

Boule 3PD Hematology Control

CONTROL

IVD

LOT



CONT

4.5 mL



Tri-Level	32503-5K	2025/07/31
Low	32503-51	2025/07/31
Normal	32503-52	2025/08/01
High	32503-53	2025/08/08

Open Vial Stability: 14 days

LOW CONTROL		Sysmex KX Series	Mindray 3000 Series	ABX Micros 45/60	Orphee Mythic 18	ERMA PCE-210	Diatron Abacus Jr.	Nihon Kohden MEK 6400/6410/6420	
Lot 32503-51									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	3.2	3.3	3.4	3.4	3.3	3.2	3.3	0.3
Lymph #	x10 ⁹ /L	1.3	1.3	1.6	1.5	1.2	1.3	1.5	0.5
Mid # (Mxd*)	x10 ⁹ /L	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Gran # (Neut*)	x10 ⁹ /L	1.6	1.7	1.6	1.8	1.9	1.7	1.5	0.8
Lymph	%	41.5	39.4	45.7	43.0	37.5	41.5	46.8	5.0
Mid (Mxd*)	%	8.4	9.1	8.6	5.2	4.1	6.0	6.6	4.0
Gran (Neut*)	%	50.1	51.5	45.7	51.8	58.4	52.5	46.6	5.0
RBC	x10 ¹² /L	2.30	2.39	2.30	2.31	2.43	2.38	2.36	0.12
Hgb	g/dL	5.0	5.5	5.4	5.4	5.6	5.6	5.4	0.3
Hct	%	14.5	16.4	15.2	16.1	17.2	16.5	16.0	3.0
MCV	fL	63.2	68.5	66.2	69.9	70.9	69.3	68.0	7.0
MCH	pg	21.7	23.0	23.5	23.4	23.0	23.5	22.9	2.0
MCHC	g/dL	34.5	33.5	35.5	33.5	32.6	33.9	33.8	4.0
RDW-CV	%	13.7	14.6	16.1	16.2	16.4	17.0	18.3	4.5
RDW-SD	fL	36.1	na	na	na	na	na	na	5.7
PLT	x10 ⁹ /L	79	98	98	91	98	75	101	15
MPV	fL	9.8	11.0	11.2	11.8	11.1	10.1	11.5	1.5
NORMAL CONTROL		Sysmex KX Series	Mindray 3000 Series	ABX Micros 45/60	Orphee Mythic 18	ERMA PCE-210	Diatron Abacus Jr.	Nihon Kohden MEK 6400/6410/6420	
Lot 32503-52									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	8.0	8.1	8.1	8.2	8.8	7.9	8.2	0.6
Lymph #	x10 ⁹ /L	3.6	3.3	3.8	3.6	3.4	3.4	3.8	0.6
Mid # (Mxd*)	x10 ⁹ /L	1.0	1.0	0.7	0.5	0.5	0.7	0.5	0.5
Gran # (Neut*)	x10 ⁹ /L	3.5	3.9	3.7	4.1	4.9	3.8	4.0	1.0
Lymph	%	44.0	40.8	46.6	43.5	38.2	42.9	46.5	5.0
Mid (Mxd*)	%	12.0	12.1	8.3	6.6	5.7	9.0	5.1	4.0
Gran (Neut*)	%	44.0	47.1	45.1	49.9	56.1	48.1	48.4	5.0
RBC	x10 ¹² /L	4.17	4.33	4.16	4.16	4.24	4.17	4.20	0.18
Hgb	g/dL	12.5	12.6	12.6	12.6	12.8	12.4	12.9	0.4
Hct	%	34.0	39.2	36.5	38.3	40.2	38.8	37.3	3.5
MCV	fL	81.5	90.6	87.7	92.1	94.7	93.0	88.7	7.0
MCH	pg	30.0	29.1	30.3	30.3	30.2	29.7	30.7	2.0
MCHC	g/dL	36.8	32.1	34.5	32.9	31.8	32.0	34.6	4.0
RDW-CV	%	9.9	11.2	11.7	11.8	12.1	13.6	14.4	4.5
RDW-SD	fL	31.2	na	na	na	na	na	na	5.2
PLT	x10 ⁹ /L	248	270	261	242	257	250	292	30
MPV	fL	9.7	10.4	10.8	11.6	10.5	9.9	11.5	1.5
HIGH CONTROL		Sysmex KX Series	Mindray 3000 Series	ABX Micros 45/60	Orphee Mythic 18	ERMA PCE-210	Diatron Abacus Jr.	Nihon Kohden MEK 6400/6410/6420	
Lot 32503-53									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	19.4	19.0	19.4	19.6	19.3	19.2	20.5	1.8
Lymph #	x10 ⁹ /L	11.8	10.5	11.8	11.5	10.1	11.5	13.6	1.5
Mid # (Mxd*)	x10 ⁹ /L	1.6	2.0	1.3	1.1	1.2	1.4	1.3	1.0
Gran # (Neut*)	x10 ⁹ /L	6.0	6.6	6.3	7.1	8.0	6.3	5.6	2.5
Lymph	%	60.5	54.9	60.9	58.5	52.1	60.0	66.4	5.0
Mid (Mxd*)	%	8.5	10.5	6.8	5.5	6.3	7.1	6.3	4.0
Gran (Neut*)	%	31.0	34.6	32.3	36.0	41.6	32.9	27.3	5.0
RBC	x10 ¹² /L	4.98	5.26	5.01	4.98	4.98	4.87	5.06	0.22
Hgb	g/dL	16.9	16.7	16.6	16.5	16.7	16.1	17.2	0.5
Hct	%	44.4	52.0	48.8	50.0	50.4	49.5	49.0	4.0
MCV	fL	89.2	98.9	97.5	100.4	101.2	101.6	96.8	7.0
MCH	pg	33.9	31.7	33.1	33.1	33.5	33.1	34.0	2.0
MCHC	g/dL	38.1	32.1	34.0	33.0	33.1	32.5	35.1	4.0
RDW-CV	%	12.3	12.5	12.6	12.7	13.7	14.3	15.6	4.5
RDW-SD	fL	40.1	na	na	na	na	na	na	4.8
PLT	x10 ⁹ /L	542	580	574	522	497	565	650	60
MPV	fL	10.0	10.6	11.1	11.7	11.4	9.9	11.8	1.5

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4.5 mL



Tri-Level	32503-5K	2025/07/31
Low	32503-51	2025/07/31
Normal	32503-52	2025/08/01
High	32503-53	2025/08/08

Open Vial Stability: 14 days

LOW CONTROL		Beckman Coulter Series								
		S-Plus Series	JT Series	STKR STKS™	MAXM™	MD Series	OnyX	Act Diff	Act 10 T Series	
Lot 32503-51										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	0.3
Lymph #	x10 ⁹ /L	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.3	0.5
Mono #	x10 ⁹ /L	0.3	0.3	0.3	0.3	0.3	0.3	0.3	na	0.3
Gran #	x10 ⁹ /L	1.7	1.7	1.7	1.7	1.8	1.8	1.8	na	0.8
Lymph	%	43.1	43.1	43.1	43.1	43.1	43.1	43.1	36.6	5.0
Mono	%	5.4	5.4	5.4	5.4	5.4	5.4	5.4	na	4.0
Gran	%	51.5	51.5	51.5	51.5	51.5	51.5	51.5	na	5.0
RBC	x10 ¹² /L	2.31	2.31	2.31	2.31	2.30	2.30	2.30	2.30	0.12
Hgb	g/dL	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.3	0.3
Hct	%	15.3	15.3	15.3	15.3	15.6	15.6	15.6	15.6	3.0
MCV	fL	66.3	66.3	66.3	66.3	67.7	67.7	67.7	67.7	7.0
MCH	pg	23.4	23.4	23.4	23.4	23.0	23.0	23.0	23.0	2.0
MCHC	g/dL	35.3	35.3	35.3	35.3	34.0	34.0	34.0	34.0	4.0
RDW	%	19.1	19.1	19.1	19.1	17.3	17.3	17.3	na	4.5
PLT	x10 ⁹ /L	80	80	80	80	77	77	77	77	15
MPV	fL	11.8	11.8	11.8	11.8	11.5	11.5	11.5	11.5	1.5
NORMAL CONTROL		S-Plus Series	JT Series	STKR STKS™	MAXM™	MD Series	OnyX	Act Diff	Act 10 T Series	
Lot 32503-52										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	8.4	8.4	8.4	8.4	8.2	8.2	8.2	8.2	0.6
Lymph #	x10 ⁹ /L	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.1	0.6
Mono #	x10 ⁹ /L	0.7	0.7	0.7	0.7	0.7	0.7	0.7	na	0.5
Gran #	x10 ⁹ /L	3.9	3.9	3.9	3.9	3.8	3.8	3.8	na	1.0
Lymph	%	44.5	44.5	44.5	44.5	44.5	44.5	44.5	37.8	5.0
Mono	%	8.6	8.6	8.6	8.6	8.6	8.6	8.6	na	4.0
Gran	%	46.9	46.9	46.9	46.9	46.9	46.9	46.9	na	5.0
RBC	x10 ¹² /L	4.19	4.19	4.19	4.19	4.16	4.16	4.16	4.16	0.18
Hgb	g/dL	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	0.4
Hct	%	36.6	36.6	36.6	36.6	36.7	36.7	36.7	36.7	3.5
MCV	fL	87.3	87.3	87.3	87.3	88.3	88.3	88.3	88.3	7.0
MCH	pg	30.1	30.1	30.1	30.1	30.0	30.0	30.0	30.0	2.0
MCHC	g/dL	34.4	34.4	34.4	34.4	34.1	34.1	34.1	34.1	4.0
RDW	%	13.7	13.7	13.7	13.7	12.6	12.6	12.6	na	4.5
PLT	x10 ⁹ /L	235	235	235	235	230	230	230	230	30
MPV	fL	11.6	11.6	11.6	11.6	11.5	11.5	11.5	11.5	1.5
HIGH CONTROL		S-Plus Series	JT Series	STKR STKS™	MAXM™	MD Series	OnyX	Act Diff	Act 10 T Series	
Lot 32503-53										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	20.1	20.1	20.1	20.1	19.7	19.7	19.7	19.7	1.8
Lymph #	x10 ⁹ /L	12.1	12.1	12.1	12.1	11.9	11.9	11.9	10.1	1.5
Mono #	x10 ⁹ /L	1.3	1.3	1.3	1.3	1.3	1.3	1.3	na	1.0
Gran #	x10 ⁹ /L	6.7	6.7	6.7	6.7	6.5	6.5	6.5	na	2.5
Lymph	%	60.2	60.2	60.2	60.2	60.2	60.2	60.2	51.2	5.0
Mono	%	6.6	6.6	6.6	6.6	6.6	6.6	6.6	na	4.0
Gran	%	33.2	33.2	33.2	33.2	33.2	33.2	33.2	na	5.0
RBC	x10 ¹² /L	5.02	5.02	5.02	5.02	5.01	5.01	5.01	5.01	0.22
Hgb	g/dL	16.5	16.5	16.5	16.5	16.4	16.4	16.4	16.4	0.5
Hct	%	47.8	47.8	47.8	47.8	48.4	48.4	48.4	48.4	4.0
MCV	fL	95.3	95.3	95.3	95.3	96.7	96.7	96.7	96.7	7.0
MCH	pg	32.9	32.9	32.9	32.9	32.7	32.7	32.7	32.7	2.0
MCHC	g/dL	34.5	34.5	34.5	34.5	33.9	33.9	33.9	33.9	4.0
RDW	%	14.6	14.6	14.6	14.6	13.6	13.6	13.6	na	4.5
PLT	x10 ⁹ /L	509	509	509	509	505	505	505	505	60
MPV	fL	11.9	11.9	11.9	11.9	11.8	11.8	11.8	11.8	1.5

STKS*, MAXM* (CBC parameters only)



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4.5 mL

Tri-Level	32503-5K	2025/07/31
Low	32503-51	2025/07/31
Normal	32503-52	2025/08/01
High	32503-53	2025/08/08



Open Vial Stability: 14 days

LOW CONTROL		Abbott CELL-DYN Series				
		1400	1600	1700	1800	
Lot 32503-51						
Parameters		Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	3.4	3.4	3.4	3.2	0.3
Lymph #	x10 ⁹ /L	1.2	1.2	1.3	1.2	0.5
Mid #	x10 ⁹ /L	na	0.3	0.3	0.3	0.3
Gran #	x10 ⁹ /L	2.2	2.0	1.8	1.7	0.8
Lymph	%	35.8	35.8	38.1	36.0	5.0
Mid	%	na	5.3	7.2	10.5	4.0
Gran	%	64.2	58.9	54.7	53.5	5.0
RBC	x10 ¹² /L	2.39	2.39	2.39	2.46	0.12
Hgb	g/dL	5.6	5.6	5.6	5.6	0.3
Hct	%	15.5	15.5	15.6	16.2	3.0
MCV	fL	65	65	65	66	7
MCH	pg	23.4	23.4	23.4	22.8	2.0
MCHC	g/dL	36.1	36.1	35.9	34.6	4.0
RDW	%	na	20.9	20.9	18.9	4.5
PLT	x10 ³ /L	82	82	82	78	15
NORMAL CONTROL		1400	1600	1700	1800	
Lot 32503-52						
Parameters		Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	8.5	8.5	8.5	8.1	0.6
Lymph #	x10 ⁹ /L	3.2	3.2	3.5	3.1	0.6
Mid #	x10 ⁹ /L	na	0.8	0.8	1.0	0.5
Gran #	x10 ⁹ /L	5.3	4.5	4.2	4.0	1.0
Lymph	%	37.6	37.6	40.7	38.5	5.0
Mid	%	na	9.2	9.3	12.4	4.0
Gran	%	62.4	53.2	50.0	49.1	5.0
RBC	x10 ¹² /L	4.24	4.24	4.24	4.24	0.18
Hgb	g/dL	12.6	12.6	12.6	12.7	0.4
Hct	%	36.9	36.9	36.8	37.3	3.5
MCV	fL	87	87	87	88	7
MCH	pg	29.7	29.7	29.7	30.0	2.0
MCHC	g/dL	34.1	34.1	34.2	34.0	4.0
RDW	%	na	15.2	15.2	13.5	4.5
PLT	x10 ³ /L	265	265	265	246	30
HIGH CONTROL		1400	1600	1700	1800	
Lot 32503-53						
Parameters		Mean	Mean	Mean	Mean	± Range
WBC	x10 ⁹ /L	19.7	19.7	19.7	19.1	1.8
Lymph #	x10 ⁹ /L	10.2	10.2	10.8	9.9	1.5
Mid #	x10 ⁹ /L	na	1.9	1.8	2.4	1.0
Gran #	x10 ⁹ /L	9.5	7.5	7.1	6.8	2.5
Lymph	%	51.9	51.9	55.1	51.6	5.0
Mid	%	na	9.8	8.9	12.7	4.0
Gran	%	48.1	38.3	36.0	35.7	5.0
RBC	x10 ¹² /L	5.04	5.04	5.04	5.02	0.22
Hgb	g/dL	16.6	16.6	16.6	16.6	0.5
Hct	%	47.4	47.4	47.4	47.7	4.0
MCV	fL	94	94	94	95	7
MCH	pg	32.9	32.9	32.9	33.1	2.0
MCHC	g/dL	35.0	35.0	35.0	34.8	4.0
RDW	%	na	16.3	16.3	17.0	4.5
PLT	x10 ⁹ /L	585	585	585	540	60

Note: Platelet/RBC - causing alarms, and WBC differential "R" flags should be disregarded for Abbott Series.

