





BC-3D

HEMATOLOGY CONTROLS

CONTROL

ASSAY VALUES AND EXPECTED RANGES

 **B0223**
**2023-05-05**

Instrument	Parameter	Low		Normal		High	
		 B0223L	 B0223N	 B0223N	 B0223H		
		The U.S. Units	The International Units	The U.S. Units	The International Units	The U.S. Units	The International Units
BC-3600 CD version 1.8(FDA) or greater	WBC	2.0 ± 0.5 × 10 ³ /μL	2.0 ± 0.5 × 10 ⁹ /L	7.8 ± 1.0 × 10 ³ /μL	7.8 ± 1.0 × 10 ⁹ /L	20.7 ± 2.5 × 10 ³ /μL	20.7 ± 2.5 × 10 ⁹ /L
	RBC	2.20 ± 0.18 × 10 ⁶ /μL	2.20 ± 0.18 × 10 ¹² /L	4.46 ± 0.24 × 10 ⁶ /μL	4.46 ± 0.24 × 10 ¹² /L	5.67 ± 0.30 × 10 ⁶ /μL	5.67 ± 0.30 × 10 ¹² /L
	HGB	5.7 ± 0.4 g/dL	57 ± 4 g/L	13.5 ± 0.6 g/dL	135 ± 6 g/L	18.9 ± 0.8 g/dL	189 ± 8 g/L
	HCT	17.2 ± 1.5 %	17.2 ± 1.5 %	38.6 ± 2.0 %	38.6 ± 2.0 %	53.6 ± 2.4 %	53.6 ± 2.4 %
	MCV	78.0 ± 5.0 fL	78.0 ± 5.0 fL	86.5 ± 5.0 fL	86.5 ± 5.0 fL	94.5 ± 5.0 fL	94.5 ± 5.0 fL
	MCH	25.9 ± 2.5 pg	25.9 ± 2.5 pg	30.3 ± 2.5 pg	30.3 ± 2.5 pg	33.3 ± 2.5 pg	33.3 ± 2.5 pg
	MCHC	33.2 ± 3.0 g/dL	332 ± 30 g/L	35.0 ± 3.0 g/dL	350 ± 30 g/L	35.3 ± 3.0 g/dL	353 ± 30 g/L
	RDW	15.5 ± 3.0 %	15.5 ± 3.0 %	14.5 ± 3.0 %	14.5 ± 3.0 %	13.5 ± 3.0 %	13.5 ± 3.0 %
	PLT	64 ± 20 × 10 ³ /μL	64 ± 20 × 10 ⁹ /L	261 ± 40 × 10 ³ /μL	261 ± 40 × 10 ⁹ /L	577 ± 60 × 10 ³ /μL	577 ± 60 × 10 ⁹ /L
	MPV	8.0 ± 3.0 fL	8.0 ± 3.0 fL	8.0 ± 3.0 fL	8.0 ± 3.0 fL	8.0 ± 3.0 fL	8.0 ± 3.0 fL
	Lymph	60.0 ± 9.0 %	60.0 ± 9.0 %	31.5 ± 8.0 %	31.5 ± 8.0 %	13.5 ± 8.0 %	13.5 ± 8.0 %
	Mid	8.5 ± 8.0 %	8.5 ± 8.0 %	6.5 ± 6.0 %	6.5 ± 6.0 %	4.0 ± 4.0 %	4.0 ± 4.0 %
	Gran	31.5 ± 9.0 %	31.5 ± 9.0 %	62.0 ± 8.0 %	62.0 ± 8.0 %	82.5 ± 9.0 %	82.5 ± 9.0 %
	Lymph#	1.2 ± 0.2 × 10 ³ /μL	1.2 ± 0.2 × 10 ⁹ /L	2.5 ± 0.7 × 10 ³ /μL	2.5 ± 0.7 × 10 ⁹ /L	2.8 ± 1.7 × 10 ³ /μL	2.8 ± 1.7 × 10 ⁹ /L
	Mid#	0.2 ± 0.2 × 10 ³ /μL	0.2 ± 0.2 × 10 ⁹ /L	0.5 ± 0.5 × 10 ³ /μL	0.5 ± 0.5 × 10 ⁹ /L	0.8 ± 0.8 × 10 ³ /μL	0.8 ± 0.8 × 10 ⁹ /L
	Gran#	0.6 ± 0.2 × 10 ³ /μL	0.6 ± 0.2 × 10 ⁹ /L	4.8 ± 0.7 × 10 ³ /μL	4.8 ± 0.7 × 10 ⁹ /L	17.1 ± 1.9 × 10 ³ /μL	17.1 ± 1.9 × 10 ⁹ /L
BC-3600 CD version lower than 1.8 and/or manufacture date before March of 2015	WBC	2.1 ± 0.5 × 10 ³ /μL	2.1 ± 0.5 × 10 ⁹ /L	8.0 ± 1.0 × 10 ³ /μL	8.0 ± 1.0 × 10 ⁹ /L	21.5 ± 2.5 × 10 ³ /μL	21.5 ± 2.5 × 10 ⁹ /L
	RBC	2.30 ± 0.18 × 10 ⁶ /μL	2.30 ± 0.18 × 10 ¹² /L	4.60 ± 0.24 × 10 ⁶ /μL	4.60 ± 0.24 × 10 ¹² /L	5.81 ± 0.30 × 10 ⁶ /μL	5.81 ± 0.30 × 10 ¹² /L
	HGB	5.9 ± 0.4 g/dL	59 ± 4 g/L	13.5 ± 0.6 g/dL	135 ± 6 g/L	18.7 ± 0.8 g/dL	187 ± 8 g/L
	HCT	17.5 ± 1.5 %	17.5 ± 1.5 %	39.5 ± 2.0 %	39.5 ± 2.0 %	54.0 ± 2.4 %	54.0 ± 2.4 %
	MCV	76.1 ± 5.0 fL	76.1 ± 5.0 fL	85.9 ± 5.0 fL	85.9 ± 5.0 fL	92.9 ± 5.0 fL	92.9 ± 5.0 fL
	MCH	25.7 ± 2.5 pg	25.7 ± 2.5 pg	29.3 ± 2.5 pg	29.3 ± 2.5 pg	32.2 ± 2.5 pg	32.2 ± 2.5 pg
	MCHC	33.7 ± 3.0 g/dL	337 ± 30 g/L	34.2 ± 3.0 g/dL	342 ± 30 g/L	34.6 ± 3.0 g/dL	346 ± 30 g/L
	RDW-CV	16.4 ± 3.0 %	16.4 ± 3.0 %	15.1 ± 3.0 %	15.1 ± 3.0 %	14.4 ± 3.0 %	14.4 ± 3.0 %
	RDW-SD	36.7 ± 8.0 fL	36.7 ± 8.0 fL	40.4 ± 8.0 fL	40.4 ± 8.0 fL	43.2 ± 8.0 fL	43.2 ± 8.0 fL
	PLT	67 ± 20 × 10 ³ /μL	67 ± 20 × 10 ⁹ /L	276 ± 40 × 10 ³ /μL	276 ± 40 × 10 ⁹ /L	585 ± 60 × 10 ³ /μL	585 ± 60 × 10 ⁹ /L
	MPV	9.8 ± 3.0 fL	9.8 ± 3.0 fL	9.4 ± 3.0 fL	9.4 ± 3.0 fL	9.6 ± 3.0 fL	9.6 ± 3.0 fL
	*PCT	0.066 ± 0.050 %	0.066 ± 0.050 %	0.259 ± 0.100 %	0.259 ± 0.100 %	0.562 ± 0.200 %	0.562 ± 0.200 %
	*PDW	15.4 ± 3.0 %	15.4 ± 3.0 %	15.6 ± 3.0 %	15.6 ± 3.0 %	16.0 ± 3.0 %	16.0 ± 3.0 %
	*P-LCC	24 ± 10 × 10 ³ /μL	24 ± 10 × 10 ⁹ /L	89 ± 22 × 10 ³ /μL	89 ± 22 × 10 ⁹ /L	199 ± 30 × 10 ³ /μL	199 ± 30 × 10 ⁹ /L
	*P-LCR	35.7 ± 12.0 %	35.7 ± 12.0 %	32.3 ± 9.0 %	32.3 ± 9.0 %	34.0 ± 9.0 %	34.0 ± 9.0 %
	Lymph	60.5 ± 9.0 %	60.5 ± 9.0 %	31.9 ± 8.0 %	31.9 ± 8.0 %	13.9 ± 8.0 %	13.9 ± 8.0 %
Mid	9.9 ± 9.0 %	9.9 ± 9.0 %	7.4 ± 7.0 %	7.4 ± 7.0 %	4.9 ± 4.5 %	4.9 ± 4.5 %	
Gran	29.6 ± 9.0 %	29.6 ± 9.0 %	60.7 ± 8.0 %	60.7 ± 8.0 %	81.2 ± 9.0 %	81.2 ± 9.0 %	
Lymph#	1.3 ± 0.2 × 10 ³ /μL	1.3 ± 0.2 × 10 ⁹ /L	2.6 ± 0.7 × 10 ³ /μL	2.6 ± 0.7 × 10 ⁹ /L	3.0 ± 1.8 × 10 ³ /μL	3.0 ± 1.8 × 10 ⁹ /L	
Mid#	0.2 ± 0.2 × 10 ³ /μL	0.2 ± 0.2 × 10 ⁹ /L	0.6 ± 0.6 × 10 ³ /μL	0.6 ± 0.6 × 10 ⁹ /L	1.1 ± 1.0 × 10 ³ /μL	1.1 ± 1.0 × 10 ⁹ /L	
Gran#	0.6 ± 0.2 × 10 ³ /μL	0.6 ± 0.2 × 10 ⁹ /L	4.8 ± 0.7 × 10 ³ /μL	4.8 ± 0.7 × 10 ⁹ /L	17.4 ± 2.0 × 10 ³ /μL	17.4 ± 2.0 × 10 ⁹ /L	

THIS
ANALYZER
NOT
APPROVED
FOR USE IN
THE US

* For Research Use Only.
Before using, refer to the instruction sheet for mixing directions.

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BC-3D

HEMATOLOGY CONTROLS

CONTROL

ASSAY VALUES AND EXPECTED RANGES

LOT	B0223
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2023-05-05

Instrument	Parameter	Low		Normal		High	
		LOT	B0223L	LOT	B0223N	LOT	B0223H
		The U.S. Units	The International Units	The U.S. Units	The International Units	The U.S. Units	The International Units
BC-3200	WBC	2.1 ± 0.5 × 10 ⁹ /μL	2.1 ± 0.5 × 10 ⁹ /L	8.3 ± 1.0 × 10 ⁹ /μL	8.3 ± 1.0 × 10 ⁹ /L	21.5 ± 2.5 × 10 ⁹ /μL	21.5 ± 2.5 × 10 ⁹ /L
	RBC	2.27 ± 0.18 × 10 ⁶ /μL	2.27 ± 0.18 × 10 ¹² /L	4.50 ± 0.24 × 10 ⁶ /μL	4.50 ± 0.24 × 10 ¹² /L	5.69 ± 0.30 × 10 ⁶ /μL	5.69 ± 0.30 × 10 ¹² /L
	HGB	5.8 ± 0.4 g/dL	58 ± 4 g/L	13.5 ± 0.6 g/dL	135 ± 6 g/L	18.6 ± 0.8 g/dL	186 ± 8 g/L
	HCT	17.3 ± 1.5 %	17.3 ± 1.5 %	39.4 ± 2.0 %	39.4 ± 2.0 %	54.2 ± 2.4 %	54.2 ± 2.4 %
	MCV	76.0 ± 5.0 fL	76.0 ± 5.0 fL	87.6 ± 5.0 fL	87.6 ± 5.0 fL	95.2 ± 5.0 fL	95.2 ± 5.0 fL
	MCH	25.6 ± 2.5 pg	25.6 ± 2.5 pg	30.0 ± 2.5 pg	30.0 ± 2.5 pg	32.7 ± 2.5 pg	32.7 ± 2.5 pg
	MCHC	33.6 ± 3.0 g/dL	336 ± 30 g/L	34.2 ± 3.0 g/dL	342 ± 30 g/L	34.3 ± 3.0 g/dL	343 ± 30 g/L
	*RDW	15.2 ± 3.0 %	15.2 ± 3.0 %	14.6 ± 3.0 %	14.6 ± 3.0 %	14.0 ± 3.0 %	14.0 ± 3.0 %
	PLT	76 ± 20 × 10 ³ /μL	76 ± 20 × 10 ⁹ /L	265 ± 40 × 10 ³ /μL	265 ± 40 × 10 ⁹ /L	546 ± 60 × 10 ³ /μL	546 ± 60 × 10 ⁹ /L
	*MPV	9.1 ± 3.0 fL	9.1 ± 3.0 fL	8.1 ± 3.0 fL	8.1 ± 3.0 fL	8.2 ± 3.0 fL	8.2 ± 3.0 fL
	Lymph	51.5 ± 12.0 %	51.5 ± 12.0 %	29.0 ± 8.0 %	29.0 ± 8.0 %	14.0 ± 6.0 %	14.0 ± 6.0 %
	*Mid	15.5 ± 10.0 %	15.5 ± 10.0 %	9.0 ± 8.0 %	9.0 ± 8.0 %	7.5 ± 7.0 %	7.5 ± 7.0 %
	Gran	33.0 ± 9.0 %	33.0 ± 9.0 %	62.0 ± 8.0 %	62.0 ± 8.0 %	78.5 ± 8.0 %	78.5 ± 8.0 %
	Lymph#	1.1 ± 0.3 × 10 ³ /μL	1.1 ± 0.3 × 10 ⁹ /L	2.4 ± 0.7 × 10 ³ /μL	2.4 ± 0.7 × 10 ⁹ /L	3.0 ± 1.3 × 10 ³ /μL	3.0 ± 1.3 × 10 ⁹ /L
	*Mid#	0.3 ± 0.2 × 10 ³ /μL	0.3 ± 0.2 × 10 ⁹ /L	0.7 ± 0.7 × 10 ³ /μL	0.7 ± 0.7 × 10 ⁹ /L	1.6 ± 1.5 × 10 ³ /μL	1.6 ± 1.5 × 10 ⁹ /L
	Gran#	0.7 ± 0.2 × 10 ³ /μL	0.7 ± 0.2 × 10 ⁹ /L	5.1 ± 0.7 × 10 ³ /μL	5.1 ± 0.7 × 10 ⁹ /L	16.9 ± 1.8 × 10 ³ /μL	16.9 ± 1.8 × 10 ⁹ /L

* For new software version 01.07.00 or greater.

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