

# **Hematology and Coagulation Controls**

**Your Quality Goals Realized** 





# Comprehensive QC solutions for building an effective quality control strategy

Hematologists and physicians rely on the accuracy of hematology and coagulation tests to diagnose, treat and prevent various blood disorders or diseases related to blood. That's why finding, designing and implementing the right quality control strategy is critical for your lab. The ideal quality control system minimizes the risk of reporting erroneous test results while streamlining operations and increasing productivity.

#### Helping you build a more complete quality control system

At Bio-Rad, we understand that you need a robust quality plan designed to meet your specific quality control goals and objectives. That's why we offer a wide range of assayed hematology and coagulation controls that enable you to easily expand your QC capabilities and help achieve compliance with regulatory agencies.

#### Giving you the confidence of industry-leading products and support

As a leader in QC, we offer a comprehensive portfolio of EQAS®, Independent QC and QC Data Management solutions, along with support and educational resources to ensure the process of building a more complete quality control system.

#### Partner with the Experts in Quality Control



**FQAS** 

An independent, external snapshot of performance in comparison to your peers.



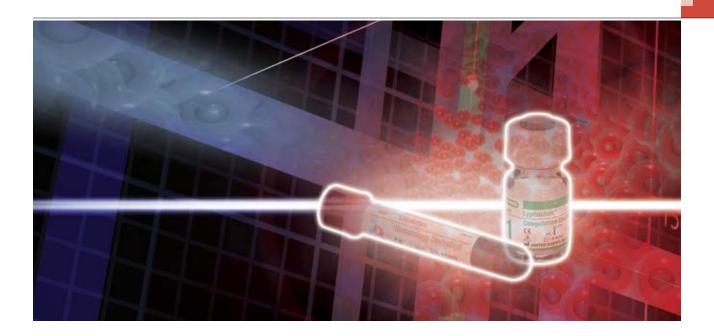
Independent QC

Ongoing, proactive, unbiased daily QC that identifies errors as they occur or begin to trend.



Unitv™

QC Data Management tools that help you create a strategy to reduce risk and streamline QC workflow.



# Partner with the leader in Independent Quality Controls

More laboratories trust Bio-Rad for quality control products than any other manufacturer. Our decades of industry leadership give you the security of consistent product quality that helps ensure reliable test results.

# Regulatory bodies worldwide recognize the importance of independent quality controls

Most guidelines recognize that Independent QC is an important part of an effective laboratory quality plan. Bio-Rad's family of independent hematology and coagulation controls monitor the precision of the instrument to help minimize the risk associated with reporting inaccurate patient test results.

# A comprehensive portfolio of quality control products

Having the right products is critical to keeping your lab running smoothly and maintaining your quality control system. Bio-Rad provides a comprehensive portfolio of high quality products readily available for when you need them.

# Improve efficiency through a supportive partnership

We provide complete service, support and consultation to our customers. When you purchase quality control products from Bio-Rad, you receive the backing of a Technical Services Department focused on providing the support and education you need to troubleshoot and resolve problems as they occur.

# Educational programs to expand your QC knowledge

Our commitment to enabling our customers to become QC experts makes us the right partner for you.

E-learning programs through QCNet<sup>™</sup> and a growing library of publications and product documentation help you better understand both the technical and regulatory aspects of quality control.



# A complete solution to support your quality control plan

From basic proficiency testing to strategic risk management, Bio-Rad has the products and services you need to design a quality control plan that meets your organization's requirements.

# **Hematology Controls**

Our Liquichek" hematology and reticulocyte controls are suitable for use on a variety of instruments, including hematology analyzers manufactured by Abbott, Beckman Coulter®, Siemens, Sysmex, and other test systems.

#### For Abbott Systems

# Liquichek™ Hematology Control (A)

An assayed hematology control for monitoring values on Abbott CELL-DYN® analyzers with 3-part and 5-part differential analyzers. Assayed values for the Abbott CELL-DYN® 1700, 1800, 3200, 3500, and CELL-DYN Ruby® analyzers.

- Blood cells in plasma-like fluid
- 78 day shelf life at 2–8°C
- 8 day open-vial stability at 2-8°C

#### **Parameters**

Basophils (BASO) % Basophils Eosinophils (EOS) % Eosinophils Granulocytes (GRAN) Hematocrit (HCT) Hemoglobin (Total) Lymphocytes (LYMPH)

% Lymphocytes

Mean Corpuscular Hemoglobin (MCH) Mean Corpuscular Hemoglobin Concentration (MCHC)

Mean Corpuscular Volume (MCV) Mean Platelet Volume (MPV)

MID

Monocytes (MONO) % Monocytes Neutrophils (NEUT) % Neutrophils

Nucleated Red Blood Cells (NRBC)

Nucleated Red Blood Cells/100 WBC (NRBC/WBC%)

Platelecrit (PCT)\*

Platelet Volume Distribution Width (PDW)\*

Platelets (PLT)

Platelets Impedance Method (PLTi)

Red Blood Cell Distribution Width (RDW)

Red Blood Cells (RBC)

Red Blood Cells, Optical (RBCo)

White Blood Cells (WBC)

White Optical Count (WOC)

White Impedance Count (WIC)

Nucleated Optical Count (NOC)



<sup>\*</sup>Values reported by the analyzer are not for diagnostic use Refer to myeinserts.com or the package insert of currently available lots for specific parameter and stability claims.

# **Liquichek™ Reticulocyte Control (A)**

An assayed whole blood reticulocyte control for use with the Abbott CELL-DYN® 3500 and 3700 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

## Liquichek™ Reticulocyte Control (A-I)

An assayed reticulocyte control for use with the Abbott CELL-DYN Sapphire® hematology analyzers. Assayed values are also provided for manual methods.

- Red cells suspended in plasma-like fluid
- 78 day shelf life at 2-8°C
- 14 day open-vial stability at 2-8°C

#### 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.

#### For Beckman Coulter Systems

# **Liquichek™ Hematology Control (C)**

An 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 Coulter® STKS™, LH 500, LH 700, MAXM™, HmX, and GEN-S™ 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

#### **Parameters**

Basophils (BASO) Eosinophils (EOS) Hematocrit (HCT) Hemoglobin (HGB) Lymphocytes (LYMPH)

Mean Corpuscular Hemoglobin (MCH)

Mean Corpuscular Hemoglobin Concentration (MCHC)

Mean Corpuscular Volume (MCV) Mean Platelet Volume (MPV)

\*Values reported by analyzer are not for diagnostic use. ¹For Beckman Coulter® LH and Unicel® DxH™ 800 only.

Monocytes (MONO) Neutrophils (NEUT) Platelecrit (PCT)\* Platelet Distribution Width (PDW)\* Platelets (PLT) RDW-SD¹

Red Blood Cell Distribution Width (RDW) Red Blood Cells (RBC)

White Blood Cells (WBC)







# **Liquichek™ Reticulocyte Control (C)**

An 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

#### **Parameters**

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

#### For Siemens Systems

# **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

#### **Parameters**

Basophils (BASO)

Cellular Hemoglobin Concentration Mean (CHCM)

Eosinophils (EOS)

Hematocrit (HCT)

Hemoglobin (HGB)

Hemoglobin Concentration Distribution Width (HDW)

Large Unstained Cells (LUC)

Lymphocytes (LYMPH)

Mean Corpuscular Hemoglobin (MCH)

Mean Corpuscular Hemoglobin Concentration (MCHC)

Mean Corpuscular Volume (MCV)

Mean Platelet Volume (MPV)

Monocytes (MONO)

NEUT X

NEUT Y

Neutrophils (NEUT)

Platelets (PLT)

Red Blood Cell Distribution Width (RDW)

Red Blood Cells (RBC)

White Blood Cells (WBC)

White Blood Cells Counts Measured in Perox Channel (WBCP Perox)

# **Liquichek™ Reticulocyte Control (S)**

An 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

#### **Parameters**

Cellular Hemoglobin Concentration Mean of Gated Red Blood Cells (CHCMa)

Cellular Hemoglobin Concentration Mean of Reticulocytes (CHCMr) 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) Reticulocyte (Retic)

Total Red Blood Cell Counts in Retic Channel (Retic RBC)







#### For Sysmex Systems

# 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

#### **Parameters**

Basophils (BASO)
Eosinophils (EOS)
Hematocrit (HCT)
Hemoglobin (HGB)
Lymphocytes (LYMPH)
Mean Corpuscular Hemoglobin (MCH)
Mean Corpuscular Hemoglobin Concentration (MCHC)
Mean Corpuscular Volume (MCV)

Mean Platelet Volume (MPV)

\*No claims made for expected value or stability.

Monocytes (MONO)
Neutrophils (NEUT)
Nucleated Red Blood Cells (NRBC)\*
Platelets (PLT)
Platelets, Optical Count (PLT-o)\*
Red Blood Cell Distribution Width-CV (RDW-CV)
Red Blood Cell Distribution Width-SD (RDW-SD)
Red Blood Cells (RBC)
White Blood Cells (WBC)

### **Liquichek™ Reticulocyte Control (X)**

An 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

#### **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. This trilevel control can be used on either manual sampling or automatic cap-piercing instruments and is 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

#### **Parameters**

Granulocytes (GRAN)
Hematocrit (HCT)
Hemoglobin (HGB)
Lymphocytes (LYMPH)
Mean Corpuscular Hemoglobin (MCH)
Mean Corpuscular Hemoglobin Concentration (MCHC)
Mean Corpuscular Volume (MCV)

Mean Platelet Volume (MPV)
Mid-Sized Cells (MID)
Monocytes (MONO)
Platelets (PLT)
Red Blood Cell Distribution Width (RDW)
Red Blood Cells (RBC)
White Blood Cells (WBC)

## **Liquichek**<sup>™</sup> **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

#### **Parameters**

Granulocytes (GRAN)
Hematocrit (HCT)
Hemoglobin (Total)
LYMPH (W-SCC & W-SCR)
Lymphocytes (LYMPH)
Mean Corpuscular Hemoglobin (MCH)
Mean Corpuscular Hemoglobin Concentration (MCHC)
Mean Corpuscular Volume (MCV)
Mean Platelet Volume (MPV)
MID

MXD (W-MCC & W-MCR)
NEUT (W-LCC & W-LCR)
Platelets (PLT)
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)
Spun Hematocrit (Spun HCT)
White Blood Cells (WBC)

# **Liquichek™ Sedimentation Rate Control**

A 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

#### **Parameter**

Erythrocyte Sedimentation Rate (ESR)







# **Coagulation Controls**

Our Coagulation controls provide values for coagulation times, factors and fragments across a wide range of platforms and with a three year shelf life, the controls allow for fewer cross crossover studies.

# Lyphochek® Coagulation Control

Extended open-vial stability reduces the cost of daily QC and offers even more value where quality control testing must be performed on every shift. Three year shelf life also 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

#### **Analytes**

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

# Lyphochek® Hemostasis Control

Supplements the basic parameters provided by Lyphochek® Coagulation Control with additional factors and provides QC for more specialized diagnostic testing. Three year shelf life also allows laboratories to save money by performing fewer crossover studies.

- 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

#### **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)

# **Liquichek**<sup>™</sup> **D-dimer Control**

Four level control monitoring assay precision across the critical range used in diagnosis of thrombotic events on multiple platforms. Consult tables for platforms and target values.

- Liquid, human-plasma based
- 3 year shelf life at -20°C to -70°C
- 15 day open-vial stability at 2-8°C

#### **Analyte**

D-dimer









# External Quality Assessment Programs

Bio-Rad's comprehensive, internationally recognized External Quality Assurance Services (EQAS®) ease your process, improve your efficiency, and increase your confidence in results.

Make the best use of your time and resources by increasing your efficiency by consolidating your external qualitative blood typing and qualitative and quantitative infectious disease assessments to Bio-Rad EQAS® programs. Feel secure knowing that you have technical support from the experienced professionals at Bio-Rad to assist you in selecting and implementing the right programs for your compliance needs.

In addition, EQAS® makes it easy to meet your laboratory's proficiency testing needs because Bio-Rad's programs:

- Are accredited to ISO/IEC 17043:2010 "Conformity assessment-General requirements for proficiency testing"
- Satisfy EQA requirements for ISO 15189 accredited labs
- Have a large international database with participants from over 108 countries
- Provide comprehensive, easy-to-read and -understand reports presented in a clear, graphic format.

# **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
- 3 x 2 mL (each shipment)

#### **Parameters**

Hematocrit (HCT) Hemoglobin Mean Corpuscular Hemoglobin

(MCH)

Mean Corpuscular Hemoglobin Concentration (MCHC)

Mean Corpuscular Volume (MCV) Mean Platelet Volume (MPV) Platelets (PLT) Red Blood Cells (RBC)

Red Blood Cell Distribution Width (RDW)

Red Blood Cell Distribution Width-SD (RDW-SD) White Blood Cells (WBC)

# **Coagulation Program**

- Lyophilized, human plasma based
- 8 parameters for external assessment of laboratory coagulation test performance
- 12-month cycle
- 12 x 1 mL

#### **Analytes**

Antithrombin III (ATIII) APTT Fibrinogen INR Protein C Protein S PT Thrombin Time (TT)







# Unity™ QC Data Management Solutions

Unity<sup>™</sup> 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<sup>™</sup> ultimately helps your team deliver objectives more efficiently and with greater ease.

Unity™ gives you the confidence that comes with more active risk management. Unity™ enables:

- Increased oversight with real-time bench and supervisor data review
- Better ongoing management and interpretation of QC results so you can achieve accurate results consistently.

With Unity™ you get the tools you need to design a strategy to improve your lab's performance and competitive edge. Customize your strategy with risk management tools and

take advantage of adding modules and options to expand your capabilities to meet future needs without having to implement new software.

#### **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 O	ptions	Advanced Us	er Options			
			U <sub>0</sub>	URI			
	UnityWeb®	Unity Real Time® LT	Unity Real Time® online	Unity Real Time®			
Type of Solution	•						
Web Service (Web-based)	х		x				
Desktop Software		x		х			
Unity <sup>™</sup> Interlaboratory Reports							
Monthly Reports	x	x	x	x			
InstantQC™ Reports	х	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	х		x				
Installed on Local Laboratory PC		x		x			
Connectivity (Sold separately)							
WebConnect™	х		x				
UnityConnect™	х	x	х	х			







Desktop based





Want to know more? Discover the power of Unity™ Solutions at www.bio-rad.com/qc-datamanagement



# Unity™ QC Data Management Solutions

Bio-Rad Quality Controls are part of the Unity™ Program with its industryleading features 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 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

You can consolidate your entire laboratory into one QC system through our Unity™ Program. This sophisticated software includes best-in-class tools to support releasing results, benchmarking laboratory performance, and designing your QC system.

# Unity™ Software Solutions

Contact your local sales representative for more information about all of our QC Data Management Solutions.



### **Unity Real Time®**







#### **Expert QC Data Management Solution** for Desktop or Online Users

- Facilitate regulatory 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 Advisor™ module available to comply with German regulations



#### 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)
- Access UnityWeb® via mobile device





Advanced



Desktop based



Web based



Mobile

Want to know more? Discover the power of Unity™ Solutions at www.bio-rad.com/qc-datamangement

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

■ Use for CBC and 5-Part Differential Parameters		ı								l	
Use for CBC and 3-Part Differential Parameters      Use for CBC and 3-Part Differential Parameters											
Use for Reticulocyte Counts											
Use for CBC and Lymph		=	Ī	_			<u> </u>	_	0		<u> </u>
Use for CBC Parameters Only	₹	e (/	e (/	ଥି	) e	s) /	(S)	<u>ĕ</u>	() (e	۳,	1-16
Use for Manual Methods	og)	c.	cyt	og)	cyt	og)	cyt	og)	cyt	og)	og)
POCT Methods Available	뎙	읔	읔	뎙	음	l g	음	뎙	읔	뎙	<u> </u>
	Hematology (A)	Reticulocyte (A)	Reticulocyte (A-I)	Hematology (C)	Reticulocyte (C)	Hematology (S)	Reticulocyte (S)	Hematology (X)	Reticulocyte (X)	Hematology-16	Hematology-16T
Manufacturer/Instrument(s)	Ĭ	ď	Œ	Ī	Œ	Ī	Œ	Ī	Œ	Ī	Ĭ
Abbott Diagnostics						ı					
CELL-DYN® 1600/1700/1800	<b>A</b>									<b>A</b>	<b>A</b>
CELL-DYN® 3000/ 3200		•									
CELL-DYN® 3500/3700		•								D	
CELL-DYN® 4000			•								
CELL-DYN Ruby™		•									
CELL-DYN Sapphire®			•								
CELL-DYN Emerald®										<b>A</b>	
HORIBA ABX Diagnostics											
ABx Pentra 80/80XL										•	
Micros 60										<b>A</b>	
Beckman Coulter®											
AcT™ DIFF/AcT™ DIFF2										<b>A</b>	
AcT <sup>™</sup> 5DIFF/UniCell <sup>®</sup> DxH <sup>™</sup> 800										<u> </u>	
COULTER® GeN•S					•					•	
					•					_	
LH 500/700 Series					•					•	
STKS™/MAXM™ /HmX											
ERMA						ı					
PCE 210										_	
FORTRESS		1				T				1	
CELLDIFF-3										<b>A</b>	
Medonic											
M-Series										<b>A</b>	
Mindray											
BC-2600/2800										<b>A</b>	
BC-3000CT/3200/3000 PLUS										<b>A</b>	
Samsung	'										
Geo										<b>A</b>	
Siemens											
ADVIA® 60						<b>A</b>					
ADVIA® 120/2120/2120i							•				
Sysmex						_					
KX-21											<b>A</b>
								_	•	•	
XE-2100/XE-5000									-	,	
XN Series									<b>*</b>		
XS-800i/XS-1000i									<b>*</b>	•	
XT-4000i									•	)	
XT-1800i/XT 2000i										)	
URIT											
2000-Plus										<b>A</b>	
3000/3010/3300										<b>A</b>	
3000-Plus/URIT 3020										<b>A</b>	
Other											
Manual Methods	*		*			*				*	*
POCT Methods										~	
If your instrument model is not listed, please contact your nearest Bio-	-Rad office for	current co	ntrol infor	mation		1					

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

# Use Bio-Rad's Coagulation Controls on these popular instruments

	Coagulation	D-dimer	Hemostasis			
Manufacturer/Instrument(s)						
Abbott Diagnostics						
ARCHITECT®		•				
Alere™						
Triage®		•				
Beckman Coulter®						
Olympus AU		•				
bioMérieux						
VIDAS®		•				
Diagnostica Stago						
STA® Hemostasis System	•	•	•			
Instrumentation Laboratory						
ACL® Advance/Futura	•	•				
ACL® 8000		•				
ELECTRA®	•					
Mitsubishi						
PATHFAST®		•				
Roche Diagnostics						
COBAS INTEGRA®		•				
Hitachi® Systems		•				
Siemens						
BCS®/BCT®	•	•	•			
Stratus® CS		•				
Sysmex® CA Series	•	•				
Trinity Biotech						
AMAX® Series	•					
Other						
POCT Methods		•				

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

# **Popular Instruments for D-dimer Assays**

Instrument	Level Low	Level 1	Level 2	Level 3	
Abbott ARCHITECT®	•	•	•	•	
Alere Triage® Meter Pro		•	•	•	
Beckman Coulter® Olympus AU		•	•	•	
bioMérieux	•	•	•	•	
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 Level**

	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.

 $^{\star}$ Fibrinogen Equivalent Units (FEU) = twice the mass of the D-DU (D-dimer units).

# Ordering Information

Cat #	Product Name	Configuration	Cat #	Product Name	Configuration	
Indeper	ndent Quality Control		Liquiche	ek™ Hematology-16T Control		
Liquich	ek™ Hematology Control (A)		144	Trilevel (4 of each level)		
865	Trilevel (4 of each level)	12 x 3 mL	144X	Trilevel MiniPak (1 of each level)		
866	Low	4 x 3 mL				
867	Normal	4 x 3 mL	•	chek™ Sedimentation Rate Control  Level 1		
868	High	4 x 3 mL	514			
865X	Trilevel MiniPak (1 of each level)	3 x 3 mL	515 514X	Level 2		
Liquich	ek™ Reticulocyte Control (A)		5148	Bilever MiniPak (1 or each lever)	ZX9IIIL	
854	Level 1	4 v 3 ml	Lyphocl	hek® Coagulation Control		
855	Level 2		744	Level 1		
855X	Bilevel MiniPak (1 of each level)		745	Level 2		
0007	Dilever Willin ak (1 of each level)		746	Level 3		
-	ek™ Reticulocyte Control (A-I)		745X	Trilevel MiniPak (1 of each level)	3 x 1 mL	
916	Level 1		Liquiche	ek™ D-dimer Control		
917	Level 2		27100	Level Low	6 x 1 mL	
915X	Bilevel MiniPak (1 of each level)	2 x 3 mL	27101	Level 1		
Liquich	ek <sup>™</sup> Hematology Control (C)		27102	Level 2		
904	Trilevel (4 of each level)		27103	Level 3		
905	Low		27102X	Four Level MiniPak (1 of each le		
906	Normal	4 x 5 mL		``	,	
907	High	4 x 5 mL		hek® Hemostasis Control		
904X	Trilevel MiniPak (1 of each level)	3 x 5 mL	597	Level 1		
			598	Level 2		
-	ek™ Reticulocyte Control (C)	4 4 1	599	Level 3		
826	Level 1		598X	Trilevel MiniPak (1 of each level)	3 x 1 mL	
827	Level 2		EQAS® I	Programs		
828 827X	Level 3		Hemato	logy Program¹		
021X	Trilevel MiniPak (1 of each level)	3 X 4 IIIL	BC90A	Shipment A	3 x 2 mL	
Liquich	ek™ Hematology Control (S)		BC90B	Shipment B	3 x 2 mL	
449	Trilevel (4 of each level)		BC90C	Shipment C	3 x 2 mL	
449X	Trilevel MiniPak (1 of each level)	3 x 3.5 mL	BC90D	Shipment D	3 x 2 mL	
Liauich	ek™ Reticulocyte Control (S)		Coaqula	ation Program¹		
921	Level 1	4 x 4 mL	BC34	Program	12 x 1 mL	
922	Level 2	4 x 4 mL	00 D-4	. M		
923	Level 3	4 x 4 mL		a Management Solutions		
922X	Trilevel MiniPak (1 of each level)	3 x 4 mL	UnityWe			
	,		870-1	UnityWeb <sup>®</sup>	Annual subscription	
487	ek™ Hematology Control (X)	10 v 4 F ml	Unity Re	eal Time® LT		
487X	Trilevel (4 of each level)		805-1	Unity Real Time® LT	Annual subscription	
40/ X	Trilevel MiniPak (1 of each level)		Unity D	eal Time <sup>®</sup> online		
Liquich	ek™ Reticulocyte Control (X)		804-W1	Unity Real Time® online	Annual subscription	
926	Level 1			•	Almaa sabscription	
927	Level 2	4 x 3 mL	Unity Re	eal Time®		
928	Level 3		804	Installation Package		
927X	Trilevel MiniPak (1 of each level)	3 x 3 mL	804-1	Unity Real Time®		
Liquich	ek™ Hematology-16 Control		825i	Unity™ Remote Installation & Tra	ining Single use	
760	Trilevel (2 of each level)	6 x 3 mL	10	of the program are subcontracted from an a	aproved evenlier	
761	Low			or the program are subcontracted from an a lyeinserts.com or the package insert for curi		
762	Normal				•	
763	High					
760X	Trilevel MiniPak (1 of each level)					
	, ,					



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