bio-techne®

Hematology Product Guide

Controls, Calibrators, Linearity Material, QC Program

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From a Trusted Partner

R&D Systems has been at the forefront of the hematology clinical controls industry for several decades. Leveraging cutting-edge technologies and a deep understanding of hematology testing requirements, we have established ourselves as a trusted partner for laboratories worldwide. Our commitment to innovation and quality enables us to continually enhance our product offerings to meet the evolving needs of the healthcare industry.

Dependability: R&D Systems' controls are meticulously formulated to mimic the characteristics of patient samples, providing laboratories with reliable materials to verify the accuracy and precision of their hematology analyzers

Comprehensive Solution: A wide-ranging portfolio supports quality across all aspects of hematology testing.

- CBC 3-Part Differential
- Reticulocytes
- Flow Cytometry
- Sedimentation Rate (ESR)
- Linearity Models
- Body Fluid
- Glucose and Hemoglobin

Regulatory Compliance: Controls are manufactured in compliance with international regulatory standards and guidelines, including ISO 13485 and FDA regulations. This commitment to regulatory compliance assists laboratories meet stringent quality control requirements.

Technical Support and Expertise: From product selection and validation to troubleshooting and data interpretation, R&D Systems' team of experts is dedicated to ensuring the success of its customers' quality assurance programs.

Custom Capabilites

Our offerings go beyond the catalog to provide exactly the services and products you need.

- New control development
- Analyzer verification and validation
- Custom labeling and kitting
- Value assignment services
- Proficiency/EQA materials

R&D Systems Clinical Controls is a leading provider of Hematology Clinical Controls. With a focus on **precision, reliability, and accuracy,** R&D Systems offers a comprehensive range of controls and calibrators.

Products for **Abbott**

	CBC-3K	CBC-3D	PLATELET-TROL Extended	R&D 3K Retic	R&D 4K Retic	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE	RET-LINE	CD-Cal
CELL-DYN 3200	○			○		●	●				○
CELL-DYN Ruby™	○			○		●	●				○
CELL-DYN Emerald™		○				●	●	●			
CELL-DYN 3500, 3700	○					●	●	●	●		○
CELL-DYN 3500 VET, 3700 VET						●	●	●	●		
CELL-DYN 4000						●	●		●	○	
CELL-DYN SAPPHIRE™	○		○		○	●	●		●	○	○

Key ○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

CBC-3K Whole Blood Control
Five-Part WBC Differential

CBC-3K is a tri-level control for monitoring the Abbott CELL-DYN SAPPHIRE hematology analyzers. The CELL-DYN SAPPHIRE assay tables include values for 26 parameters. Assay values are also provided for the CELL-DYN 3200, 3500, 3700, Ruby, and manual methods. CBC-3K has 75-day closed vial stability with 8-day open vial stability.

	Catalog #	Description
Tubes	3K301	10 x 3 mL (10 Normal)
	3K302	10 x 3 mL (5 Low, 5 High)
	3K303	12 x 3 mL (4 Low, 4 Normal, 4 High)
	3K303X	6 x 3 mL (2 Low, 2 Normal, 2 High)

CBC-3D® Whole Blood Control
Three-Part WBC Differential

CBC-3D is a tri-level control for monitoring Abbott CELL-DYN Emerald instruments. CBC-3D has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	3D501	10 x 2 mL (Normal)
	3D503	12 x 2 mL (4 Low, 4 Normal, 4 High)
Tubes	3D507	12 x 2 mL (4 Low, 4 Normal, 4 High)
	3D508	6 x 2 mL (2 Low, 2 Normal, 2 High)

PLATELET-TROL® Extended Platelet Control

PLATELET-TROL Extended is a multi-level control designed specifically for monitoring the elevated platelet ranges of hematology analyzers, including the Abbott CELL-DYN Sapphire. PLATELET-TROL Extended has 75-day closed vial stability with 14-day open vial stability. Kit requires high speed vortexer.

	Catalog #	Description
Tubes	PTE006	12 x 3 mL (4 each: Level 3, 5, 6)*

* Approximate Plt values (units in 10^3/mL):
Level 3: 1000 Level 5: 2000 Level 6: 3000

R&D 3K Retic Whole Blood Reticulocyte Control

R&D 3K Retic is a bi-level whole blood reticulocyte control designed specifically for the Abbott CELL-DYN 3200 and Ruby hematology analyzers. The target values for the levels are Level 1: 1.2% and Level 2: 5.0%. R&D 3K Retic has 75-day closed vial stability with 16-day open vial stability.

	Catalog #	Description
Tubes	3R001	4 x 3 mL (2 each: Level 1, 2)
	3R002	10 x 3 mL (5 each: Level 1, 2)

R&D 4K Retic Whole Blood Reticulocyte Control

R&D 4K Retic is a bi-level whole blood reticulocyte control designed specifically for the Abbott CELL-DYN SAPPHIRE hematology analyzers. Assay values are also provided for manual methods. The target values for the levels are Level 1: 1.0% and Level 2: 10.0%. R&D 4K Retic has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	4R001	4 x 3 mL (2 each: Level 1, 2)
	4R002	10 x 3 mL (5 each: Level 1, 2)

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001) or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

RET-LINE

Contains a series of reticulocyte concentrations to test your hematology analyzer's ability to accurately recover reticulocyte counts across a range of values. Each kit includes one Instrument Evaluation Report at no extra charge.

CD-Cal Whole Blood Calibrator

CD-Cal is designed for calibration of Abbott CELL-DYN 3200, Ruby, and SAPPHIRE hematology analyzers. Values are provided for WBC, RBC, Hgb, MCV, and Plt. MPV values are provided for the CELL-DYN SAPPHIRE. CD-Cal has 45-day closed vial stability with 7-day open vial stability.

	Catalog #	Description
Tubes	3KC11	2 x 3 mL
	3KC12	5 x 3 mL

Products for HORIBA

	PLATELET-TROL Extended	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE	RET-LINE
Micros 60	○	●	●	●		
Pentra 60, 60 C+		●	●	●	●	
Pentra 80	○	●	●	●	●	
Pentra 80 XL		●	●	●	●	
Pentra 120		●	●	●	●	○

Key ○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

PLATELET-TROL® Extended Platelet Control

PLATELET-TROL Extended is a multi-level control designed specifically for monitoring the elevated platelet ranges of hematology analyzers. PLATELET-TROL Extended has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Instrument	Description
Tubes	PTE004	ABX Pentra 80	12 x 3 mL (4 each: Level 3, 4, 5)*
	PTE006	ABX Micros 60	12 x 3 mL (4 each: Level 3, 5, 6)*

* Approximate Plt values (units in 10^3/mL):
Level 3: 1000 Level 4: 1500 Level 5: 2000 Level 6: 3000

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001) or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

RET-LINE

Contains a series of reticulocyte concentrations to test your hematology analyzer's ability to accurately recover reticulocyte counts across a range of values. Each kit includes one Instrument Evaluation Report at no extra charge.

Products for BD Biosciences

	R&D LeukoReduced RBC/PLT	StatusFlow Series	R&D Retic-I	FETALtrol
BD FACalibur	○	○	○	○
BD FACScanto II	○	○		○
Manual Methodologies	○		○	○

Key ○ = Assay Values are available for each instrument

R&D LeukoReduced RBC/PLT Control

LeukoReduced RBC/PLT Control is a bi-level control product to monitor flow cytometer and Nageotte Chamber methods for quantification of residual leukocytes in leukoreduced red blood cell and platelet products. The WBC target values for the levels are Level 1: 2.0 µL and Level 2: 20.0 µL. LeukoReduced RBC/PLT has a closed vial stability of 75 days with an open vial stability of 30 days or 21 thermal cycles.

	Catalog #	Description
Tubes	LRR001	2 x 3 mL (RBC - 1 each: Level 1, 2)
	LRP001	2 x 3 mL (PLT - 1 each: Level 1, 2)
	LRC001	4 x 3 mL (RBC and PLT - 1 each: Level 1, 2)

StatusFlow® Flow Cytometry Control

StatusFlow is a stable preparation of human peripheral leukocytes and erythrocytes designed for use as a control in immunophenotyping when evaluating RBC lysis, antibody reactivity, instrument set-up, and instrument performance by flow cytometry. Assay values are reported as a percent of total lymphocytes and as the number of cells for the following phenotypes: $CD3^+$, $CD3^+/CD4^+$, $CD3^+/CD8^+$, $CD19^+$, $CD3^-/CD16^+56^+$, $CD20^+$, $CD2^+$, and HLA^-DR^+. Target values (for research use only) are also provided for the following CD markers: kappa, lambda, $CD8^+/CD38^+$, $CD33^+/CD14^+$, $CD7^+/CD3^+$, $CD5^+$, $CD22^+/CD3^-$, and $CD13^+$. Target values for CD45 and CD14, which are intended for gating purposes only, are also included. StatusFlow has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC202	2 x 2.5 mL
	FC302	3 x 2.5 mL
	FC402	4 x 2.5 mL
	FC502	5 x 2.5 mL
	FC204	2 x 4 mL
	FC404	4 x 4 mL
	FC504	5 x 4 mL

StatusFlow^{LO} Flow Cytometry Control

StatusFlow^{LO} is designed to team with StatusFlow to provide a two-level whole blood reference control for monitoring low $CD3^+/CD4^+$ cell counts. Assay values are reported as a percent of total lymphocytes and as the number of cells for $CD3^+$, $CD3^+/CD4^+$, $CD3^+/CD8^+$, $CD19^+$, and $CD3^-/CD16^+56^+$. The $CD3^+/CD4^+$ cell count is less than 200 cells/µL. StatusFlow^{LO} has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC235	1 x 2.5 mL
	FC237	2 x 2.5 mL

StatusFlow^{PRO} Flow Cytometry Control

StatusFlow^{PRO} contains human stem cells and can be used with most flow cytometry methods for identifying $CD34^+$ cells. StatusFlow^{PRO} offers two clinically relevant levels of $CD34^+$ cells. Target values for the Low Level CD34 are approximately 10 cells/µL. Target values for the High Level CD34 are approximately 35 cells/µL. Statusflow^{PRO} facilitates the evaluation of $CD34^+$ gating strategy, evaluation of the CD34 antibody clone selection, lysing reagents and data analysis. StatusFlow^{PRO} has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC234L	1 x 1.5 mL Status Flow^{PRO} (Low)
	FC234H	1 x 1.5 mL Status Flow^{PRO} (High)
	FC236L	2 x 1.5 mL Status Flow^{PRO} (Low)
	FC236H	2 x 1.5 mL Status Flow^{PRO} (High)
	FC238	2 x 1.5 mL Status Flow^{PRO} (1 each: Low, High)

R&D Retic-I Whole Blood Reticulocyte Control

R&D Retic-I is a tri-level whole blood reticulocyte control for manual and automated counting methods. Assay values are provided for the manual method, manual with Miller ocular, and Flow Cytometers using Retic-COUNT Thiazole Orange. The target values for the levels are Level 1: 1.0 %; Level 2: 5.0 %; Level 3: 10.0 %. R&D Retic-I has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	RI001	9 x 1.5 mL (3 each: Level 1, 2, 3)
	RI005	3 x 1.5 mL (1 each: Level 1, 2, 3)

FETALtrol™

FETALtrol is a tri-level control product used for the assesment of fetomaternal hemorrhage. FETALtrol can be used to control both flow cytometry assays and manual stains (KB) for the detection of RBCs containing HbF or Rho (D antigen). FETALtrol has a closed vial stability of 105 days with an open vial stability of 25 thermal cycles.

	Catalog #	Description
Vials	FH101	6 x 2 mL (2 each: Level 1, 2, 3)
	FH102	3 x 2 mL (1 each: Level 1, 2, 3)

Products for **Beckman Coulter**

	CBC-5D	CBC-7	Body Fluid-I	PLATELET-TROL Extended	R&D LeukoReduced RBC/PLT	StatusFlow® Series	R&D Retic-I Plus	R&D Retic-I	R&D Retic-I for DxH 800
Unicel® DxH™ 800, 600	○		○						○
Gen•S™									
LH 700 Series	○		○	○			○		
LH 500 Series	○						○		
HMX									
Ac•T™ 8, Ac•T 10™									
Ac•T diff™, Ac•T diff 2™									
Ac•T 5 diff AL									
Ac•T 5 diff OV									
Ac•T 5 diff CP									
Elite, Epics, Profile, Epics XL, FC 500					○	○		○	

Key ○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE	RET-LINE	RET-LINE B	CBC-CAL PLUS	FETALtrol
Unicel® DxH™ 800, 600	●	●	●	●	○		○	
Gen•S™	●	●	●			○		
LH 700 Series	●	●	●	●		○	○	
LH 500 Series	●	●	●	●		○	○	
HMX	●	●	●			○	○	
Ac•T™ 8, Ac•T 10™	●	●	●					
Ac•T diff™, Ac•T diff 2™	●	●	●					
Ac•T 5 diff AL	●	●	●					
Ac•T 5 diff OV	●	●	●					
Ac•T 5 diff CP	●	●	●					
Elite, Epics, Profile, Epics XL, FC 500								○

Key ○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

CBC-7 Whole Blood Control

CBC-7 is a tri-level control used for manual and semi-automated instruments. CBC-7 has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	72001	10 x 2 mL (Normal)
	72002	10 x 2 mL (5 Low, 5 High)
	72003	12 x 2 mL (4 Low, 4 Normal, 4 High)
	72004	6 x 2 mL (2 Low, 2 Normal, 2 High)

CBC-5D Whole Blood Control
Five-Part WBC Differential

CBC-5D is a tri-level control designed specifically for Beckman Coulter LH 500, LH 700 Series and DxH 800/600 hematology analyzers. The assay table includes values for 23 parameters including nRBCs. CBC-5D is bar-coded for the correct QC file access. Bar codes are available for uploading assay values on the Coulter LH500, LH700 Series and DxH 800/600. CBC-5D has 105-day closed vial stability with an open vial stability of 14 samples within 14 days.

	Catalog #	Description
Tubes	5D003	12 x 5 mL (4 each: Level 1, 2, 3)
	5D004	6 x 5 mL (2 each: Level 1, 2, 3)

Body Fluid-I

Body Fluid-I is an assayed hematology control intended to monitor the reliability of the Beckman Coulter LH 700 Series and DxH 800/600 instruments that quantitatively measure red and white blood cell counts in cerebrospinal fluids, serous fluids, and synovial fluids. Body Fluid-I has a 75-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	BFI001	3 x 3 mL (1 each: Level 1, 2, 3)
	BFI002	6 x 3 mL (2 each: Level 1, 2, 3)

PLATELET-TROL® Extended Platelet Control

PLATELET-TROL Extended is a multi-level control designed specifically for monitoring the elevated platelet ranges of hematology analyzers. PLATELET-TROL Extended has 75-day closed vial stability with 14-day open vial stability. Kit requires high speed vortexer.

	Catalog #	Instrument	Description
Tubes	PTE006	Coulter LH 700 Series	12 x 3 mL (4 each: Level 3, 5, 6)*

* Approximate Plt values (units in 10^3/mL):
Level 3: 1000 Level 5: 2000 Level 6: 3000

R&D LeukoReduced RBC/PLT Control

LeukoReduced RBC/PLT Control is a bi-level control product to monitor flow cytometer and Nageotte Chamber methods for quantification of residual leukocytes in leukoreduced red blood cell and platelet products. The WBC target values for the Levels are Level 1: 2.0 µL and Level 2: 20.0 µL. LeukoReduced RBC/PLT has a closed vial stability of 75 days with an open vial stability of 30 days or 21 thermal cycles.

	Catalog #	Description
Tubes	LRR001	2 x 3 mL (RBC: 1 each: Level 1, 2)
	LRP001	2 x 3 mL (PLT: 1 each: Level 1, 2)
	LRC001	4 x 3 mL (RBC and PLT: 1 each: Level 1, 2)

StatusFlow^{LO} Flow Cytometry Control

StatusFlow^{LO} is designed to team with StatusFlow to provide a two-level whole blood reference control for monitoring low $CD3^+/CD4^+$ cell counts. Assay values are reported as a percent of total lymphocytes and as the number of cells for $CD3^+$, $CD3^+/CD4^+$, $CD3^+/CD8^+$, $CD19^+$, and $CD3^-/CD16^+56^+$. The $CD3^+/CD4^+$ cell count is less than 200 cells/µL. StatusFlow^{LO} has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC235	1 x 2.5 mL
	FC237	2 x 2.5 mL

StatusFlow® Flow Cytometry Control

StatusFlow is a stable preparation of human peripheral leukocytes and erythrocytes designed for use as a control in immunophenotyping when evaluating RBC lysis, antibody reactivity, instrument set-up, and instrument performance by flow cytometry. Assay values are reported as a percent of total lymphocytes and as the number of cells for the following phenotypes: $CD3^+$, $CD3^+/CD4^+$, $CD3^+/CD8^+$, $CD19^+$, $CD3^-/CD16^+56^+$, $CD20^+$, $CD2^+$, and $HLA\text{-}DR^+$. Target values (for research use only) are also provided for the following CD markers: kappa, lambda, $CD8^+/CD38^+$, $CD33^+/CD14^+$, $CD7^+/CD3^+$, $CD5^+$, $CD22^+/CD3^-$, and $CD13^+$. Target values for CD45 and CD14, which are intended for gating purposes only, are also included. StatusFlow has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC202	2 x 2.5 mL
	FC302	3 x 2.5 mL
	FC502	5 x 2.5 mL
	FC404	4 x 4 mL
	FC504	5 x 4 mL

StatusFlow^{PRO} Flow Cytometry Control

StatusFlow^{PRO} contains human stem cells and can be used with most flow cytometry methods for identifying $CD34^+$ cells. StatusFlow^{PRO} offers two clinically relevant levels of $CD34^+$ cells. Target values for the Low Level CD34 are approximately 10 cells/µL. Target values for the High Level CD34 are approximately 35 cells/µL. StatusflowPRO facilitates the evaluation of $CD34^+$ gating strategy, evaluation of the CD34 antibody clone selection, lysing reagents and data analysis. StatusFlow^{PRO} has a closed vial stability of 45 days with an open vial stability of 9 thermal cycles.

	Catalog #	Description
Hemogard Tubes	FC234H	1 x 1.5 mL Status Flow^{PRO} (High)
	FC236L	2 x 1.5 mL Status Flow^{PRO} (Low)
	FC236H	2 x 1.5 mL Status Flow^{PRO} (High)
	FC238	2 x 1.5 mL Status Flow^{PRO} (1 each: Low, High)

R&D Retic-I Whole Blood Reticulocyte Control

R&D Retic-I is a tri-level whole blood reticulocyte control for manual and automated counting methods. Assay values are provided for the manual method, manual with Miller ocular, and Flow Cytometers using Retic-COUNT Thiazole Orange. The target values for the levels are Level 1: 1.0 %; Level 2: 5.0 %; Level 3: 10.0 %. R&D Retic-I has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	RI001	9 x 1.5 mL (3 each: Level 1, 2, 3)
	RI005	3 x 1.5 mL (1 each: Level 1, 2, 3)
Tubes	RI003	9 x 3 mL (3 each: Level 1, 2, 3)
	RI004	3 x 3 mL (1 each: Level 1, 2, 3)

R&D Retic-I for DxH 800 Whole Blood Reticulocyte Control

R&D Retic-I for DxH 800 is a tri-level whole blood reticulocyte control for the Beckman Coulter DxH 800 analyzer. The target values for the levels are Level 1: 1.0%; Level 2: 4.0%; Level 3: 8.0%. R&D Retic-I for DxH 800 has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	RDXH03	9 x 3 mL (3 each: Level 1, 2, 3)

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001) or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

RET-LINE

Contains a series of reticulocyte concentrations to test your hematology analyzer's ability to accurately recover reticulocyte counts across a range of values. Each kit includes one Instrument Evaluation Report at no extra charge.

CBC-CAL PLUS Whole Blood Calibrator

CBC-CAL PLUS is designed for the calibration of most models of Beckman Coulter hematology analyzers. Values are provided for WBC, RBC, Hgb, Hct, MCV, Plt, and MPV parameters for Isoton® II, Isoton III, and Isoton III/UNI-T-PAK reagent systems. Bar Codes are available for uploading assay values to the Coulter HMX, GEN•S, LH 500, LH 700 Series and DxH 800. CBC-CAL PLUS has 45-day closed vial stability with 7-day open vial stability.

	Catalog #	Description
Tubes	8CP33	3 x 4.5 mL

FETALtrol™

FETALtrol is a tri-level control product used for the assesment of fetomaternal hemorrhage. FETALtrol can be used to control both flow cytometry assays and manual stains (KB) for the detection of RBCs containing HbF or Rho (D antigen). FETALtrol has a closed vial stability of 105 days with an open vial stability of 25 thermal cycles.

	Catalog #	Description
Vials	FH101	6 x 2 mL (2 each: Level 1, 2, 3)
	FH102	3 x 2 mL (1 each: Level 1, 2, 3)

Products for ESR

	SEDRite Plus	SEDRite III
Diesse - Mini-Ves™, Ves-Matic™ 10/Easy, Ves-Matic 20	○	
Excyte™ 10/M	○	
Excyte™ 40	○	
Polymedco - Sedimat® 15		○
STARRSED	○	
Westergren, saline diluted	○	
Westergren, sodium citrate diluted	○	
Westergren, undiluted	○	
Wintrobe	○	

Key ○ = Assay Values are available for each instrument

SEDRite Plus Whole Blood Erythrocyte Sedimentation (ESR) Control

SEDRite Plus is a bi-level control formulated to provide values in the clinically normal and elevated ranges, and is designed to monitor erythrocyte sedimentation rate (ESR) values obtained from manual and automated ESR methods. SEDRite Plus is an excellent control for the ESR tests because the control cells rouleaux in the same manner as fresh whole blood cells. Therefore, this product can be used to monitor the factors that cause variability in ESR results, such as technique, time, temperature, and tube position. SEDRite Plus has 195-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	SR002	8 x 9.0 mL (4 each: Level 1, 2)
	SR002X	4 x 9.0 mL (2 each: Level 1, 2)
Tubes	SR003	12 x 4.5 mL (6 each: Level 1, 2)

SEDRite III Whole Blood Erythrocyte Sedimentation (ESR) Control

SEDRite III is a bi-level control designed specifically for the Sedimat 15 analyzer. It is formulated to provide values in the clinically normal and elevated ranges. SEDRite III is an excellent control for the ESR tests because the control cells rouleaux in the same manner as fresh whole blood cells. SEDRite III has 195-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	SED002	4 x 9.0 mL (2 each: Level 1, 2)

Products for HemoCue

	CBC-7	CBC-7 HemoCue Kit	HC WBC	HGB Extended Control	R&D Glu/Hgb	CBC-LINE for HemoCue
HemoCue® Hb 201+	○	●R		○	○	●
HemoCue B-Glucose, Glucose 201					○	
HemoCue WBC			○			
Manual Methodologies	○	○				

Key
○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer
●R = Recommended product for instrument (if assay values are available on >1 product)

CBC-7® Whole Blood Control

CBC-7 is a tri-level control used for manual, semi-automated, and automated instruments capable of measuring up to seven parameters. CBC-7 has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	72001	10 x 2 mL (Normal)
	72002	10 x 2 mL (5 Low, 5 High)
	72003	12 x 2 mL (4 Low, 4 Normal, 4 High)
	72004	6 x 2 mL (2 Low, 2 Normal, 2 High)

CBC-7 HemoCue Kit Whole Blood Hemoglobin Control

CBC-7 HemoCue is a tri-level control used to monitor hemoglobin values obtained from the HemoCue hemoglobin photometer. CBC-7 HemoCue has 105-day closed vial stability with 30-day open vial stability stored at room temperature.

	Catalog #	Description
Vials	HC722	14 x 2 mL (7 Low, 7 Normal)
	HC723	21 x 2 mL (7 Low, 7 Normal, 7 High)
	HC724	6 x 2 mL (2 Low, 2 Normal, 2 High)
	HC725	7 x 2 mL (Low)
	HC728	9 x 2 mL (3 Low, 3 Normal, 3 High)
	HC729	14 x 2 mL (7 Low, 7 High)

HC WBC Whole Blood Control

HC WBC is a tri-level control used to monitor values obtained from a HemoCue WBC system. HC WBC has 105-day closed vial stability with 30 day open vial stability and is provided in 1.5 mL plastic dropper vials.

	Catalog #	Description
Plastic Dropper Vials	WBC00S	3 x 2.0 mL (1 each: Level 1, 2, 3)

HGB Extended Control

HGB Extended Control is an assayed control designed to monitor values obtained from the HemoCue Hemoglobin Photometer. HGB Extended Control has 375-day closed vial stability with 30-day open vial stability at 15-30 °C (59-86 °F) or 2-8 °C (35-46 °F).

	Catalog #	Description
Vials	HGB722	12 x 2 mL (6 Low, 6 Normal)
	HGB729	12 x 2 mL (6 Low, 6 High)
	HGB723	18 x 2 mL (6 Low, 6 Normal, 6 High)
	HGB724	6 x 2 mL (2 Low, 2 Normal, 2 High)
	HGB725	6 x 2 mL (Low)
	HGB727	6 x 2 mL (High)

R&D Glu/Hgb Whole Blood Control

R&D Glu/Hgb is a tri-level control used to monitor the precision and accuracy of HemoCue B-Glucose, Glucose 201, and Hb 201+ analyzers. The three levels of control are designed to provide values in the abnormal low, normal, and abnormal high ranges. Because the control contains erythrocytes, the total test process is verified, including the lysing reagent. R&D Glu/Hgb has 105-day closed vial stability with 30-day open vial stability at 15 - 30 °C (59 - 86 °F) or at 2 - 8 °C (35 - 46 °F), and is provided in 1.5 mL plastic dropper vials.

	Catalog #	Description
Plastic Dropper Vials	GH00L	6 x 1.5 mL (Low)
	GH00N	6 x 1.5 mL (Normal)
	GH00H	6 x 1.5 mL (High)
	GH00LX	3 x 1.5 mL (Low)
	GH00NX	3 x 1.5 mL (Normal)
	GH00HX	3 x 1.5 mL (High)
	GH00S	3 x 1.5 mL (1 Low, 1 Normal, 1 High)

CBC-LINE for HemoCue

Contains whole blood pre-diluted Hgb levels appropriate for use in instrument calibration verification. Kits are customized to the reportable range capabilities of B-Hemoglobin and Hb 201+ analyzers. Each kit includes one Instrument Evaluation Report at no extra charge.

Products for **Manual Methodologies**

CBC-3K Whole Blood Control
Five-Part WBC Differential

CBC-3K is a tri-level control for monitoring Abbott CELL-DYN instruments. Manual values are also provided for Coulter Counter Z series, cyanmethemoglobin method, centrifuged microhematocrit, and hemocytometer WBC and platelet counts. CBC-3K has 75-day closed vial stability with 8-day open vial stability.

	Catalog #	Description
Tubes	3K303	12 x 3 mL (4 Low, 4 Normal, 4 High)
	3K303X	6 x 3 mL (2 Low, 2 Normal, 2 High)

CBC-7® Whole Blood Control

CBC-7 is a tri-level control used for manual, semi-automated, and automated instruments capable of measuring up to seven parameters. Manual values are supplied for a Coulter hemoglobinometer and Z series, cyanmethemoglobin method, centrifuged microhematocrit, and calculated MCV using centrifuged microhematocrit. CBC-7 has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	72001	10 x 2 mL (Normal)
	72002	10 x 2 mL (5 Low, 5 High)
	72003	12 x 2 mL (4 Low, 4 Normal, 4 High)
	72004	6 x 2 mL (2 Low, 2 Normal, 2 High)

CBC-7® HemoCue Kit Whole Blood Hemoglobin Control

CBC-7 HemoCue is a tri-level control used to monitor hemoglobin values obtained from the HemoCue hemoglobin photometer as well as centrifuged microhematocrit. CBC-7 HemoCue has 105-day closed vial stability with 30-day open vial stability stored at room temperature.

	Catalog #	Description
Vials	HC722	14 x 2 mL (7 Low, 7 Normal)
	HC723	21 x 2 mL (7 Low, 7 Normal, 7 High)
	HC724	6 x 2 mL (2 Low, 2 Normal, 2 High)
	HC725	7 x 2 mL (Low)
	HC728	9 x 2 mL (3 Low, 3 Normal, 3 High)
	HC729	14 x 2 mL (7 Low, 7 High)

R&D LeukoReduced RBC Control

LeukoReduced RBC Control is a bi-level control product to monitor flow cytometer and Nageotte Chamber methods for quantification of residual leukocytes in leukoreduced red blood cell products. The WBC target values for the levels are as follows: Level 1: 2.0 µL; Level 2: 20.0 µL. LeukoReduced RBC has a closed vial stability of 75 days with an open vial stability of 30 days or 21 thermal cycles.

	Catalog #	Description
Tubes	LRR001	2 x 3 mL (1 each: Level 1, 2)

R&D LeukoReduced PLT Control

LeukoReduced PLT Control is a bi-level control product to monitor flow cytometer and Nageotte Chamber methods for quantification of residual leukocytes in leukoreduced platelet products. The WBC target values for the levels are Level 1: 2.0 µL; Level 2: 20.0 µL. LeukoReduced PLT has a closed vial stability of 75 days with an open vial stability of 30 days or 21 thermal cycles.

	Catalog #	Description
Tubes	LRP001	2 x 3 mL (1 each: Level 1, 2)

R&D LeukoReduced RBC/PLT Control

LeukoReduced RBC/PLT Control is a bi-level control product to monitor flow cytometer and Nageotte Chamber methods for quantification of residual leukocytes in leukoreduced red blood cell and platelet products. The WBC target values for the levels are Level 1: 2.0 µL; Level 2: 20.0 µL. LeukoReduced RBC/PLT has a closed vial stability of 75 days with an open vial stability of 30 days or 21 thermal cycles.

	Catalog #	Description
Tubes	LRC001	4 x 3 mL (RBC & PLT - 1 each: Level 1, 2)

FETALtrol™

FETALtrol is a tri-level control product used for the assesment of fetomaternal hemorrhage. FETALtrol can be used to control both flow cytometry assays and manual stains (KB) for the detection of RBCs containing HbF or Rho (D antigen). FETALtrol has a closed vial stability of 105 days with an open vial stability of 25 thermal cycles.

	Catalog #	Description
Vials	FH101	6 x 2 mL (2 each: Level 1, 2, 3)
	FH102	3 x 2 mL (1 each: Level 1, 2, 3)

R&D 4K Retic Whole Blood Reticulocyte Control

R&D 4K Retic is a bi-level whole blood reticulocyte control for the Abbott CELL-DYN SAPPHIRE hematology analyzers, and for manual reticulocytes. The target values for the levels are Level 1: 1.0 %; Level 2: 10.0 %. R&D 4K Retic has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	4R001	4 x 3 mL (2 each: Level 1, 2)

R&D Retic Whole Blood Reticulocyte Control

R&D Retic is a tri-level whole blood reticulocyte control for manual counting methods. Assay values are provided for the manual method and manual with Miller ocular. The target values for the levels are Level 1: 1.0 %; Level 2: 5.0 %; Level 3: 10.0 %. R&D Retic has 75-day closed vial stability with 21-day open vial stability.

	Catalog #	Description
Vials	RE003	9 x 1.5 mL (3 each: Level 1, 2, 3)
	RE003X	3 x 1.5 mL (1 each: Level 1, 2, 3)

R&D Body Fluid

R&D Body Fluid is a bi-level control used to monitor total cell counts performed manually using a hemocytometer. The two levels of this control are designed to monitor values in the normal and abnormal ranges. This product contains mammalian erythrocytes and leukocytes in a plasma like fluid. R&D Body Fluid Control has 105-day closed vial stability with open vial stability of 90 days (31 thermal cycles).

	Catalog #	Description
Vials	BF001	2 x 2 mL (1 each: Level 1, 2)
	BF002	4 x 2 mL (2 each: Level 1, 2)

R&D Retic-I Whole Blood Reticulocyte Control

R&D Retic-I is a tri-level whole blood reticulocyte control for manual and automated counting methods. Manual assay values are provided for the manual method and manual with Miller ocular. The target values for the levels are Level 1: 1.0 %; Level 2: 5.0 %; Level 3: 10.0 %. R&D Retic-I has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	RI001	9 x 1.5 mL (3 each: Level 1, 2, 3)
	RI005	3 x 1.5 mL (1 each: Level 1, 2, 3)

Sickle QC Whole Blood Control

Sickle QC is a positive and negative control for solubility tests used to detect Hemoglobin S. Sickle QC control is compatible with the following sickle cell tests: Chembio Diagnostic System Sickle-STAT, Columbia Calibre® Sickle Cell Reagent, Dade® Behring Sickle Sol™ Solubility Test, Ortho/Johnson SICKLEDEX®, Pacific Hemostasis SickleScreen® Sickling Hemoglobin Screening Kit, and Streck Sickle-Chex Solubility Kit. Sickle QC has 195-day closed vial stability with 100-day open vial stability.

	Catalog #	Description
Vials	SQC001	2 x 2.5 mL (1 each: Level 1, 2)
	SQC002	4 x 2.5 mL (2 each: Level 1, 2)

SEDRite Plus Whole Blood Erythrocyte Sedimentation (ESR) Control

SEDRite Plus is a bi-level control formulated to provide values in the clinically normal and elevated ranges, and is designed to monitor erythrocyte sedimentation rate (ESR) values obtained from manual and automated ESR methods. Manual values are supplied for Westergren and Wintrobe. SEDRite Plus is an excellent control for the ESR tests because the control cells rouleaux in the same manner as fresh whole blood cells. Therefore, this product can be used to monitor the factors that cause variability in ESR results, such as technique, time, temperature, and tube position. SEDRite Plus has 195-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	SR002	8 x 9.0 mL (4 each: Level 1, 2)
	SR002X	4 x 9.0 mL (2 each: Level 1, 2)
Tubes	SR003	12 x 4.5 mL (6 each: Level 1, 2)

SEDRite III Whole Blood Erythrocyte Sedimentation (ESR) Control

SEDRite III is a bi-level control designed specifically for the Sedimat 15 analyzer. It is formulated to provide values in the clinically normal and elevated ranges. SEDRite III is an excellent control for the ESR tests because the control cells rouleaux in the same manner as fresh whole blood cells. SEDRite III has 195-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	SED002	4 x 9.0 mL (2 each: Level 1, 2)

HCT Extended

HCT Extended is an assayed bi-level control designed to monitor values obtained from automated, semi-automated and manual methods. HCT Extended has a 75-day closed vial stability with 21-day open vial stability.

	Catalog #	Description
Tubes	HCT004	4 x 3 mL (2 Abnormal I, 2 Abnormal II)

Products for **Mindray**

	CBC5 DMR OUT of US	CBC-3D OUT of US	CBC-3D IN US	CBC- 3D IN US Vet	CBC-CAL PLUS OUT of US	CBC-CAL PLUS IN US	CBC-CAL PLUS IN US Vet	Body Fluid-I	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE
BC-5800	○				○				●	●	●	●
BC-5600	○				○				●	●	●	●
BC-5500	○				○				●	●	●	●
BC-5200	○				○				●	●	●	●
BC-5380	○				○				●	●	●	●
BC-5300/ 5300Vet	○				○		○		●	●	●	●
BC-5100/ 5100 Vet	○				○		○		●	●	●	●
BC-5000/ 5000Vet	○	○			○				●	●	●	●
BC-5150	○	○			○				●	●	●	●
BC-5180	○				○				●	●	●	●
BC-3000 PLUS		○			○				●	●	●	●
BC-3200		○	○		○	○			●	●	●	●
BC-2900		○			○				●	●	●	●
BC-1800		○			○				●	●	●	●
BC-3000CT		○			○				●	●	●	●
BC-2800/ 2800Vet		○		○	○		○		●	●	●	●
BC-2600/ 2600Vet		○		○	○		○		●	●	●	●
BC-3600		○	○		○	○			●	●	●	●
BC-3300		○			○				●	●	●	●
BC-6800								○	●	●	●	●

Key
○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

CBC-5DMR Whole Blood Control
Five-Part WBC Differential

CBC-5DMR is a tri-level control designed for monitoring Mindray Hematology analyzers. CBC-5DMR has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	5DMR02	6 x 3 mL (2 Low, 2 Normal, 2 High) *AVAILABLE OUT OF US ONLY*
	5DMR04	12 x 3 mL (4 Low, 4 Normal, 4 High) *AVAILABLE OUT OF US ONLY*

CBC-3D® Whole Blood Control
Three-Part WBC Differential

CBC-3D is a tri-level control designed for monitoring Mindray Hematology analyzers. CBC-3D has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	3D506	6 x 3 mL (2 Low, 2 Normal, 2 High) *AVAILABLE OUT OF US ONLY*
	3D506US	6 x 3 mL (2 Low, 2 Normal, 2 High) *AVAILABLE IN US ONLY*
	3D506VETUS	6 x 3 mL (2 Low, 2 Normal, 2 High) *VET ONLY*

CBC-CAL PLUS Whole Blood Calibrator

CBC-CAL PLUS is designed for calibration of Hematology analyzers. CBC-CAL PLUS has 45-day closed vial stability with 7-day open vial stability.

	Catalog #	Description
Tubes	8CP13	2 x 3 mL *AVAILABLE OUT OF US ONLY*
	8CP13US	2 x 3 mL *AVAILABLE IN US ONLY*
	8CP13VETUS	2 x 3 mL *VET ONLY*

Body Fluid-I

Body Fluid-I is an assayed hematology control intended to monitor the reliability of the Mindray BC-6800 instrument that quantitatively measure red and white blood cell counts in cerebrospinal fluids, serous fluids, and synovial fluids. R&D Body Fluid-I has a 75-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Vials	BFI001	3 x 3 mL (1 each: Level 1, 2, 3)
	BFI002	6 x 3 mL (2 each: Level 1, 2, 3)

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001) or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

Products for Siemens Healthineers

	CBC-Tech	PLATELET-TROL Extended	R&D ADVIA Retic Plus	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE	RET-LINE B	Tech-Cal
ADVIA® 60	○			●	●	●			○
ADVIA 70				●	●	●	●		
ADVIA 120/2120/2120i	○	○	○	●	●		●	○	○

Key ○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

CBC-Tech Whole Blood Control
Five-Part WBC Differential

CBC-Tech is a tri-level control designed specifically for the Bayer ADVIA 120, ADVIA 2120, 2120i and ADVIA 60. The ADVIA 120 and ADVIA 2120 have a bar-coded assay table that includes values for 20 parameters. CBC-Tech is bar-coded for correct QC file access. CBC-Tech has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	CT001	10 x 3.5 mL (Normal)
	CT002	10 x 3.5 mL (5 Low, 5 High)
	CT003	12 x 3.5 mL (4 Low, 4 Normal, 4 High)
	CT003X	6 x 3.5 mL (2 Low, 2 Normal, 2 High)

PLATELET-TROL® Extended Platelet Control

PLATELET-TROL Extended is a multi-level control designed specifically for monitoring the elevated platelet ranges of hematology analyzers. PLATELET-TROL Extended has 75-day closed vial stability with 14-day open vial stability. Kit requires high speed vortexer.

	Catalog #	Instrument	Description
Tubes	PTE006	Bayer ADVIA 120	12 x 3 mL (4 each: Level 3, 5, 6)*

* Approximate Plt values (units in 10^3/mL):
Level 3: 1000 Level 5: 2000 Level 6: 3000

R&D ADVIA Retic Plus Whole Blood Reticulocyte Control

R&D ADVIA Retic Plus is a tri-level whole blood reticulocyte control for the ADVIA 120, 2120, and 2120i hematology analyzer. The bar-coded assay table provides values for Retic %, Retic RBC, MCVg, MCVr, CHCMg, CHCMr, CHg, and CHr. The target values for the levels are Level 1: 1.5 %; Level 2: 5.0 %; Level 3: 9.0 %. R&D ADVIA Retic Plus is bar-coded for correct QC file access. R&D ADVIA Retic Plus has 75-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Tubes	RA003	6 x 4 mL (2 each: Level 1, 2, 3)

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001) or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

RET-LINE

Contains a series of reticulocyte concentrations to test your hematology analyzer's ability to accurately recover reticulocyte counts across a range of values. Each kit includes one Instrument Evaluation Report at no extra charge.

Tech-Cal Whole Blood Calibrator

Tech-Cal is designed for calibration of ADVIA 120, 2120, 2120i, and ADVIA 60 instruments. The ADVIA 120 and 2120 have a bar-coded assay table which includes values for WBCB, WBCP, RBC, Hgb, MCV, CHCM %, Plt, NEUTx %, and NEUTy %. Tech-Cal is bar-coded for correct QC file access. Tech-Cal calibrator has 45-day closed vial with 5-day open vial stability.

	Catalog #	Description
Tubes	TCV11	2 x 3.5 mL

Products for **Sysmex**

	CBC-X	CBC-ST Plus	Body Fluid-I	HCT Extended	PLATELET-TROL Extended	XERet Control	CBC-LINE	CBC-LINE Ultra Low	CBC-LINE Ultra Low Plus RBC	PLT-LINE	RET-LINE	NEK-CAL
K-1000, K-800, K-1000/ KCP-1, K-4500							●	●	●			
KX-21, KX-21N		○					●	●	●			○
SF-3000							●	●	●			
XE-5000	○					○	●	●	●			
XE-2100™	○			○	○	○	●	●	●	●	○	○
XE-2100D				○	○		●		●			○
XN-Series	○		○			○			●			
XT-4000i	○		○			○	●	●	●	●	○	○
XT-2000i™	○					○	●	●	●	●	○	
XT-1800i™	○						●	●	●	●		
XS-1000i	○						●		●			

Key
○ = Assay Values are available for each instrument
● = Please call or check our website for catalog number best suited for your analyzer

CBC-X Whole Blood Control
Five-Part WBC Differential

CBC-X is a tri-level control designed specifically for the Sysmex XE-5000, XE-2100, XT-4000i, XT-2000i, XN-Series, XT-1800i, and XS-1000i hematology analyzers. Assay tables include values for 27 parameters including nRBC's. CBC-X is bar-coded for correct QC file access. CBC-X has 75-day closed vial stability with an open vial stability of 15 samples within 15 days.

	Catalog #	Description
Tubes	X003	12 x 4.5 mL (4 Low, 4 Normal, 4 High)
	X003X	6 x 4.5 mL (2 Low, 2 Normal, 2 High)
	X002	10 x 4.5 mL (5 Normal, 5 High)

CBC-ST Plus Whole Blood Control
Three-Part WBC Differential

CBC-ST Plus is a tri-level control for monitoring the Sysmex KX-21/KX-21N analyzers. CBC-ST Plus has 105-day closed vial stability with 14-day open vial stability.

	Catalog #	Description
Vials	ST001	10 x 2.5 mL (Normal)
	ST002	10 x 2.5 mL (5 Low, 5 High)
Tubes	ST207	12 x 2.5 mL (4 Low, 4 Normal, 4 High)
	ST208	6 x 2.5 mL (2 Low, 2 Normal, 2 High)
	ST405	12 x 4 mL (4 Low, 4 Normal, 4 High)
	ST406	S6 x 4 mL (2 Low, 2 Normal, 2 High)

R&D Body Fluid-I

R&D Body Fluid-I Control is an assayed hematology control intended to monitor the reliability of the Sysmex XT-4000i and XN-Series instruments that quantitatively measure red and white blood cell counts in cerebrospinal fluids, serious fluids, and synovial fluids. R&D Body Fluid-I has a 75-day closed vial stability with 30-day open vial stability.

	Catalog #	Description
Tubes	BFI001	3 x 3.0 mL (1 each: Level 1, 2, 3)
	BFI002	6 x 3.0 mL (2 each: Level 1, 2, 3)

HCT Extended

HCT Extended is an assayed bi-level control designed to monitor values obtained from automated, semi-automated and manual methods. HCT Extended has a 75-day closed vial stability with 21-day open vial stability.

	Catalog #	Description
Tubes	HCT004	4 x 3 mL (2 Abnormal I, 2 Abnormal II)

PLATELET-TROL® Extended Platelet Control

PLATELET-TROL Extended is a multi-level control designed specifically for monitoring the elevated platelet ranges of hematology analyzers. PLATELET-TROL Extended has 75-day closed vial stability with 14-day open vial stability. Kit requires high speed vortexer.

	Catalog #	Instrument	Description
Tubes	PTE006	Sysmex XE-2100	12 x 3 mL (4 each: Level 3, 5, 6)*

* Approximate Plt values (units in 10^3/mL):
Level 3: 1000 Level 5: 2000 Level 6: 3000

XERet Control

XERet Control is a tri-level control designed for use in monitoring reticulocytes on the Sysmex XE-5000, XE-2100, XT-4000i, XT-2000i and XN-Series hematology analyzers. XERet Control has 75-day closed vial stability with an open vial stability of 15 samples within 15 days.

	Catalog #	Description
Tubes	XER003X	6 x 3 mL (2 each: Level 1, 2, 3)

CBC-LINE

Contains pre-diluted WBC, RBC/Hgb, and Plt levels. Kits are customized to the reportable range capabilities of all major hematology analyzers to provide a kit best suited to your needs. When CBC-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

CBC-LINE Ultra Low/Ultra Low Plus RBC

CBC-LINE Ultra Low/Ultra Low Plus RBC Range Linearity Kits are pre-diluted samples that provide a means of measuring a hematology instrument's performance and reportable range at the very low end of the linearity range for white blood cell and platelet parameters (UL001), or white blood cell, red blood cell, and platelet determinations (UL002). Linearity combined with independently verified and documented calibration is used to establish the range of lowest patient values that can be accurately reported. CBC-LINE Ultra Low/Ultra Low Plus RBC kits have 105-day closed vial stability with an immediate use for open vial stability.

PLT-LINE

Contains pre-diluted platelet levels. Kits are customized to the reportable range capabilities of the hematology analyzers to provide a kit best suited to your needs. When PLT-LINE Kits are used in combination with independently verified and documented calibration, the information can be used to establish the range of lowest and highest values that can be accurately reported by the hematology analyzer. Each kit includes one Instrument Evaluation Report at no extra charge. Kit requires high speed vortexer.

RET-LINE

Contains a series of Reticulocyte concentrations to test your hematology analyzer's ability to accurately recover reticulocyte counts across a range of values. Each kit includes one Instrument Evaluation Report at no extra charge.

NEK-CAL Whole Blood Calibrator

NEK-CAL is designed for calibration of Sysmex XE-2100, XE-2100D, XT-4000i, and KX-21/KX-21N hematology analyzers. Values are provided for WBC, RBC, Hgb, MCV, Hct, and Plt. NEK-CAL has 45-day closed vial with 5-day open vial stability.

	Catalog #	Description
Tubes	NEK11	2 x 3.5 mL

CBC-Monitor2

CBC-Monitor2 is a complimentary web-based inter-laboratory QC service available for R&D Systems hematology controls.

CBC-Monitor2 is a key Quality Assurance tool for your laboratory providing real-time statistical results that can be reviewed and saved for quality records.

Key Features:

- Easy online enrollment
- Simple user interface
- Robust data analysis
- 12 months of data history
- Available in English and French

To register, visit:
cbcmonitor2.rndsystems.com

For assistance, please call:
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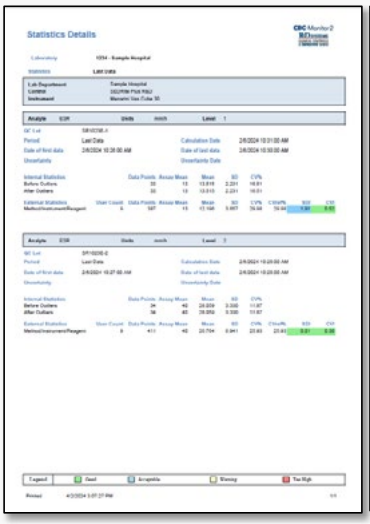

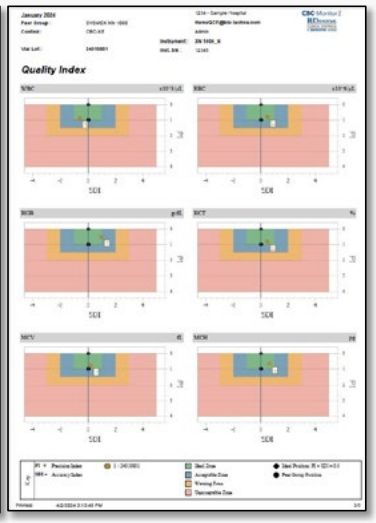

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