimentation Rate Control (Liquichek), Bilevel MiniPak 47
424	Urine Toxicology Control (Liquichek), Level S2E Low Opiate 107	515	Sedimentation Rate Control (Liquichek), Level 2. 47
430	Immunology Plus Control (Lyphocheck), Bilevel 58	527	Whole Blood Metals Control (Lyphocheck), Level 1 111
430X	Immunology Plus Control (Lyphocheck), Bilevel MiniPak. 58	528	Whole Blood Metals Control (Lyphocheck), Level 2 111
435	Urinalysis Control (Liquichek), Bilevel 115	528X	Whole Blood Metals Control (Lyphocheck), Trilevel MiniPak. 111
435X	Urinalysis Control (Liquichek), Bilevel MiniPak. 115	529	Whole Blood Metals Control (Lyphocheck), Level 3 111
436	Urinalysis Control (Liquichek), Level 1 115	535	Endocrine Control (Lyphocheck), Bilevel. 55
437	Urinalysis Control (Liquichek), Level 2. 115	535X	Endocrine Control (Lyphocheck), Bilevel MiniPak. 55
438	Urine Toxicology Control (Liquichek), Level S1E 106	544	Ethanol/Ammonia Control (Liquichek), Level 1 (3 mL) 21
439	Urine Toxicology Control (Liquichek), Level S2E 106	545	Ethanol/Ammonia Control (Liquichek), Level 2 (3 mL) 21
441	Urine Toxicology Control (Liquichek), Level C1 109	545X	Ethanol/Ammonia Control (Liquichek), Trilevel MiniPak (3 mL) 21
442	Urine Toxicology Control (Liquichek), Level C2. 109	546	Ethanol/Ammonia Control (Liquichek), Level 3 (3 mL) 21
443	Urine Toxicology Control (Liquichek), Level C3. 109	547	Tumor Marker Control (Liquichek), Level 1 (2 mL) 53
444	Urine Toxicology Control (Liquichek), Level C4. 109	548	Tumor Marker Control (Liquichek), Level 2 (2 mL) 53
449	Hematology Control (S) (Liquichek), Trilevel 44	548X	Tumor Marker Control (Liquichek), Trilevel MiniPak (2 mL) 53
449X	Hematology Control (S) (Liquichek), Trilevel MiniPak. 44	549	Tumor Marker Control (Liquichek), Level 3 (2 mL) 53
450	Therapeutic Drug Monitoring Control (TDM) (Lyphocheck), Trilevel 101	553	Hemoglobin A ₂ Control (Lyphocheck), Bilevel. 31
		553X	Hemoglobin A ₂ Control (Lyphocheck), Bilevel MiniPak 31
		560X	Whole Blood Control (Lyphocheck), Trilevel MiniPak 112

561	Whole Blood Control (Lyphocheck), Level 1	112	724	Therapeutic Drug Monitoring Control (TDM)	
562	Whole Blood Control (Lyphocheck), Level 2	112		(Liquichek), Trilevel	101
563	Whole Blood Control (Lyphocheck), Level 3	112	724X	Therapeutic Drug Monitoring Control (TDM)	
570X	Blood Gas Control (Liquichek), Trilevel MiniPak	10		(Liquichek), Trilevel MiniPak	101
571	Blood Gas Control (Liquichek), Level 1	10	725	Therapeutic Drug Monitoring Control (TDM)	
572	Blood Gas Control (Liquichek), Level 2	10		(Liquichek), Level 1	101
573	Blood Gas Control (Liquichek), Level 3	10	726	Therapeutic Drug Monitoring Control (TDM)	
575X	Blood Gas Plus E Control (Liquichek), Trilevel MiniPak	10		(Liquichek), Level 2	101
576	Blood Gas Plus E Control (Liquichek), Level 1	10	727	Therapeutic Drug Monitoring Control (TDM)	
577	Blood Gas Plus E Control (Liquichek), Level 2	10		(Liquichek), Level 3	101
578	Blood Gas Plus E Control (Liquichek), Level 3	10	730X	Unassayed Chemistry Control (Human) (Lyphocheck),	
587	Blood Gas Ampule Breaker	116		Bilevel MiniPak (5 mL)	19
588	Dispenser Tips for Crimp Seals	116	731	Unassayed Chemistry Control (Human) (Lyphocheck),	
590X	Immunology Control (Liquichek), Trilevel MiniPak (1 mL)	58		Level 1 (5 mL)	19
591	Immunology Control (Liquichek), Level 1 (1 mL)	58	732	Unassayed Chemistry Control (Human) (Lyphocheck),	
592	Immunology Control (Liquichek), Level 2 (1 mL)	58		Level 2 (5 mL)	19
593	Immunology Control (Liquichek), Level 3 (1 mL)	58	740	Diabetes Control (Lyphocheck), Bilevel	30
594	Immunology Control (Liquichek), Level 1 (3 mL)	58	740X	Diabetes Control (Lyphocheck), Bilevel MiniPak	30
595	Immunology Control (Liquichek), Level 2 (3 mL)	58	744	Coagulation Control (Lyphocheck), Level 1	26
596	Immunology Control (Liquichek), Level 3 (3 mL)	58	745	Coagulation Control (Lyphocheck), Level 2	26
597	Hemostasis Control (Lyphocheck), Level 1	26	745X	Coagulation Control (Lyphocheck), Trilevel MiniPak	26
598	Hemostasis Control (Lyphocheck), Level 2	26	746	Coagulation Control (Lyphocheck), Level 3	26
598X	Hemostasis Control (Lyphocheck), Trilevel MiniPak	26	750X	Spinal Fluid Control (Liquichek), Bilevel MiniPak (3 mL)	60
599	Hemostasis Control (Lyphocheck), Level 3	26	751	Spinal Fluid Control (Liquichek), Level 1 (3 mL)	60
	600		752	Spinal Fluid Control (Liquichek), Level 2 (3 mL)	60
600	Hypertension Markers Control (Lyphocheck), Trilevel	55	760	Hematology-16 Control (Liquichek), Trilevel	46
600X	Hypertension Markers Control (Lyphocheck),		760X	Hematology-16 Control (Liquichek), Trilevel MiniPak	46
	Trilevel MiniPak	55	761	Hematology-16 Control (Liquichek), Low	46
636	Maternal Serum 1st Trimester Control (Liquichek), Trilevel	54	762	Hematology-16 Control (Liquichek), Normal	46
636X	Maternal Serum 1st Trimester Control (Liquichek),		763	Hematology-16 Control (Liquichek), High	46
	Trilevel MiniPak	54		800	
640X	Lipids Control (Liquichek), Bilevel MiniPak	20	804	Unity Real Time Installation Package	89, 90
641	Lipids Control (Liquichek), Level 1	20	804-1	Unity Real Time (Annual Subscription)	90
642	Lipids Control (Liquichek), Level 2	20	804-W1	Unity Real Time online (Annual Subscription)	90
645	Cardiac Markers Control LT (Liquichek), Trilevel	15	805-1	Unity Real Time LT	89
645X	Cardiac Markers Control LT (Liquichek), Trilevel MiniPak	15	806-1	Unity Alert (Annual Subscription)	91
646	Cardiac Markers Control LT (Liquichek), Level 1	15	811-1	Westgard Advisor (Annual Subscription)	91
647	Cardiac Markers Control LT (Liquichek), Level 2	15	820-1	UnityConnect (Annual Subscription)	90
648	Cardiac Markers Control LT (Liquichek), Level 3	15	825i	Additional Software and Training	89, 90
663	Benzo/TCA Control-Set B (Lyphocheck), Level 1	110	826	Reticulocyte Control (C) (Liquichek), Level 1	43
664	Benzo/TCA Control-Set B (Lyphocheck), Level 2	110	827	Reticulocyte Control (C) (Liquichek), Level 2	43
665X	Benzo/TCA Control-Set B (Lyphocheck), Bilevel MiniPak	110	827X	Reticulocyte Control (C) (Liquichek), Trilevel MiniPak	43
670X	CK/LD Isoenzyme Control (Liquichek), Bilevel MiniPak	15	828	Reticulocyte Control (C) (Liquichek), Level 3	43
671	CK/LD Isoenzyme Control (Liquichek), Level 1	15	854	Reticulocyte Control (A) (Liquichek), Level 1	42
672	CK/LD Isoenzyme Control (Liquichek), Level 2	15	855	Reticulocyte Control (A) (Liquichek), Level 2	42
683	Urine Toxicology Control (Liquichek),		855X	Reticulocyte Control (A) (Liquichek), Bilevel MiniPak	42
	Level S10 Low Opiate	107	858i	Additional Software Training	89, 90, 91
690X	Unassayed Chemistry Control (Human) (Liquichek),		865	Hematology Control (A) (Liquichek), Trilevel	42
	Bilevel MiniPak	20	865X	Hematology Control (A) (Liquichek), Trilevel MiniPak	42
691	Unassayed Chemistry Control (Human)		866	Hematology Control (A) (Liquichek), Low	42
	(Liquichek), Level 1	20	867	Hematology Control (A) (Liquichek), Normal	42
692	Unassayed Chemistry Control (Human) (Liquichek),		868	Hematology Control (A) (Liquichek), High	42
	Level 2	20	870-1	UnityWeb (Annual Subscription)	89
694	Liquid Assayed Multiquel, Level 1 (3 mL)	18	870-W1	WebConnect (Annual Subscription)	89
695	Liquid Assayed Multiquel, Level 2 (3 mL)	18		900	
695X	Liquid Assayed Multiquel, Trilevel MiniPak (3 mL)	18	904	Hematology Control (C) (Liquichek), Trilevel	43
696	Liquid Assayed Multiquel, Level 3 (3 mL)	18	904X	Hematology Control (C) (Liquichek), Trilevel MiniPak	43
697	Liquid Unassayed Multiquel, Level 1	18	905	Hematology Control (C) (Liquichek), Low	43
698	Liquid Unassayed Multiquel, Level 2	18	906	Hematology Control (C) (Liquichek), Normal	43
698X	Liquid Unassayed Multiquel, Trilevel MiniPak	18	907	Hematology Control (C) (Liquichek), High	43
699	Liquid Unassayed Multiquel, Level 3	18	915X	Reticulocyte Control (A-I) (Liquichek), Bilevel MiniPak	42
	700		916	Reticulocyte Control (A-I) (Liquichek), Level 1	42
706	Urine Toxicology Control (Liquichek),		917	Reticulocyte Control (A-I) (Liquichek), Level 2	42
	Level S20 Low Opiate	107	921	Reticulocyte Control (S) (Liquichek), Level 1	44

922	Reticulocyte Control (S) (Liquichek), Level 2	44	00133	VIROCLEAR MuMZ	69
922X	Reticulocyte Control (S) (Liquichek), Trilevel MiniPak	44	00138	AmpliPROBE CT/GC	82
923	Reticulocyte Control (S) (Liquichek), Level 3	44	00142A	VIROTROL HAV-IgM	67
926	Reticulocyte Control (X) (Liquichek), Level 1	45	00143	VIROTROL HBc-IgM	67
927	Reticulocyte Control (X) (Liquichek), Level 2	45	00144	VIROTROL HBeAg	67
927X	Reticulocyte Control (X) (Liquichek), Trilevel MiniPak	45	00152	Assayed VIROTROL II-B	65
928	Reticulocyte Control (X) (Liquichek), Level 3	45	00164	Assayed VIROTROL I-C	64
962	qUAntify Plus Control, Bilevel, Bottle	114	00166	Assayed VIROTROL I-E	64
962X	qUAntify Plus Control, Bilevel MiniPak, Bottle	114	00168	Assayed VIROTROL I-F	64
963	qUAntify Plus Control, Level 1, Bottle	114	00171	VIROTROL Syphilis LR-A	70
964	qUAntify Plus Control, Level 2, Bottle	114	00171X	VIROTROL Syphilis LR-A	70
970	Meter Trax Control, Trilevel	31	01400	VIROTROL RPR Panel	70
970X	Meter Trax Control, Trilevel MiniPak	31			
971	Meter Trax Control, Low Level	31		27000	
972	Meter Trax Control, Mid Level	31	27100	D-dimer Control (Liquichek), Level Low	27
973	Meter Trax Control, High Level	31	27101	D-dimer Control (Liquichek), Level 1	27
995	qUAntify Plus Control, Bilevel	114	27102	D-dimer Control (Liquichek), Level 2	27
995X	qUAntify Plus Control, Bilevel MiniPak	114	27102X	D-dimer Control (Liquichek), Four Level MiniPak	27
98700	Dispenser Tips for Screw Caps	116	27103	D-dimer Control (Liquichek), Level 3	27
	00100		27104	Cardiac Markers Plus Control LT (Liquichek), Level 1A (3 mL)	14
00100A	VIROTROL I (5 mL)	64	27104X	Cardiac Markers Plus Control LT (Liquichek), Level 1A MiniPak (3 mL)	14
00100B	VIROTROL I (5 mL)	64	27105	Cardiac Markers Plus Control LT (Liquichek), Level 1B (3 mL)	14
00100C	VIROTROL I (5 mL)	64	27105X	Cardiac Markers Plus Control LT (Liquichek), Level 1B MiniPak (3 mL)	14
00100E	VIROTROL I (5 mL)	64	27106	Cardiac Markers Plus Control LT (Liquichek), Level 1C (3 mL)	14
00100F	VIROTROL I (5 mL)	64	27106X	Cardiac Markers Plus Control LT (Liquichek), Level 1C MiniPak (3 mL)	14
00100G	VIROTROL I (5 mL)	64	27110	Immunoassay Premium Control (Liquichek), Trilevel	85
00100H	VIROTROL I (5 mL)	64	27110X	Immunoassay Premium Control (Liquichek), Level 1	85
00101B	VIROTROL I (4 mL)	64	27111	Immunoassay Premium Control (Liquichek), Level 2	85
00101C	VIROTROL I (4 mL)	64	27112	Immunoassay Premium Control (Liquichek), Level 3	85
00101E	VIROTROL I (4 mL)	64	27113	Immunoassay Premium Control (Liquichek), Trilevel MiniPak	85
00101F	VIROTROL I (4 mL)	64	27114	Tumor Marker Control (Liquichek), Level 1 (2 mL)	98
00102B	VIROTROL I (20 mL)	64	27115	Tumor Marker Control (Liquichek), Level 2 (2 mL)	98
00102C	VIROTROL I (20 mL)	64	27115X	Tumor Marker Control (Liquichek), Trilevel MiniPak (2 mL)	98
00104A	VIROTROL II (5 mL)	65	27116	Tumor Marker Control (Liquichek), Level 3 (2 mL)	98
00104B	VIROTROL II (5 mL)	65	27124	Specialty Immunoassay Control (Lyphocheck), Level 1	52
00105A	VIROTROL HIV-2	66	27125	Specialty Immunoassay Control (Lyphocheck), Level 2	52
00105B	VIROTROL HIV-2	66	27125X	Specialty Immunoassay Control (Lyphocheck), Trilevel MiniPak	52
00105C	VIROTROL HIV-2	66	27126	Specialty Immunoassay Control (Lyphocheck), Level 3	52
00106	VIROCLEAR (5 mL)	67		200000	
00107	VIROCLEAR (20 mL)	67	200300A	VIROTROL SARS-CoV-2	70
00108A	VIROTROL HIV-1 Ag	66	200300B	VIROTROL SARS-CoV-2	70
00108B	VIROTROL HIV-1 Ag	66	200300C	VIROTROL SARS-CoV-2	70
00109	VIROTROL ToRCH	68	200305A	VIROTROL SARS-CoV-2	70
00110A	VIROTROL III	65	200305B	VIROTROL SARS-CoV-2	70
00110C	VIROTROL III	65	200305C	VIROTROL SARS-CoV-2	70
00111	VIROTROL IV	65	200500	VIROCLEAR SARS-CoV-2	70
00112	VIROCLEAR (4 mL)	67	200505	VIROCLEAR SARS-CoV-2	70
00113	VIROTROL HIV-1 gO (4 tubes)	66		1100000	
00113X	VIROTROL HIV-1 gO (1 tube)	66	1100002	Bio-Rad Mission: Control, Annual Subscription	91
00115A	VIROTROL II (4 mL)	65	1100005	Bio-Rad Mission: Control, Subscription and Service Bundle	91
00115B	VIROTROL II (4 mL)	65		12000000	
00116	VIROTROL WNV	72	12000070	Hemoglobin A1C Linearity Set (Lyphocheck)	30
00117A	VIROTROL ToRCH-M	68	12000141	Allergen sIgE Control (Lyphocheck), Negative	60
00117B	VIROTROL ToRCH-M	68	12000142	Allergen sIgE Control (Lyphocheck), Panel A	60
00118	VIROCLEAR ToRCH	68	12000143	Allergen sIgE Control (Lyphocheck), Negative MiniPak	60
00119	VIROTROL MuMZ	69	12000144	Allergen sIgE Control (Lyphocheck), Panel A MiniPak	60
00121	PyloriTrol	71	12000201	Amplichek II, Negative	81
00125	VIROTROL Chagas	72	12000202	Amplichek II, Level 1	81
00125X	VIROTROL Chagas	72	12000203	Amplichek II, Level 2	81
00126	AmpliTrol CT/GC	82	12000204	Amplichek II, Level 3	81
00127	AmpliClear	82			
00128A	VIROTROL EBV	71			
00129	PneumoTrol	70			
00131	VIROCLEAR EBV	71			
00132	VIROTROL Lyme	72			

12000404	Whole Blood Immunosuppressant Control (Liquichek), Level 1	100	12008278	Specialty Immunoassay Control (InteliQ), Level 2	77
12000405	Whole Blood Immunosuppressant Control (Liquichek), Level 2	100	12008279	Specialty Immunoassay Control (InteliQ), Level 3	77
12000406	Whole Blood Immunosuppressant Control (Liquichek), Level 3	100	12008280	Specialty Immunoassay Control (InteliQ), Four Level MiniPak	77
12000407	Whole Blood Immunosuppressant Control (Liquichek), Level 4	100	12008289	Tumor Marker Control (InteliQ), Level 1	77
12000408	Whole Blood Immunosuppressant Control (Liquichek), Four Level MiniPak	100	12008290	Tumor Marker Control (InteliQ), Level 2	77
12000527	Amplichek I, Negative	80	12008291	Tumor Marker Control (InteliQ), Level 3	77
12000528	Amplichek I, Level 1	80	12008292	Tumor Marker Control (InteliQ), Trilevel MiniPak	77
12000529	Amplichek I, Level 2	80	12008299	Ethanol/Ammonial Control (InteliQ), Level 1	75
12000530	Amplichek I, Level 3	80	12008300	Ethanol/Ammonial Control (InteliQ), Level 2	75
12000531	Amplichek I, Four Level MiniPak	80	12008301	Ethanol/Ammonial Control (InteliQ), Level 3	75
12000538	VIROTROL PLUS-R (5 x 4 mL)	66	12008302	Ethanol/Ammonial Control (InteliQ), Trilevel MiniPak	75
12000539	VIROTROL PLUS-R (1 x 4 mL)	66	12009941	Immunology Control (InteliQ), Level 1	76
12000575	Amplichek II, Negative MiniPak	81	12009942	Immunology Control (InteliQ), Level 2	76
12000576	Amplichek II, Level 1 MiniPak	81	12009943	Immunology Control (InteliQ), Level 3	76
12000577	Amplichek II, Level 2 MiniPak	81	12009944	Immunology Control (InteliQ), Trilevel MiniPak	76
12000578	Amplichek II, Level 3 MiniPak	81	12009955	Cardiac Markers Plus Control LT, (InteliQ), Level 1	75
12000810	Urinalysis Program (EQAS)	39	12009956	Cardiac Markers Plus Control LT, (InteliQ), Level 2	75
12000815	HIV/Hepatitis Program (EQAS)	36	12009957	Cardiac Markers Plus Control LT, (InteliQ), Level 3	75
12000825	ToRCH/EBV/MuMZ Program (EQAS)	39	12009958	Cardiac Markers Plus Control LT, (InteliQ), Level 1A	75
12000833	Syphilis/Chagas Program (EQAS)	38	12009959	Cardiac Markers Plus Control LT, (InteliQ), Level 1B	75
12000837	Blood Typing Program (EQAS), Shipment A	34	12009960	Cardiac Markers Plus Control LT, (InteliQ), Level 1C	75
12000838	Blood Typing Program (EQAS), Shipment B	34	12009961	Cardiac Markers Plus Control LT, (InteliQ), Level 1 MiniPak	75
12000839	Blood Typing Program (EQAS), Shipment C	34	12009962	Cardiac Markers Plus Control LT, (InteliQ), Level 2 MiniPak	75
12000846	Quality Control Tray	116	12009963	Cardiac Markers Plus Control LT, (InteliQ), Level 3 MiniPak	75
12000991	Amplichek STI, Negative	81	12009964	Cardiac Markers Plus Control LT, (InteliQ), Level 1A MiniPak	75
12000992	Amplichek STI, Positive	81	12009965	Cardiac Markers Plus Control LT, (InteliQ), Level 1B MiniPak	75
12000993	Amplichek STI, Negative MiniPak	81	12009966	Cardiac Markers Plus Control LT, (InteliQ), Level 1C MiniPak	75
12000994	Amplichek STI, Positive MiniPak	81	12012693	Serum Indices (Liquichek), Hemolysis	24
12001084	Cardiac Troponins Control (Liquichek), Level 1	14	12012694	Serum Indices (Liquichek), Icterus	24
12001085	Cardiac Troponins Control (Liquichek), Level 1 MiniPak	14	12012695	Serum Indices (Liquichek), Lipemia	24
12002594	Opiate Control (Liquichek), Level 1 MiniPak	105	12012696	Serum Indices (Liquichek), Non-interfered	24
12002595	Opiate Control (Liquichek), Level 2 MiniPak	105	12012697	Serum Indices (Liquichek), Hemolysis MiniPak	24
12004309	Homocysteine Control (InteliQ), Level 1	76	12012698	Serum Indices (Liquichek), Icterus MiniPak	24
12004310	Homocysteine Control (InteliQ), Level 2	76	12012699	Serum Indices (Liquichek), Lipemia MiniPak	24
12004311	Homocysteine Control (InteliQ), Level 3	76	12012700	Serum Indices (Liquichek), Non-interfered MiniPak	24
12004312	Homocysteine Control (InteliQ), Trilevel MiniPak	76	12013881	VIROTROL SARS-CoV	70
12004319	Immunoassay Plus Control (Liquichek), Level 1, (4 mL Tube)	78	12013883	VIROCLEAR SARS-CoV	70
12004320	Immunoassay Plus Control (Liquichek), Level 2, (4 mL Tube)	78		B	
12004321	Immunoassay Plus Control (Liquichek), Level 3, (4 mL Tube)	78	BC10	TDM Program (EQAS)	38
12004322	Immunoassay Plus Control (Liquichek), Trilevel MiniPak (4 mL Tubes)	78	BC23	Serum Proteins Program (EQAS)	38
12004329	Urine Chemistry Control (Liquichek), Level 1, (4 mL Tube)	78	BC31	Blood Gas Program (EQAS)	34
12004330	Urine Chemistry Control (Liquichek), Level 2, (4 mL Tube)	78	BC34	Coagulation Program (EQAS)	35
12004331	Urine Chemistry Control (Liquichek), Bilevel Minipak, (4 mL Tubes)	78	BC35	Ethanol/Ammonia Program (EQAS)	35
12005786	Opiate Control (Liquichek), Level 1	105	BC39	Cardiac Markers Program (EQAS)	34
12005787	Opiate Control (Liquichek), Level 2	105	BC45	Urine Chemistry Program (EQAS)	39
12006239	Cardiac Troponins Control (Liquichek), Level 2	14	BC47	Lipids Program (EQAS)	37
12006327	AMH Control (Liquichek), Trilevel	54	BC50	Clinical Chemistry (Monthly) Program (EQAS)	35
12006369	Cardiac Troponins Control (Liquichek), Level 3	14	BC75	Immunoassay (Monthly) Program (EQAS)	37
12006370	Cardiac Troponins Control (Liquichek), Level 2 MiniPak	14	BC80	Hemoglobin Program (EQAS)	36
12006371	Cardiac Troponins Control (Liquichek), Level 3 MiniPak	14	BC90A	Hematology Program (EQAS), Shipment A	36
12007028	qUAntify Advance, Bilevel	114	BC90B	Hematology Program (EQAS), Shipment B	36
12007029	qUAntify Advance, Bilevel MiniPak	114	BC90C	Hematology Program (EQAS), Shipment C	36
12008256	Assayed Multiqual Control (InteliQ), Level 1	74	BC90D	Hematology Program (EQAS), Shipment D	36
12008257	Assayed Multiqual Control (InteliQ), Level 2	74		C	
12008258	Assayed Multiqual Control (InteliQ), Level 3	74	C-310-5	Assayed Chemistry Control (Lyphocheck), Level 1	19
12008259	Assayed Multiqual Control (InteliQ), Trilevel MiniPak	74	C-315-5	Assayed Chemistry Control (Lyphocheck), Level 2	19
12008276	Specialty Immunoassay Control (InteliQ), Level LTA	77	C-320-10	Unassayed Chemistry Control (Human) (Lyphocheck), Level 1 (10 mL)	19
12008277	Specialty Immunoassay Control (InteliQ), Level 1	77	C-325-10	Unassayed Chemistry Control (Human) (Lyphocheck), Level 2 (10 mL)	19

To Order Within the United States

By Phone

1-800-224-6723
Monday – Friday
6:00 AM to 4:30 PM
Pacific Standard Time (PST)

By Fax

1-510-741-6373
or 1-800-883-1887

By Mail

Bio-Rad Laboratories, Inc.
Clinical Diagnostics Group
Customer Service
4000 Alfred Nobel Drive
Hercules, CA 94547

By Email

diagcs@bio-rad.com

Be Sure Your Order Includes

Purchase order number, “ship to” address and “bill to” address, catalog number, product name, quantity required (unit and size), desired lot number and the required delivery date. To avoid duplicate shipments, confirming orders must be clearly marked “Confirming Order/Do Not Ship.”

Standing Orders

As a convenience to our customers, we can set up standing orders for a specific lot of product to be shipped on scheduled dates. Shipment dates with respective quantities must be specified at the time of order. All standing order shipments must be taken six months before the product’s expiration date. Restocking charges will apply to canceled standing orders.

Terms of Sale

Our terms are net due 30 days from the date of invoice. Prices are FOB shipping point. For a complete listing of terms and conditions regarding quantity, pricing, applicable taxes, delivery, discrepancies, returned goods and cancellation policies, please contact our Customer Service Department.

**For Worldwide Customers**

For service outside the United States, please refer to page 159 for the Bio-Rad location nearest you.

Communication Overview

Product chemical hazard information is communicated through standard statements and hazard symbols on our labeling and Safety Data Sheet (SDS).

This information was previously based on the older system contained in the European Union *Dangerous Substances Directive and the Dangerous Preparations Directive*. This system is now being replaced with the *Globally Harmonized System of Classification and Labeling of Chemicals (GHS)*, which is a new international system for chemical classification introducing new hazard symbols (pictograms) and labeling phrases.

The key elements for the label under the GHS include:

- hazard pictograms
- a signal word – either DANGER or WARNING – where necessary
- hazard statements, indicating the nature and degree of the risks posed by the product
- precautionary statements, indicating how the product should be handled to minimize risks to the user (surrounding population and the general environment)

For a copy of an SDS, or for environment or safety related information, contact the Bio-Rad office nearest you. You can find a complete list of Bio-Rad offices on the inside back cover of this catalog. SDS and product inserts are also available online at www.QCNet.com.

(Note: European Union Regulation No. 1272/2008 on Classification, Labeling and Packaging (CLP) aligns the European Union system of classification, labeling and packaging chemical substances and mixtures to the GHS).

Hazard information according to *Globally Harmonized System of Classification and Labeling of Chemicals (GHS)*

Health Hazards



Skull & Crossbones



Corrosion



Exclamation Mark



Health Hazard

Environmental Hazards



Environment Hazard

Physical Hazards



Corrosion

Hazard Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON Center or doctor/physician.

CE Marking on Bio-Rad Products

What is the CE Mark?

The letters “CE” are an abbreviation of the French phrase “Conformité Européenne.” The CE Mark on the Bio-Rad quality control products indicates the products have been designed and manufactured in an approved quality system and conform to all requirements of the In Vitro Diagnostic Directive (IVDD, 98/79/EC) and the regulation on in vitro diagnostic medical devices, Regulation 2012/0267. The CE Mark allows products to be sold within the European Economic Area (EEA).

















How is CE Marking obtained?

Companies must have their quality system certified by a European-based Notified Body in order to obtain CE Marking. A Notified Body is an organization authorized by the EEA to inspect facilities, processes, technical data, and/or test products to assess conformity to the appropriate standards. The quality system at Bio-Rad has been certified to be in conformance with the IVDD and the ISO 13485 quality system standards. A European Authorized Representative is also required for companies not based in the EEA. The Bio-Rad entity located in Marnes, France, is the Authorized Representative for Bio-Rad.

What does CE Marking mean for Bio-Rad quality control products?

In addition to allowing Bio-Rad to continue to sell products in the EEA, CE Marking also demonstrates how Bio-Rad continues its commitment to quality. CE Marking is an extra measure of confidence that customers can have with Bio-Rad quality control products.

Labeling Symbols

	European Conformity		Use by YYYY-MM-DD (Expiration Date)		Reconstitute With
	In Vitro Diagnostic Medical Device		Manufacturer		Catalog Number
	Temperature Limitation (Recommended product storage range)		Manufactured for		Lot Number
	Authorized Representative	 or  <small>myinserts.com</small>	Consult instructions for Use (Refer to package insert)		Caution, Consult Accompanying Documents
	Cycle Number		Results Receipt Date		Sample Number

Notice of Rights

Copyright © 2019 Bio-Rad Laboratories, Inc. All rights reserved. Printed in the United States of America. No part of this book may be reproduced, stored or transmitted in any form by any means, electronic, mechanical, optical, photocopying, recording or otherwise, without prior permission of the publisher.

Timeliness, Errors and Omissions

The information provided in this catalog carries no express or implied warranties as to accuracy, timeliness, or appropriateness for a particular purpose. Bio-Rad Laboratories disclaims responsibility for content errors and omissions, for any allegedly infringing material, and for any damages whatsoever associated with user reliance on information provided in this catalog.

Applicable Laws

This was published by Bio-Rad Laboratories from its offices in Irvine, California. Bio-Rad makes no representation that the information and products in this catalog are appropriate or available for use in your country, and access to such information and products from territories where such information and products are illegal is prohibited. If you choose to use this catalog, you do so on your own initiative and at your own risk, and are responsible for compliance with applicable local laws. Contact your local Bio-Rad office if you have questions regarding the availability of products listed in this catalog. These terms will be governed by and construed in accordance with the laws of the State of California, without giving effect to any principles of conflicts of laws.

Trademarks

Bio-Rad Laboratories

The following trademarks and registered trademarks used in this catalog are the property of Bio-Rad Laboratories, Incorporated, 1000 Alfred Nobel Drive, Hercules, CA 94547 USA.

Bio-Rad
BioPlex
Liquichek

Lyphocek
Unity Desktop
Unity Real Time

UnityWeb
VARIANT

VIROCLEAR
VIROTROL

Other Companies

The following trademarks and registered trademarks used in this catalog are the property of other companies. Please consult the individual manufacturers for specific information.

800 Series	AVL OMNI	CX	Excyte Mini	INNOVANCE	Multigent	Stat Profile	VITROS Series
A1c	BCS	D-10	G7 & G8	Innovin	Nova 8	Series	Viva-E
AA/AA Graphite	BCS	Dimension	Geo	iSTAT	OneTouch	StatSpin	Westergren
Furnace	BCT	Series	HemataSTAT	KX-21	OnLine	StatStrip	Tubes
ABL Series	Beckman	Dimension Vista	HemoCue Hb	LH 500/700	Ortho VITROS	Stratus	XE Series
Access Series	Coulter	DxC Series	HemosIL	Series	P.A.C.E.	Stratus CS	XN Series
Accu-Chek	Berichrom	DxH Series	Hitachi Systems	LIAISON	PATHFAST	SYNCHRON	XS Series
AcT	BN Series	Dxl Series	Hydragel	LIASON XL	Pathromtin SL	Systems	XT Series
Actin FS/FSL	CELL-DYN	e170	i-SENS	LX	PCE 210	Sysmex CA	YouTube
ADVIA	CELLDIFF-3	Ecolyte	CareSens	M-Series	pHOx	Series	
ADVIA Centaur	Clay Adams	Ecosys II	ICP-MS	m2000 RealTime	RAPIDLab	Thermo DRI	
Aeroset	Cobas	Elecsys Systems	IL ACL	Micros 60	Ruby	Thromborel S	
AIA Series	COBAS	ELITE	IL GEM	MICROsed-	S-Sedivette	Triage Meter Pro	
Alere Triage	AmpliPrep	ELITE PRO	PREMIER	System	Sapphire	Ultra 2	
ARCHITECT	COBAS	Emerald	IL Series	Mini-Ves	Sedimat 60	V-Twin	
Atellica Solution	INTEGRA	EMIT DAT	Immagine	MODULAR	Sediplast	Ves-Matic	
AU Series	COBAS TaqMan	EMIT II	Systems	Systems	Seditainer	Ves-Matic Cube	
AVL Compact	Combiline	ESR-Auto Plus	IMMULITE	Monitor Series	STA	VIDAS	
Series	Combisys II	Excyte	Series	Multifibren U	StaRRsed	VITROS ECi	

**UNITED STATES OF AMERICA**

Bio-Rad Laboratories, Inc.
Clinical Diagnostics
4000 Alfred Nobel Drive
Hercules, CA 94547
Phone: 510-724-7000
Toll Free: 800-224-6723 (in the US)
Fax: 510-741-5817
www.bio-rad.com/qualitycontrol

**AUSTRALIA**

Bio-Rad Laboratories Pty. Ltd.
Gladesville New South Wales
Phone: 61-2-9914-2800
Toll Free: 1 (800) 224-354 (within Australia only)
Fax: 61-2-9914-2888
Email: Sales.Australia@bio-rad.com

**AUSTRIA**

Bio-Rad Laboratories Ges.m.b.H.
Wien (Vienna)
Phone: 43-1-877-8901
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 43 1-876-5629
Email: Contact_CentralEurope@bio-rad.com

**BELGIUM**

Bio-Rad Laboratories N.V.
Temse
Phone: +32 (3)710-53-00
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +32 (3)710-53-01
Email: Benelux_Orders@bio-rad.com

**BRAZIL**

Bio-Rad Laboratórios Brasil Ltda
Santo Amaro, São Paulo
Phone: +55 (31)3689-6600
Fax: +55 (31)3689-6611

**CANADA**

Bio-Rad Laboratories, Ltd.
Montréal, Québec
Phone: 1-514-334-4372
Freephone: 1 (800) 361-1808
Fax: 1-514-334-4415
Email: cdg_canada_salesmarketing@bio-rad.com

**CHINA**

Bio-Rad Laboratories (Shanghai) Co. Ltd.
Shanghai
Phone: +86 21 6169 8500
Fax: +86 21 6169 8599
Email: Sales.China@bio-rad.com

**CZECH REPUBLIC**

Bio-Rad spol, s.r.o.
Praha (Prague)
Phone: 420-241-430-532
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 420-241-431-642
Email: Contact_EEMEA@bio-rad.com

**DENMARK**

Bio-Rad Laboratories
Copenhagen
Phone: +45-4452-1000
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +45-4452 1001
Email: nordic_helpdesk@bio-rad.com

**FINLAND**

Bio-Rad Laboratories
Helsinki
Phone: 358-9-804-22-00
Fax: 358-9-7597-5010
Email: nordic_helpdesk@bio-rad.com

**FRANCE**

Bio-Rad
Marnes-la-Coquette
Phone: 33-1-47-95-60-00
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 33-1-47-41-91-33
Email: Contact_France@bio-rad.com

**GERMANY**

Bio-Rad Laboratories GmbH
Munich
Phone: +49 (0)89-318-840
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +49 (0)89-31884-100

**GREECE**

Bio-Rad Laboratories M E.P.E.
Athens
Phone: 30-210-7774396
Fax: 30-210-7774376

**HONG KONG**

Bio-Rad Pacific Ltd.
Quarry Bay
Phone: 852-2789-3300
Fax: 852-2789-1290
Email: Sales.HongKong@bio-rad.com

**HUNGARY**

Bio-Rad Hungary Ltd.
Budapest
Phone: +36-1-459-6100
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +36-1-459-6101
Email: Contact_EEMEA@bio-rad.com

**INDIA**

Bio-Rad Laboratories (India) Pvt. Ltd.
Gurugram, Haryana
Phone: 1800-180-1224
Fax: 91-124-2398115
Email: sales.india@bio-rad.com

**ISRAEL**

Bio-Rad Laboratories Ltd.
Rishon Le Zion
Phone: 972-3-9636050
Fax: 972-3-9514129
Email: isreal_cdg@bio-rad.com

**ITALY**

Bio-Rad Laboratories S.r.l.
Milan
Phone: +39-02-216091
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +39-02-21609553
Email: contact_italy@bio-rad.com

**JAPAN**

Bio-Rad Laboratories K.K.
Tokyo
Phone: 81-3-6361-7070
Fax: 81-3-5463-8481
Email: diag-jp@bio-rad.com

**KOREA**

Bio-Rad Korea Ltd.
Seoul
Phone: 82-2-3473-4460
Fax: 82-2-3472-7003
Email: Sales.Korea@bio-rad.com

**MEXICO**

Bio-Rad, S.A.
Mexico City
Phone: +52 (55)5488-7670
Fax: +52 (55)1107-7246
Email: cdg_mexico@bio-rad.com

**THE NETHERLANDS**

Bio-Rad Laboratories B.V.
Veenendaal
Phone: +31-318-540666
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +31-318-542216
Email: Contact_NorthEurope@bio-rad.com

**NEW ZEALAND**

Bio-Rad New Zealand
Auckland
Phone: 64-9-415-2280
Toll Free: 0508 805 500 (within New Zealand only)
Fax: 64-9-415-2284
Email: Sales.NZ@bio-rad.com

**NORWAY**

Bio-Rad Laboratories
Oslo
Phone: +47-23-38-41-30
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +46(0)8-5551-2780
Email: nordic_helpdesk@bio-rad.com

**POLAND**

Bio-Rad Polska Sp. z o.o.
Warsaw
Phone: 48-22-3319999
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 48-22 3319988
Email: Contact_EEMEA@bio-rad.com

**PORTUGAL**

Bio-Rad Laboratories, Lda.
Amadora
Phone: 351-21-472-7700
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 351-21-472-7777
Email: customerservice_portugal@bio-rad.com

**RUSSIA**

Bio-Rad Laboratorii
Moscow
Phone: +7-495-721-1404
Fax: +7-495-721-1412
Email: info_russia@bio-rad.com

**SINGAPORE**

Bio-Rad Laboratories (Singapore) Pte. Ltd.
Phone: 65-6415-3170
Fax: 65-6415-3189
Email: sales.singapore@bio-rad.com

**SOUTH AFRICA**

Bio-Rad Laboratories (Pty) Ltd.
Johannesburg
Phone: 27-11-442-85-08
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 27-11-442-85-25
Email: Contact_EEMEA@bio-rad.com

**SPAIN**

Bio-Rad Laboratories, S.A.
Madrid
Phone: 34-91-590-5200
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: 34-91-590-5211
Email: customerservice_spain@bio-rad.com

**SWEDEN**

Bio-Rad Laboratories A.B.
Solna
Phone: +46-8-555-127-00
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +46-8-555-127-80
Email: nordic_helpdesk@bio-rad.com

**SWITZERLAND**

Bio-Rad Laboratories AG
Cressier
Phone: +41 (0)26-674-55-05/06
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +41 (0)26-674-52-19
Email: Contact_CentralEurope@bio-rad.com

**TAIWAN**

Bio-Rad Laboratories Taiwan Ltd.
Taipei
Phone: 886-2-2578-7189
Fax: 886-2-2578-6890

**THAILAND**

Bio-Rad Laboratories Ltd.
Bangkok
Phone: 662-651-8311
Fax: 662-651-8312
Email: Sales.Thailand@bio-rad.com

**UNITED KINGDOM**

Bio-Rad Laboratories Ltd.
Watford, Hertfordshire
Phone: +44 (0)20-8328-2000
Freephone: 00 800 00 BIORAD (00 800 00 24 67 23)
Fax: +44 (0)20-8328-2550
Email: Contact_NorthEurope@bio-rad.com



Want to know more? Visit us online at www.bio-rad.com/qualitycontrol



EQAS

An independent, external assessment of performance in comparison to your peers.

QCNet.com/eqas



Independent QC

Ongoing, proactive, unbiased daily QC that helps identify errors as they occur or begin to trend.

QCNet.com/independentqc



Unity

QC Data Management tools that help you create a strategy to reduce risk and streamline QC workflow.

QCNet.com/datamanagement



Follow us on Twitter @BioRadQC



**Bio-Rad
Laboratories, Inc.**

For further information, please contact the Bio-Rad office nearest you or visit our website at www.bio-rad.com/qualitycontrol

Clinical
Diagnostics Group

Website www.bio-rad.com/diagnostics **Australia** +61 (2) 9914 2800 **Austria** +43 (0) 1 877 89 01 9 **Belgium** +32 (0) 3 710 53 00 **Brazil** +55 11 3065 7550 **Canada** +1 514 334 4372 **China** +86 21 6169 8500 **Czech Republic** +420 241 431 660 **Denmark** +45 44 52 10 00 **Finland** +358 9 804 22 00 **France** +33 (0)1 47 95 60 00 **Germany** +49 (0) 89 31884 393 **Greece** +30 210 7774396 **Hong Kong** +85 2 2789 3300 **Hungary** +36 1 459 6190 **India** +91 124 4029300 **Israel** +972 03 963 6025 **Italy** +39 024 94 86 600 **Japan** +81 3 6361 7070 **Korea** +82 080 007 7373 **Mexico** +52 (55) 5488 7670 **The Netherlands** +31 (0)318 540 666 **New Zealand** +64 (9)415 2280 **Norway** +47 23 38 41 30 **Poland** +48 22 331 99 99 **Portugal** +351 21 47 27 700 **Russia** +7 495 721 1404 **Singapore** +65 6415 3170 **South Africa** +27 11 442 8508 **Spain** +34 91 490 6580 **Sweden** +46 844 98053 **Switzerland** +41 (0) 61 717 9555 **Taiwan** +886 (2) 2578-7189 **Thailand** (662) 651 8311 **United Kingdom** +44 (0)1923 471301