



**CLINICAL
DIAGNOSTICS**

Independent Quality Controls and
Informatic Software Solutions for
Roche **cobas**® Systems



TECHNOPATH
CLINICAL DIAGNOSTICS

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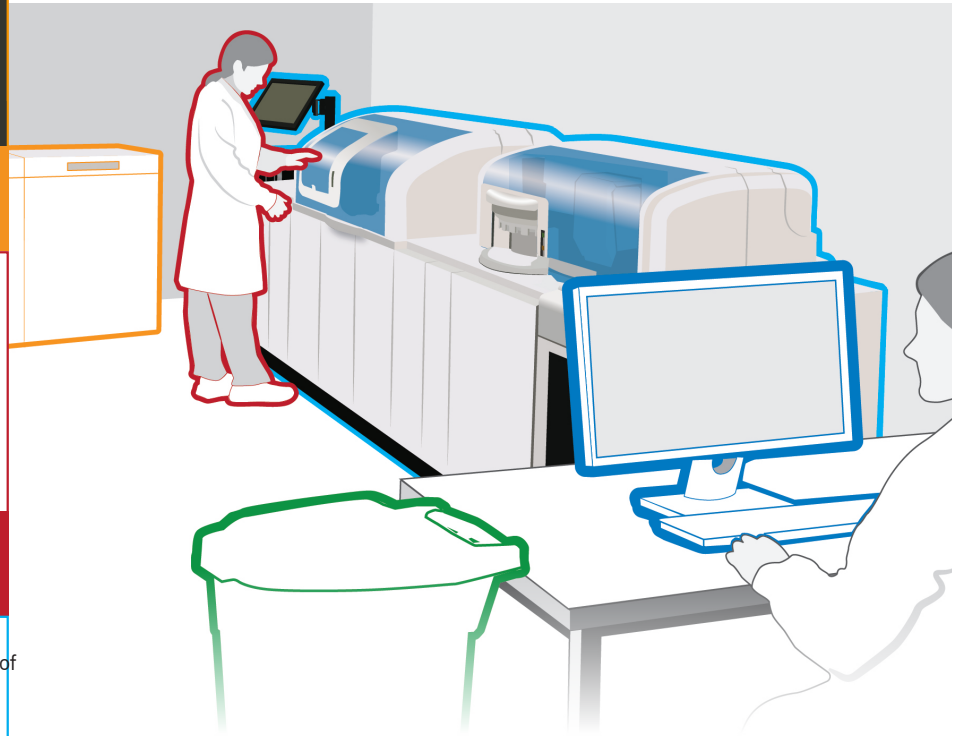
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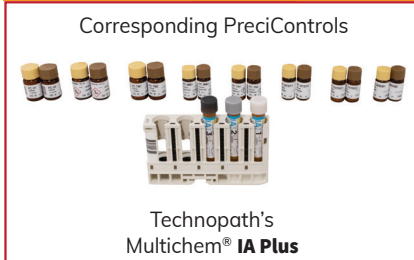
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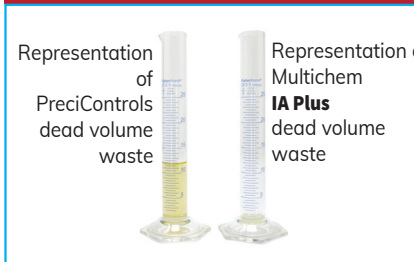
Enhance laboratory efficiencies with Technopath Clinical Diagnostics QC solutions



RECLAIM
STORAGE SPACE



REDUCE
QC HANDLING TIME & ERRORS



REDUCE
DEAD VOLUME WASTE



REDUCE
QC ANALYSIS TIME WITH IAMQC®



REDUCE
CONSUMABLE WASTE

Reclaim storage space

Switching to a consolidated solution frees up space in the laboratory freezer which can ultimately be used for alternative purposes or to hold stock of QC that will cover a much longer time period.

Reduce QC handling time and errors

Consolidating QC materials results in significant labour savings by reducing the handling requirements involved in running a QC process. Independent studies have also shown that a reduction in the physical numbers of internal quality control vials can lead to a reduction in transposition errors made by laboratory staff.

Reduce dead volume waste

Consolidating a number of products in to one leads to a reduction in dead volume waste, which in turn means a reduction in the overall volume of QC material required to be purchased.

Reduce QC analysis time

Automated connectivity solutions with IAMQC® interlaboratory peer program, streamlines data collection thus reducing QC analysis time.

Reduce weight of consumable waste

Fewer vials and less packaging means a laboratory will produce less waste, significantly reducing it's carbon footprint.

Technopath and Roche help your laboratory achieve greater efficiencies in QC processes through reduced handling time, reduced costs and barcoded vials.



Accreditation/regulatory compliance

Independent QC material facilitates meeting accreditation and regulatory guidelines, such as CLIA, CLSI, CAP, ISO and RiliBÄK.



Targeted at clinical decision points

Controls material targeted at clinical decision points helps improve clinicians' confidence in the validity of test results.



Value assigned

Value assignment saves technologist time when setting up initial reference intervals.



Automated configuration of new QC lots

Faster turn around time for quality control set up. Use the automated QC configuration process to upload the QC targets and ranges directly on to your Roche system, reducing errors and increasing productivity.



Human-based matrices

Human-based matrices provide patient-like performance to increase confidence in QC material results.



Reduction in handling errors

All Technopath Multichem controls are liquid, meaning no reconstitution of lyophilised controls.



Streamlined supply chain

Reduction in the number of part numbers to be purchased streamlines the supply chain. Fewer part numbers equates to a lower number of lots to manage.



Results upload to IAMQC Peer with Roche cobas® mobile solutions connector Automatic upload of QC results to IAMQC Peer. ^[1]

Inter-Lab QC Comparison Reports

Technopath IAMQC® Peer software offers Six-Sigma, Levey-Jennings, Youden, Bias, Group Coordinator, Measurement of Uncertainty, Monthly Summary, and Exceptions reports to give your laboratory the information it requires to monitor QC. Multiple languages are supported. ^{[2] [3]}

1. Contact your Roche representative for more information on the cobas Mobile Solutions Connector.
 2. "The laboratory shall participate in inter-laboratory comparisons" ISO15189:2022.
 3. "[A] laboratory should actively participate in inter-laboratory QC programs when such programs are available." CLSI C-24 4th edition.

Multichem® IA Plus

Test consolidation for immunoassay quality control in a liquid stable format



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed immunoassay QC
- Test consolidated immunoassay control includes general IA, cardiac markers and tumor markers
- Assayed and value assigned for Roche **cobas**® systems
- Tri-level utility

Specifications

- 36 month closed vial stability at -20°C to -80°C
- 10 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem IA Plus	Assayed Level 1	12 x 4mL (48mL)	09339825190
	Assayed Level 2	12 x 4mL (48mL)	09339841190
	Assayed Level 3	12 x 4mL (48mL)	09339850190

Analytes with performance and stability claims*:

Adrenocorticotrophic hormone (ACTH)	Ferritin	Prolactin
Alpha-Fetoprotein (AFP)	Folate	Prostate Specific Antigen, Free
Androstenedione	Folicle Stimulating Hormone (FSH)	Prostate Specific Antigen, Total
Anti-Thyroglobulin (Anti-Tg)	Human Chorionic Gonadotropin +β (hCG+β) STAT	Sex Hormone Binding Globulin (SHBG)
Anti-Thyroperoxidase (Anti-TPO)	Human Chorionic Gonadotropin +β (hCG+β)	T Uptake
CA 125	Human Growth Hormone (hGH)	Testosterone
CA 15-3	IGF-1	Thyroglobulin (Tg)
CA 19-9	Immunoglobulin E (IgE)	Thyroid Stimulating Hormone (TSH)
Calcitonin	Insulin	Thyroxine, Free (FT4)
Carcinogenic Embryonic Antigen (CEA)	Leutinizing Hormone (LH)	Total T3
CK-MB	Myoglobin	Total T4
Cortisol	Parathyroid Hormone (PTH)	Triiodothyronine, Free (FT3)
C-Peptide	Parathyroid Hormone 1 - 84 (PTH)	Troponin I
DHEA-S	NT-pro BNP	Troponin T
Digoxin	Progesterone	Vitamin B12
Estradiol		Vitamin D, Total

Analytes below may be present in the product. No claims are made regarding performance and stability*.

17-OH Progesterone	Estriol, Free	Primidone
Acetaminophen	Estriol, Total	Procainamide
Aldosterone	Estrogen, Total	Procollagen NP Type 1
Amikacin	Ethosuximide	Quinidine
Angiotensin	Gentamicin	Renin
Anti-CCP	Homocysteine	Salicylate
BNP	Ibuprofen	Testosterone, Free
Caffeine	Lidocaine	Theophylline
Carbamazepine	Lithium	Thyroxine Binding Globulin
Carbamazepine, Free	N-Acetyl procainamide	Tobramycin
Chloramphenicol	Ostase	Ultra-sensitive CRP
Cyclosporine	Phenobarbital	Valproic Acid
Disopyramide	Phenytoin	Valproic Acid, Free
EPO	Phenytoin, Free	Vancomycin

*Refer to lot specific IFU for analyte performance and stability claims.

Multichem® S Plus

Test consolidation for serum chemistry and immunology quality control in a liquid stable format



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed chemistry QC
- Facilitates tri-level utility for cholesterol HDL & LDL, Apo A1, and Apo B
- Assayed and value assigned for Roche **cobas**® systems
- Tri-level utility for immunoproteins including sTfR

Specifications

- 36 month closed vial stability at -20°C to -80°C
- 10 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem S Plus	Assayed Level 1	12 x 4mL (48mL)	09339795190
	Assayed Level 2	12 x 4mL (48mL)	09339809190
	Assayed Level 3	12 x 4mL (48mL)	09339817190

Analytes with performance and stability claims*:

Acetaminophen	Cholesterol, LDL	Lipase
Acid Phosphatase (Non Prostatic)	Cholesterol, Total	Lipoprotein (a)
Acid Phosphatase (Total)	Cholinesterase	Lithium
Alanine Aminotransferase (ALT)	Complement C3	Magnesium
Albumin	Complement C4	Phenobarbital
Alkaline Phosphatase (ALKP)	C-Reactive Protein (CRP)	Phenytoin
Alpha-1 Acid Glycoprotein	Creatine Kinase (CK)	Phosphate
Alpha-1 Antitrypsin	Creatinine	Potassium
Alpha-Hydroxybutyrate dehydrogenase	Digoxin	Prealbumin
Amikacin	Ethanol	Rheumatoid Factors (RF)
Amylase, Pancreatic	Ferritin	Salicylate
Amylase, Total	Fructosamine	Sodium
Anti-streptolysin O (ASO)	Gamma Glutamyltransferase (GGT)	Soluble Transferrin Receptor (sTfR)
Apolipoprotein A1 (APO A1)	Gentamicin	Theophylline
Apolipoprotein B (APO B)	Glucose	Tobramycin
Aspartate Aminotransferase (AST)	Haptoglobin	Total Protein
Beta-2 Microglobulin	Homocysteine	Transferrin
Bicarbonate (CO2)	Immunoglobulin A (IgA)	Triglycerides
Bilirubin Direct	Immunoglobulin G (IgG)	Ultra sensitive CRP
Bilirubin Total	Immunoglobulin M (IgM)	Unsaturated Iron-Binding Capacity (UIBC)
Calcium	Iron	Urea
Carbamazepine	Kappa Light Chain	Uric Acid
Ceruloplasmin	Lactate	Valproic acid
Chloride	Lactate Dehydrogenase (LDH)	Vancomycin
Cholesterol, HDL	Lambda Light Chain	

Analytes below may be present in the product.

No claims are made regarding performance and stability*.

ACE	CH50 (Total hemolytic Complement)	IgG4, Subclass
Acid Phosphatase (Non Prostatic)	CKMB	Osmolality
ADNase B (Anti-Streptococcal DNase B)	Copper	Phospholipids
Alpha 2 Macroglobulin	Cortisol	Properdin Factor B
Anti-thrombin III	Cystatin C	Protein Electrophoresis
Beta Hydroxybutyrate	Dehydrogenase	Retinol Binding Protein
Bile acids	Hemopexin	Total Iron Binding Capacity
Bilirubin Indirect	IgE	Thyroxine (T4)
C1 Inhibitor	IgG1, Subclass	Triiodothyronine
Caffeine	IgG2, Subclass	Zinc
Calcium Ionized	IgG3, Subclass	

*Refer to lot specific IFU for analyte performance and stability claims.

Multichem® P

Test consolidation for serum elevated immunoprotein quality control in a liquid stable format



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed and value assigned for Roche **cobas**® systems
- Provides truly elevated values of specific proteins to control the analytical range
- Supplementary single-level immunoprotein control to complement Multichem S Plus
- Provides tri-level utility for RF when used in conjunction with Multichem S Plus

Specifications

- 36 month closed vial stability at -20°C to -80°C
- 14 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem P	Level P	12 x 4mL (48mL)	09339884190

Analytes with performance and stability claims*:

Albumin	Complement C3	Prealbumin
Alpha-1 Acid Glycoprotein	Complement C4	Rheumatoid Factors (RF)
Alpha-1 Antitrypsin	C-Reactive Protein (CRP)	Soluble Transferrin Receptor (sTfR)
Apolipoprotein A-1 (APO A1)	Haptoglobin	Total Protein
Apolipoprotein B (APO B)	Immunoglobulin A (IgA)	Transferrin
Beta-2 Microglobulin	Immunoglobulin G (IgG)	
Ceruloplasmin	Immunoglobulin M (IgM)	

Analytes below may be present in the product.

No claims are made regarding performance and stability*.

ADNase B (Anti-Streptococcal DNase B)	Cystatin C	IgG4, Subclass
Alpha-2 Macroglobulin	Ferritin	Kappa Light Chain
Angiotensin Converting Enzyme	Hemopexin	Lambda Light Chain
Antistreptolysin O (ASO)	IgE	Lipoprotein (a)
Antithrombin III	IgG1, Subclass	Properdin Factor B
C1 Inhibitor	IgG2, Subclass	Retinol Binding Protein
CH50 (Total hemolytic Complement)	IgG3, Subclass	

*Refer to lot specific IFU for analyte performance and stability claims.



Multichem® U

Test consolidation for urinary chemistry quality control in a liquid stable format



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed urine chemistry QC
- Bi-level utility
- Greater stability and performance for creatinine
- Assayed and value assigned for Roche **cobas**® systems
- Addition of human-based microalbumin provides greater accuracy and performance

Specifications

- 24 month closed vial stability at 2°C to 8°C
- 30 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem U	Assayed Level 1	12 x 3mL (36mL)	09339868190
	Assayed Level 2	12 x 3mL (36mL)	09339876190

Analytes with performance and stability claims*:

Amylase
Calcium
Chloride
Creatinine
Glucose

Magnesium
Microalbumin
Phosphate
Potassium
Sodium

Total Protein Urine
Urea
Uric acid

Analytes below may be present in the product. No claims are made regarding performance and stability*.

Cortisol
hCG

Osmolality
Specific Gravity

*Refer to lot specific IFU for analyte performance and stability claims.



Multichem® ID-G

Multi-analyte infectious disease quality control



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed and value assigned for Roche **cobas**® systems
- Suitable for HIV Duo assay with negative claim for HIV 1 p24 antigen

Specifications

- 24 month closed vial stability at 2°C to 8°C
- 30 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem ID-G	Single Level	4 x 4mL (16mL)	09339892190
Positive For:			
Anti-HBc IgG		Anti-HTLV I IgG ¹	
Anti-HCV IgG		Anti-Treponema pallidum IgG	
Anti-HIV 1 IgG		HBsAg	

Multichem® ID-HIV p24

Infectious disease quality control



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed and value assigned for Roche **cobas**® systems
- Suitable for HIV Duo assay with negative claim for Anti-HIV 1 IgG

Specifications

- 24 month closed vial stability at 2°C to 8°C
- 30 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem ID-HIV p24	Single Level	4 x 4mL (16mL)	09915494190
Positive For:			
HIV 1 p24 Antigen			

Multichem® ID-GNeg

Multi-analyte infectious disease quality control



Features

- Human-based proprietary formulation
- Mimics performance of patient samples
- Direct load, liquid, for ease of use
- Assayed and value assigned for Roche **cobas**® systems

Specifications

- 36 month closed vial stability at 2°C to 8°C
- 30 day open vial stability at 2°C to 8°C

Product	Description	Configuration	PART NO
Multichem ID-GNeg	Single Level	4 x 4mL (16mL)	09339906190
Negative For:			
Anti-HBc IgG		Anti-Treponema pallidum IgG	
Anti-HCV IgG		HBsAg	
Anti-HIV 1 IgG		HIV 1 p24 Antigen	
Anti-HTLV I IgG ¹			

1. Anti-HTLV is not available in the USA

IAMQC® Interlaboratory peer program






The easiest way to automate QC data from Technopath's Multichem® independent quality controls.



Technopath's **IAMQC** interlaboratory peer program enables a laboratory to choose **real-time peer comparison** from laboratories within group or across the globe for all QC test data. This allows the laboratory to easily monitor its own reliability and precision.

**REGISTER
FOR IAMQC PEER**

<https://register.iamqc.com/>

-  **Full automation** options available
-  **Daily comparison** of internal lab system or global comparisons
-  Powerful automated **inter-laboratory** QC comparison reports
-  **Track shifts and trends** over time and across reagent lots
-  **Meet accreditation requirements** for peer comparison



Setting up Roche **cobas**® Instruments with IAMQC® Interlaboratory Peer Program








It's as simple as step 1, 2 and 3.



Quality controls for Roche **cobas**® systems

Order information:

Order through your local Roche affiliate

Product	Features	Specifications	Part Code	Kit Config
Multichem IA Plus 	<ul style="list-style-type: none"> Assayed Immunoassay QC Tri-level utility Direct load, liquid for ease of use Human-based proprietary formulation 	<ul style="list-style-type: none"> 36 month closed vial stability at -20°C to -80°C 10 day open vial stability at 2°C to 8°C 	Level 1: 09339825190 Level 2: 09339841190 Level 3: 09339850190	12 x 4mL (48mL) 12 x 4mL (48mL) 12 x 4mL (48mL)
Multichem S Plus 	<ul style="list-style-type: none"> Assayed Chemistry QC Tri-level utility Direct load, liquid for ease of use Human-based proprietary formulation 	<ul style="list-style-type: none"> 36 month closed vial stability at -20°C to -80°C 10 day open vial stability at 2°C to 8°C 	Level 1: 09339795190 Level 2: 09339809190 Level 3: 09339817190	12 x 4mL (48mL) 12 x 4mL (48mL) 12 x 4mL (48mL)
Multichem P 	<ul style="list-style-type: none"> Assayed immunoprotein QC Direct load, liquid for ease of use Human-based proprietary formulation 	<ul style="list-style-type: none"> 36 month closed vial stability at -20°C to -80°C 14 day open vial stability at 2°C to 8°C 	Level P: 09339884190	12 x 4mL (48mL)
Multichem U 	<ul style="list-style-type: none"> Assayed urine chemistry QC Bi-level utility Direct load, liquid for ease of use Mimics performance of patient samples 	<ul style="list-style-type: none"> 24 month closed vial stability at 2°C to 8°C 30 day open vial stability at 2°C to 8°C 	Level 1: 09339868190 Level 2: 09339876190	12 x 3mL (36mL) 12 x 3mL (36mL)
- Coming Soon - Multichem ID-G 	<ul style="list-style-type: none"> Assayed and value assigned for Roche cobas® systems Direct load, liquid for ease of use Human-based proprietary formulation Mimics performance of patient samples 	<ul style="list-style-type: none"> 24 month closed vial stability at 2°C to 8°C 30 day open vial stability at 2°C to 8°C 	09339892190	4 x 4mL (16mL)
- Coming Soon - Multichem ID-HIV p24 	<ul style="list-style-type: none"> Assayed and value assigned for Roche cobas® systems Direct load, liquid for ease of use Human-based proprietary formulation Mimics performance of patient samples 	<ul style="list-style-type: none"> 24 month closed vial stability at 2°C to 8°C 30 day open vial stability at 2°C to 8°C 	09915494190	4 x 4mL (16mL)
- Coming Soon - Multichem ID-GNeg 	<ul style="list-style-type: none"> Assayed and value assigned for Roche cobas® systems Direct load, liquid for ease of use Human-based proprietary formulation Mimics performance of patient samples 	<ul style="list-style-type: none"> 36 month closed vial stability at 2°C to 8°C 30 day open vial stability at 2°C to 8°C 	09339906190	4 x 4mL (16mL)

Additional complementary independent quality controls from Technopath Clinical Diagnostics

PRODUCT NAME	TECHNOPATH LIST NO.	KIT CONFIG.	ANALYTES	FEATURE SET
Multichem A1c Single level (level 1) assayed Single level (level 2) assayed Bi-level assayed	HB001A HB002A HB000A	12 x 1mL 12 x 1mL 2 x 6 x 1mL	• HbA1c	<ul style="list-style-type: none"> • 24 month closed vial stability at -20°C to -80°C • 30 day open vial stability at 2°C to 8°C
Multichem AE Single level (level 1) assayed Single level (level 2) assayed Single level (level 3) assayed Bi-level assayed Tri-level assayed	AE611A AE612A AE613A AE600A AE610A	12 x 2mL 12 x 2mL 12 x 2mL 2 x 6 x 2mL 3 x 4 x 2mL	<ul style="list-style-type: none"> • Ammonia • Ethanol 	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 14 day open vial stability at 2°C to 8°C
Multichem AMH Single level (level 1) assayed Single level (level 2) assayed Single level (level 3) Assayed Tri-level assayed	AM501A AM502A AM503A AM500A	12 x 2mL 12 x 2mL 12 x 2mL 3 x 4 x 2mL	• Anti-Müllerian Hormone	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 30 day open vial stability at 2°C to 8°C
Multichem CSF Single level (Level 1) assayed Single level (Level 2) assayed Bi-level assayed	CF101A CF102A CF100A	12 x 2mL 12 x 2mL 2 x 6 x 2mL	<ul style="list-style-type: none"> • Glucose • Lactate • IgG • Protein 	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 30 day open vial stability at 2°C to 8°C
Multichem D-Dimer Single level (level 1) assayed Single level (level 2) assayed Bi-level assayed	DM901A DM902A DM900A	12 x 1mL 12 x 1mL 2 x 6 x 1mL	• D-Dimer	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 30 day open vial stability at 2°C to 8°C
Multichem hsTn Single level (assayed)	HS301A	12 x 3mL	<ul style="list-style-type: none"> • Troponin I • Troponin T 	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 10 day open vial stability at 2°C to 8°C
Multichem IA Speciality Single level (level 1) assayed Single level (level 2) assayed Single level (level 3) assayed Tri-level assayed	BP301A BP302A BP303A BP300A	12 x 2mL 12 x 2mL 12 x 2mL 3 x 4 x 2mL	<ul style="list-style-type: none"> • ACTH • BNP • Calcitonin • Procalcitonin • PTH Intact 	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 7 day open vial stability at 2°C to 8°C
Multichem NB Single level (assayed)	NB800A	12 x 2mL	<ul style="list-style-type: none"> • Direct Bilirubin • Total Bilirubin • Caffeine* • Theophylline 	<ul style="list-style-type: none"> • 36 month closed vial stability at -20°C to -80°C • 14 day open vial stability at 2°C to 8°C
Multichem WBT Tri-level assayed	WB000A	3 x 4 x 2mL	<ul style="list-style-type: none"> • Cyclosporine • Red Blood Cell Folate* • Glucose* • Sirolimus • Tacrolimus 	<ul style="list-style-type: none"> • 30 month closed vial stability at -20°C to -80°C • 10 day open vial stability at 2°C to 8°C

*Refer to lot specific IFU for analyte performance and stability claims.



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