



Premium Controls for Immunochemistry

Powerful Combinations for Productive QC Solutions





Consolidated Controls Address the Complex Needs of Your Multi-disciplined Laboratory

Bio-Rad's new Premium Controls were developed to help laboratories operate more efficiently. These products are third party controls, which provide an independent assessment of assay performance, and are designed to help you report reliable results.

Our Premium QC products contain cross-disciplinary analytes to promote fast, reliable testing on integrated systems. Not limited to use with specific instruments, Bio-Rad controls are reliable indicators for monitoring the validity of your analytical process.

Liquichek™ Immunoassay Premium Control

Liquid Assayed Multiquial® Premium Control

Simplify Your Daily QC With Bio-Rad Premium Third Party Controls

Optimize your core laboratory performance by taking advantage of these product features:

Industry leading comprehensive control menus

- Consolidate multiple high-usage quality controls to a Bio-Rad Premium control and experience savings in cost and labor
- Reduce QC setup time, QC waste and potential scrapping of multiple products

Use on a wide range of modular platforms and integrated systems

- Compatible with most Chemistry and Immunoassay platforms

Easy to use liquid trilevel formulations

- Convenience of a liquid formulation minimizes error in reconstitution and decreases QC setup time

Third party controls offer long shelf life

- Extended shelf life allows for long-term QC monitoring across reagent lots, saving time and money by reducing lot crossovers
- Easy lot reservation helps minimize QC inventory concerns

The Essential Elements of Quality Control

1

Patient-based Focus

Diminish the Risk of Reporting Incorrect Patient Results

Whether your lab produces five hundred or five million results a year, providing quality patient care should include a plan to minimize the risk of a system failure or a mistake leading to reporting incorrect results. Results impact patient outcomes. A patient-focused assessment enables the laboratory to evaluate appropriate QC levels, frequency and rules.

qcnet.com/patientrisk

2

Independent Control Materials

Rely on Independent Quality Control Materials

Any patient result reported without evaluating quality control is at risk, and the best way to evaluate QC is with an independent control solution. Bio-Rad controls are not optimized for a specific instrument or reagent and provide an independent assessment of a test system or method. This gives the laboratory the opportunity to detect shifts, drifts and imprecision.

qcnet.com/thirdpartyqc

3

QC Data Management

Ensure the Reliability of Your Results with Real-time Data Management Solutions

The ability to successfully manage and interpret your QC results is essential to improving laboratory analytical performance. Today you can consolidate your entire laboratory into one QC system with Unity Real Time®, including best-in-class tools to support run-time decision making, troubleshooting and QC design. With UnityConnect™, QC data can be quickly and easily imported from LIS, middleware or instruments directly. No program in the world can more effectively provide information about your Bio-Rad QC performance than the suite of Unity™ QC Data Management Solutions.

bio-rad.com/data-management-solutions



Liquichek™ Immunoassay Premium Control

IMMUNOASSAY + IMMUNOLOGY + SPECIALTY + TDM + TUMOR MARKER



Consolidate controls for efficient routine Immunoassay and Tumor Marker QC

Using Liquichek™ Immunoassay Premium Control allows your laboratory to replace two or more individual QC products with a single control while maintaining the same QC program for data review and peer group reports.

By bringing together Immunoassays, Specialty Immunoassays (25-OH Vitamin D, SHBG), Tumor Markers, and Therapeutic Drug Monitoring analytes, Bio-Rad has created an effective tool to maximize the power of your QC program.

This new premium QC product is an unbiased third party trilevel control, providing assayed values for most major integrated immunoassay platforms.

- Liquid, trilevel formulation
- 2 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes
- Includes Tumor Markers

Analytes

Immunoassay

Acid Phosphatase, Prostatic
AFP
Cortisol
DHEA-Sulfate
Estradiol
Estriol, Free
Ferritin
Folate
FSH
hCG
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



Complement Liquichek™ Immunoassay Premium Control with our Cardiac Assessment and Specialty Immunoassay Controls

Liquichek™ Cardiac Markers Plus Control LT

Analytes

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

Liquichek™ Specialty Immunoassay Control

Analytes

25-Hydroxy Vitamin D	Erythropoietin (EPO)
Anti-Thyroglobulin (Anti-Tg)	Insulin Growth Factor I (IGF-I)
Anti-Thyroperoxidase (Anti-TPO)	Intact PTH
C-Peptide	Osteocalcin

*No claims are made regarding performance or stability.

**Not available for diagnostic use in the United States.

For specific analyte, open-vial stability, methods, mean values and ranges, refer to the package inserts of currently available lots at myeinserts.com

Liquid Assayed Multiqual® Premium Control

CHEMISTRY + IMMUNOLOGY + TDM + IMMUNOASSAY



Consolidate controls for efficient routine Chemistry and Immunology QC

Liquid Assayed Multiqual® Premium Control is especially formulated to address the complex needs of a multi-disciplined laboratory. This new control offers you the benefits of a comprehensive selection of chemistry, key Immunology and Therapeutic Drug Monitoring (TDM) analytes.

Core laboratories that employ integrated Chemistry/Immunoassay analyzers will find the analytes in Liquid Assayed Multiqual® Premium Control complement the broad test menu on those platforms. The comprehensive list contains 96 analytes.

Packaged in a large fill size, this control accommodates a busy laboratory workflow by providing efficient QC usage.

- Liquid, trilevel formulation
- 3 year shelf life at -20°C to -70°C
- 14 day open-vial stability at 2-8°C for most analytes
- Includes CRP, Cystatin C and Vancomycin



**Complement Liquid Multiqual®
Premium Control with our Protein
Control**

**Liquichek™
Rheumatoid Factor Control**

Analyte

Rheumatoid Factor

Analytes

General Chemistry

Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase (ALP)
Alpha-Hydroxybutyrate
Dehydrogenase (α HBDH)
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
Lactate Dehydrogenase (LDH)
LAP Amylamidase
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
CRP
Complement C3
Complement C4
Cystatin C
Globulin
Haptoglobin
IgA
IgG
IgM
Kappa Light Chains
Lambda Light Chains
Prealbumin
Protein Electrophoresis
Transferrin

TDM

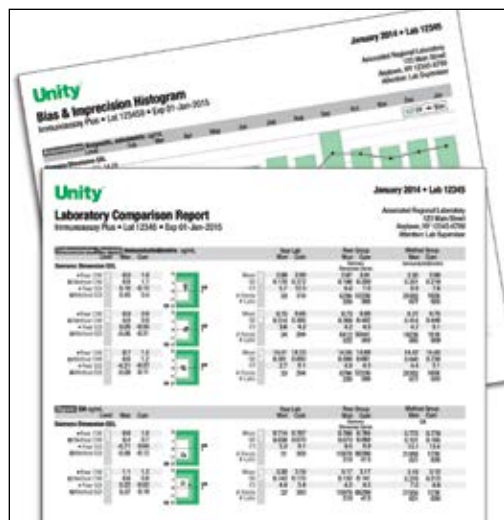
Acetaminophen
Amikacin
Caffeine
Carbamazepine
Digoxin
Disopyramide
Gentamicin
Lidocaine
Lithium
Methotrexate
NAPA
Phenobarbital
Phenytoin
Procainamide
Quinidine
Salicylate
Theophylline
Tobramycin
Valproic Acid
Vancomycin

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.

For specific analyte, open-vial stability, methods, mean values and ranges, refer to the package inserts of currently available lots at myeinserts.com



Unity™ QC Data Management Solutions

Premium Controls are part of the Unity™ QC program used for benchmarking laboratory performance.

- Benefit from peer data generated from more than 40,000 instruments worldwide
- Utilize real-time access to peer group comparisons to help troubleshooting
- Consolidate your entire laboratory into one system
- Facilitate run-time decisions with optimized Westgard rules
- Ease compliance with ISO 15189 and regulatory requirements using simple tools to review rule violations and document corrective actions
- Define your own quality requirements (TEa specifications) and track key quality performance indicators

Ordering Information

Cat #	Product Name	Quantity	Cat #	Product Name	Quantity
Liquichek™ Immunoassay Premium Control			Liquichek™ Specialty Immunoassay Control		
27110	Trilevel (2 of each level)	6 x 5 mL	359	Level LTA	6 x 5 mL
27111	Level 1	6 x 5 mL	364	Level 1	6 x 5 mL
27112	Level 2	6 x 5 mL	365	Level 2	6 x 5 mL
27113	Level 3	6 x 5 mL	366	Level 3	6 x 5 mL
27110X	MiniPak (1 of each level)	3 x 5 mL	359X	Four Level MiniPak (1 of each level)	2 x 5 mL
Liquichek™ Cardiac Markers Plus Control LT			Liquid Multiquel® Premium Control		
146	Level 1	6 x 3 mL	284	Level 1	6 x 5 mL
147	Level 2	6 x 3 mL	285	Level 2	6 x 5 mL
148	Level 2	6 x 3 mL	286	Level 3	6 x 5 mL
149	Level Low	6 x 3 mL	285X	Trilevel MiniPak (1 of each level)	3 x 5 mL
146X	Level 1 MiniPak	1 x 3 mL	Liquichek™ Rheumatoid Factor Control		
147X	Level 2 MiniPak	1 x 3 mL	501	Level 1	6 x 2 mL
148X	Level 3 MiniPak	1 x 3 mL	502	Level 2	6 x 2 mL
149X	Level Low MiniPak	1 x 3 mL	503	Level 3	6 x 2 mL
27104	Level 1A	6 x 3 mL	502X	Trilevel MiniPak (1 of each level)	3 x 2 mL
27105	Level 1B	6 x 3 mL			
27106	Level 1C	6 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			



**Bio-Rad
Laboratories**

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/qualitycontrol **Australia** 61-2-9914-2800 **Austria** 43-1-877-8901 **Belgium** 32-9-385-5511 **Brazil** +55 (31)3689-6600 **Canada** 1-514-334-4372 **China** 86-21-61698500 **Czech Republic** 420-241-430-532 **Denmark** +45-4452-1000 **Finland** 358-9-804-22-00 **France** 33-1-47-95-60-00 **Germany** +49 (0)89-318-840 **Greece** 30-210-7774396 **Hong Kong** 852-2789-3300 **Hungary** +36-1-459-6100 **India** 1800-180-1224 **Israel** 972-3-9636050 **Italy** +39-02-216091 **Japan** 81-3-6361-7070 **Korea** 82-2-3473-4460 **Mexico** +52 (55)5488-7670 **The Netherlands** +31-318-540666 **New Zealand** 64-9-415-2280 **Norway** +47-23-38-41-30 **Poland** 48-22-3319999 **Portugal** 351-21-472-7700 **Russia** 7-495-721-14-04 **Singapore** 65-6415-3170 **South Africa** 27-11-442-85-08 **Spain** 34-91-590-5200 **Sweden** 46-8-555-127-00 **Switzerland** +41 (0)26-674-55-05/06 **Taiwan** 886-2-2578-7189 **Thailand** 662-651-8311 **United Kingdom** +44 (0)20-8328-2000