

LOW CONTROL		Sysmex K1000 K-4500	Sysmex KX21N, XP300	Abbott CELL-DYN	Mindray BC-2800 BC-3000	ABX Micros45/60	Nihon Kohden MEK SERIES CELTAC ALPHA	MEDONIC CA series Swelab	ORPHEE MYTHIC 18	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	mean	+ Range
WBC	x10 <sup>9</sup> /L	3.0	3.0	3.0	3.2	3.3	2.9	2.9	3.0	0.6
Lymph #	x10 <sup>9</sup> /L	Na	2.2	2.2	2.1	2.2	2.0	2.2	2.0	1.0
Mid # (Mxd*)	x10 <sup>9</sup> /L	Na	0.2	0.2	Na	0.2	Na	Na	Na	0.4
Gran#(Neut*)	x10 <sup>9</sup> /L	Na	1.5	1.5	Na	1.5	Na	Na	Na	0.8
Lymph	%	Na	57.0	57.0	52.0	57.0	48.0	57.0	48.0	10
Mid (Mxd*)	%	Na	6.0	6.0	Na	6.0	Na	Na	Na	5.0
Gran (Neut*)	%	Na	37	37	Na	37	Na	Na	Na	10
RBC	x10 <sup>12</sup> /L	2.93	2.89	2.86	2.88	2.95	2.80	2.86	2.90	0.20
Hgb	g/dL	7.0	6.9	7.3	7.3	7.3	7.1	7.0	7.3	0.5
Hct	%	21.9	21.6	21.3	21.0	21.7	21.2	21.1	21.1	3.0
MCV	fL	74.7	74.7	74.4	73.0	73.5	75.7	73.4	72.7	5.0
MCH	pg	23.8	23.8	25.5	25.3	24.7	25.3	24.5	25.2	3.0
MCHC	g/dL	31.9	31.9	34.3	34.7	33.6	33.5	33.3	34.6	3.0
RDW-CV	%	12.8	12.5	11.5	13.8	11.5	12.3	12.0	12.5	3.5
PLT	x10 <sup>9</sup> /L	74	72	80	90	80	74	80	80	30
MPV	fL	9.8	10.0	10.5	8.5	10.8	9.8	10.8	10.5	2.0
NORMAL CONTROL		Sysmex K1000 K-4500	Sysmex KX21N, XP300	Abbott CELL-DYN	Mindray BC-2800 BC-3000	ABX Micros45/60	Nihon Kohden MEK SERIES CELTAC ALPHA	MEDONIC CA series Swelab	ORPHEE MYTHIC 18	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	6.8	6.9	7.1	7.3	7.1	7.0	7.1	7.2	1.2
Lymph #	x10 <sup>9</sup> /L	Na	2.8	2.8	2.8	2.8	2.8	2.8	Na	1.5
Mid # (Mxd*)	x10 <sup>9</sup> /L	Na	0.3	0.7	0.7	0.7	0.4	0.7	Na	0.3
Gran#(Neut*)	x10 <sup>9</sup> /L	Na	4.1	4.2	4.2	4.2	4.0	4.2	Na	1.2
Lymph	%	Na	38.0	40.0	35.0	40.0	38.0	40.0	40.0	10
Mid (Mxd*)	%	Na	7.0	8.0	8.0	8.0	5.0	8.0	8.0	5.0
Gran (Neut*)	%	Na	55.0	52.0	57.0	52.0	57.0	52.0	52.0	10
RBC	x10 <sup>12</sup> /L	4.48	4.39	4.29	4.35	4.31	4.28	4.26	4.31	0.25
Hgb	g/dL	12.9	12.9	13.0	12.6	13.3	13.0	13.0	13.2	0.6
Hct	%	36.8	36.5	35.8	36.7	36.1	36.6	35.0	35.5	3.0
MCV	fL	82.1	83.1	83.4	84.3	83.7	85.5	82.1	82.3	6.0
MCH	pg	28.8	29.3	30.3	28.9	30.7	30.3	30.5	30.5	3.0
MCHC	g/dL	35.0	35.3	36.3	34.3	36.9	35.5	37.1	37.2	3.0
RDW-CV	%	15.0	13.3	13.8	15.2	13.8	13.1	13.5	13.8	3.5
PLT	x10 <sup>9</sup> /L	218	220	215	245	220	220	220	220	50
MPV	fL	9.2	10.2	10.3	9.0	10.3	9.9	10.3	10.3	3.0
HIGH CONTROL		Sysmex K1000 K-4500	Sysmex KX21N, XP300	Abbott CELL-DYN	Mindray BC-2800 BC-3000	ABX Micros45/60	Nihon Kohden MEK SERIES CELTAC ALPHA	MEDONIC CA series Swelab	ORPHEE MYTHIC 18	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	18.5	18.3	19.2	20.7	19.7	18.4	19.2	18.5	2.0
Lymph #	x10 <sup>9</sup> /L	Na	17.0	17.0	16.0	17.0	16.0	17.0	17.0	1.5
Mid # (Mxd*)	x10 <sup>9</sup> /L	Na	Na	Na	Na	Na	Na	Na	Na	1.0
Gran#(Neut*)	x10 <sup>9</sup> /L	Na	Na	Na	Na	Na	Na	Na	Na	5.5
Lymph	%	Na	88.0	88.0	76.0	88.0	76.0	88.0	88.0	10
Mid (Mxd*)	%	Na	Na	Na	Na	Na	Na	Na	Na	5.0
Gran (Neut*)	%	Na	Na	Na	Na	Na	Na	Na	Na	10
RBC	x10 <sup>12</sup> /L	5.42	5.39	5.39	5.30	5.30	5.28	5.25	5.33	0.30
Hgb	g/dL	17.5	17.9	17.5	17.4	17.7	18.2	17.6	17.6	1.0
Hct	%	50.1	49.7	49.5	49.0	50.2	50.8	49.2	49.5	4.0
MCV	fL	92.4	92.2	91.8	92.4	94.7	96.2	93.7	92.8	6.0
MCH	pg	32.2	33.2	32.4	32.8	33.4	34.5	33.5	33.0	3.0
MCHC	g/dL	35.0	36.0	35.3	35.5	35.2	35.8	35.5	35.5	3.0
RDW-CV	%	14.5	14.5	14.2	15.5	13.3	12.0	13.3	13.3	3.5
PLT	x10 <sup>9</sup> /L	550	550	545	575	545	545	545	545	70
MPV	fL	9.8	10.0	10.0	8.3	9.0	9.8	9.0	9.0	3.0

LOW CONTROL		DIAGON D-CELL30 60 Series	BAYER SEIMENS ADVIA60	HYCELL/ MS9	ERMA CONVERGENT	Diatron Abacus Jr.	PROKAN PE6800	PROKAN PE6000	RAYTO	± Range
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	3.2	3.3	2.9	3.0	2.9	3.1	3.1	3.3	0.6
Lymph #	x10 <sup>9</sup> /L	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.2	1.0
Mid # (Mxd*)	x10 <sup>9</sup> /L	Na	0.2	Na	0.2	Na	Na	Na	0.2	0.4
Gran # (Neut*)	x10 <sup>9</sup> /L	Na	1.5	Na	1.5	Na	Na	Na	1.5	0.8
Lymph %	%	52.0	57.0	57.0	57.0	57.0	52.0	52.0	57.0	10
Mid (Mxd*)	%	Na	6.0	Na	6.0	Na	Na	Na	6.0	5.0
Gran (Neut*)	%	Na	37	Na	37	Na	Na	Na	37	10
RBC	x10 <sup>12</sup> /L	2.88	2.95	2.86	2.86	2.86	2.7	2.7	2.95	0.20
Hgb	g/dL	7.3	7.3	7.0	7.3	7.3	7.4	7.4	7.3	0.5
Hct	%	21.0	21.7	21.1	21.3	21.8	19.8	19.8	21.7	3.0
MCV	fL	73.0	73.5	73.4	74.4	76.2	73.3	73.3	73.5	5.0
MCH	pg	25.3	24.7	24.5	25.5	25.5	27.4	27.4	24.7	3.0
MCHC	g/dL	34.7	33.6	33.3	34.3	33.5	37.4	37.4	33.6	3.0
RDW-CV	%	13.8	11.5	12.0	11.5	11.5	20.0	20.0	11.5	3.5
PLT	x10 <sup>9</sup> /L	90	80	80	80	80	99	99	80	30
MPV	fL	8.5	10.8	10.8	10.5	10.8	9.5	9.5	10.8	2.0
NORMAL CONTROL		DIAGON D-CELL30 60 Series	BAYER SEIMENS ADVIA60	HYCELL/ MS9	ERMA CONVERGENT	Diatron Abacus Jr.	PROKAN PE6800	PROKAN PE6000	RAYTO	± Range
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	7.3	7.1	7.1	7.1	7.2	7.4	7.4	7.1	1.2
Lymph #	x10 <sup>9</sup> /L	2.8	2.8	2.8	2.8	2.8	2.5	2.5	2.8	1.5
Mid # (Mxd*)	x10 <sup>9</sup> /L	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3
Gran # (Neut*)	x10 <sup>9</sup> /L	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.2	1.2
Lymph %	%	35.0	40.0	40.0	40.0	40.0	38.0	38.0	40.0	10
Mid (Mxd*)	%	8.0	8.0	8.0	8.0	8.0	8	8	8.0	5.0
Gran (Neut*)	%	57.0	52.0	52.0	52.0	52.0	54.0	54.0	52.0	10
RBC	x10 <sup>12</sup> /L	4.35	4.31	4.26	4.29	4.26	4.46	4.46	4.31	0.25
Hgb	g/dL	12.6	13.3	13.0	13.0	13.2	12.7	12.7	13.3	0.6
Hct	%	36.7	36.1	35.0	35.8	35.5	36.5	36.5	36.1	3.0
MCV	fL	84.3	83.7	82.1	83.4	83.0	81.8	81.8	83.7	6.0
MCH	pg	28.9	30.7	30.5	30.3	30.9	28.4	28.4	30.7	3.0
MCHC	g/dL	34.3	36.9	37.1	36.3	37.2	34.8	34.8	36.9	3.0
RDW-CV	%	15.2	13.8	13.5	13.8	13.5	15.2	15.2	13.8	3.5
PLT	x10 <sup>9</sup> /L	245	220	220	215	220	250	250	220	50
MPV	fL	9.0	10.3	10.3	10.3	10.3	8.5	8.5	10.3	3.0
HIGH CONTROL		DIAGON D-CELL30 60 Series	BAYER SEIMENS ADVIA60	HYCELL/ MS9	ERMA CONVERGENT	Diatron Abacus Jr.	PROKAN PE6800	PROKAN PE6000	RAYTO	± Range
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	20.7	19.7	19.2	19.2	19.2	19.5	19.5	19.7	2.0
Lymph #	x10 <sup>9</sup> /L	16.0	17.0	17.0	17.0	17.0	16.0	16.0	17.0	1.5
Mid # (Mxd*)	x10 <sup>9</sup> /L	Na	Na	Na	Na	Na	Na	Na	Na	1.0
Gran # (Neut*)	x10 <sup>9</sup> /L	Na	Na	Na	Na	Na	Na	Na	Na	5.5
Lymph %	%	76.0	88.0	88.0	88.0	88.0	76.0	76.0	88.0	10
Mid (Mxd*)	%	Na	Na	Na	Na	Na	Na	Na	Na	5.0
Gran (Neut*)	%	Na	Na	Na	Na	Na	Na	Na	Na	10
RBC	x10 <sup>12</sup> /L	5.30	5.30	5.25	5.39	5.35	5.52	5.51	5.30	0.30
Hgb	g/dL	17.4	17.7	17.6	17.5	17.6	18.1	18.1	17.7	1.0
Hct	%	49.0	50.2	49.2	49.5	48.2	49.0	49.0	50.2	4.5
MCV	fL	92.4	94.7	93.7	91.8	94.0	88.3	88.3	94.7	6.0
MCH	pg	32.8	33.4	33.5	32.4	32.9	32.6	32.6	33.4	3.0
MCHC	g/dL	35.5	35.2	35.5	35.3	36.5	37.0	37.0	35.2	3.0
RDW-CV	%	15.5	13.3	13.3	14.2	13.3	14.5	14.5	13.3	3.5
PLT	x10 <sup>9</sup> /L	575	545	545	545	545	545	545	545	70
MPV	fL	8.3	9.0	9.0	10.0	9.0	8.0	8.0	9.0	3.0

LOW CONTROL		Sysmex XS-500i, XS-800i XS-1000i	Sysmex XT-1800i XT-2000i	Sysmex XE-2100 XE-5000	Sysmex XN- Series	MINDRAY BC-5 series	MINDRAY BC-6800 BC-6800+	MINDRAY BC-6000 BC-6200	± Range
LOT 01-2402 EXP: 2024-05-28									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	2.8	2.8	2.8	2.6	3.0	2.7	2.7	0.7
RBC	x10 <sup>12</sup> /L	2.90	2.91	2.91	2.82	2.90	2.88	2.80	0.20
Hgb	g/dL	7.5	7.7	7.7	7.2	7.7	7.5	7.3	0.5
Hct	%	22.1	22.0	22.0	20.9	21.4	21.2	21.9	3.0
MCV	fL	76.2	75.6	75.6	74.1	73.8	73.6	78.2	5.0
MCH	pg	25.8	26.4	26.4	25.5	26.5	26.0	26.0	3.0
MCHC	g/dL	33.9	35.0	35.0	34.4	35.9	35.4	33.3	3.0
RDW-CV	%	13.5	13.8	13.8	13.5	13.2	13.7	14.7	3.5
PLT	x10 <sup>9</sup> /L	72	79	79	79	95	85	82	30
MPV	fL	10.2	10.6	10.6	10.2	7.8	9.8	10.5	2.0
NORMAL CONTROL		Sysmex XS-500i, XS-800i XS-1000i	Sysmex XT-1800i XT-2000i	Sysmex XE-2100 XE-5000	Sysmex XN- Series	MINDRAY BC-5 series	MINDRAY BC-6800 BC-6800+	MINDRAY BC-6000 BC-6200	± Range
LOT 01-2402 EXP: 2024-05-28									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	6.9	6.7	6.7	6.5	7.1	6.6	6.6	1.2
RBC	x10 <sup>12</sup> /L	4.55	4.49	4.49	4.46	4.41	4.51	4.39	0.25
Hgb	g/dL	13.4	13.5	13.5	13.2	13.2	13.1	12.8	0.6
Hct	%	38.7	38.0	38.0	37.2	37.9	38.3	39.2	3.0
MCV	fL	85.0	84.6	84.6	83.4	86.0	84.9	89.2	6.0
MCH	pg	29.4	30.0	30.0	29.6	29.9	29.0	29.1	3.0
MCHC	g/dL	34.7	35.5	35.5	35.5	34.8	34.2	32.6	3.0
RDW-CV	%	15.5	15.5	15.5	15.0	14.8	15.0	16.0	5.0
PLT	x10 <sup>9</sup> /L	235	230	230	230	245	260	240	50
MPV	fL	10.3	10.5	10.5	9.8	8.5	10.0	10.7	3.0
HIGH CONTROL		Sysmex XS-500i, XS-800i XS-1000i	Sysmex XT-1800i XT-2000i	Sysmex XE-2100 XE-5000	Sysmex XN- Series	MINDRAY BC-5 series	MINDRAY BC-6800 BC-6800+	MINDRAY BC-6000 BC-6200	± Range
LOT 01-2402 EXP: 2024-05-28									
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	17.8	18.0	18.0	16.0	18.4	17.9	17.8	2.0
RBC	x10 <sup>12</sup> /L	5.55	5.58	5.58	5.45	5.50	5.50	5.40	0.35
Hgb	g/dL	17.8	18.2	18.2	17.7	17.7	17.3	17.1	1.0
Hct	%	51.5	51.7	51.7	50.5	52.2	51.5	51.8	5.5
MCV	fL	92.8	92.6	92.6	93.1	94.9	93.6	95.9	7.0
MCH	pg	32.0	32.6	32.6	32.4	32.1	31.4	31.6	3.0
MCHC	g/dL	34.5	35.0	35.0	35.0	34.0	33.6	33.0	3.0
RDW-CV	%	15.8	16.5	16.5	15.5	15.0	15.5	15.7	3.5
PLT	x10 <sup>9</sup> /L	635	618	618	600	598	640	610	75
MPV	fL	10.0	10.1	10.1	9.8	8.2	10.0	9.8	3.0

\*To use the control for 5part-Diff instrument, Please set the instrument on CBC-mode function then do the sampling.

CONTROL		DANAM DATACELL 16/18	ABX PENTRA60 60C,120	PENTRA 80, 80XL	BACKER 9110PLUS	ORPHEE MYTHIC22 22AL	ORPHEE MYTHIC60	NihonKohden CELLTAC E,ES CELLTAC F	Nihon Kohden CELLTAC G	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	3.0	3.0	3.0	3.3	1.9	1.2	3.0	3.1	0.8
RBC	x10 <sup>12</sup> /L	2.90	2.89	2.89	2.95	2.81	2.90	2.93	2.8	0.20
Hgb	g/dL	7.3	6.9	6.9	7.3	7.4	7.8	7.4	6.6	0.5
Hct	%	21.1	21.6	21.6	21.7	21.5	22.5	22.8	23.1	3.0
MCV	fL	72.7	74.7	74.7	73.5	76.5	77.5	77.8	82.5	5.0
MCH	pg	25.2	23.8	23.8	24.7	26.3	26.9	25.2	23.6	3.0
MCHC	g/dL	34.6	31.9	31.9	33.6	34.4	34.6	32.4	28.6	3.0
RDW-CV	%	12.5	12.5	12.5	11.5	15.0	13.0	14.3	13.2	3.5
PLT	x10 <sup>9</sup> /L	80	72	72	80	80	90	80.0	85	30
MPV	fL	10.5	10.0	10.0	10.8	9.2	10.2	7.2	8.5	2.0
NORMAL CONTROL		DANAM DATACELL 16/18	ABX PENTRA60 60C,120	PENTRA 80, 80XL	BACKER 9110PLUS	ORPHEE MYTHIC22 22AL	ORPHEE MYTHIC60	NihonKohden CELLTAC E,ES CELLTAC F	Nihon Kohden CELLTAC G	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	7.2	6.9	6.9	7.1	4.5	4.7	6.9	7.1	1.2
RBC	x10 <sup>12</sup> /L	4.31	4.39	4.39	4.31	4.29	4.38	4.51	4.36	0.25
Hgb	g/dL	13.2	12.9	12.9	13.3	13.0	13.5	13.3	12.3	0.6
Hct	%	35.5	36.5	36.5	36.1	37.8	37.5	39.0	42.0	3.0
MCV	fL	82.3	83.1	83.1	83.7	88.1	85.6	86.5	96.3	6.0
MCH	pg	30.5	29.3	29.3	30.7	30.3	30.8	29.5	28.2	3.0
MCHC	g/dL	37.2	35.3	35.3	36.9	34.4	36.0	34.1	29.3	3.0
RDW-CV	%	13.8	13.3	13.3	13.8	15.9	14.5	16.0	15.8	5.0
PLT	x10 <sup>9</sup> /L	220	220	220	220	240	255	230	242	50
MPV	fL	10.3	10.2	10.2	10.3	10.5	10.5	8.5	8.7	3.0
HIGH CONTROL		DANAM DATACELL 16/18	ABX PENTRA60 60C,120	PENTRA 80, 80XL	BACKER 9110PLUS	ORPHEE MYTHIC22 22AL	ORPHEE MYTHIC60	NihonKohden CELLTAC E,ES CELLTAC F	Nihon Kohden CELLTAC G	
LOT 01-2402 EXP: 2024-05-28										
Parameters		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	± Range
WBC	x10 <sup>9</sup> /L	18.5	18.3	18.3	19.7	9.0	10.0	17.2	20.8	2.0
RBC	x10 <sup>12</sup> /L	5.33	5.39	5.39	5.30	5.35	5.39	5.48	5.32	0.30
Hgb	g/dL	17.6	17.9	17.9	17.7	17.5	17.3	18.0	17.3	1.0
Hct	%	49.5	49.7	49.7	50.2	49.8	51.5	51.5	55.6	5.0
MCV	fL	92.8	92.2	92.2	94.7	93.2	95.5	94.0	104.5	7.0
MCH	pg	33.0	33.2	33.2	33.4	32.7	32.0	32.8	32.5	3.0
MCHC	g/dL	35.5	36.0	36.0	35.2	35.1	33.6	34.9	31.1	3.0
RDW-CV	%	13.3	14.5	14.5	13.3	14.0	14.8	16.2	15.9	3.5
PLT	x10 <sup>9</sup> /L	545	550	550	545	560	650	595	600	75
MPV	fL	9.0	10.0	10.0	9.0	9.0	10.3	8.5	9.0	3.0

\*To use the control for 5part-Diff instrument, Please set the instrument on CBC-mode function then do the sampling.