

Date: 20/07/2021

CALIBRATION CERTIFICATE

This is to state that the hematology cell counter model **YUMIZEN H500** bearing Serial no: **803YOXH01348** at **Prima Diagnostic, Yelahanka, Bangalore, Karnataka**, was calibrated with Calibrator on **20/07/2021**.

The Calibration Coefficient is automatically generated after calibration. Subsequently controls were processed and found them in respective range.

Calibrator Used: **ABX MINOCAL**

Lot No.: **CX 460**

Expiry Date: **05/08/2021**

Sr. No	Tested Parameter	Remarks
1	Startup/Blank Cycle	Passed
2	Repeatability/ Precision	Passed
3	Calibration	Passed
4	Quality Control	Passed

Next calibration cycle is due on **19/07/2022**.

Yeshwanth Padashetty



ENGINEER CUSTOMER SUPPORT
Horiba Medical.



Blank Cycle Logs

Running Date Comments	Operator	WBC 10 ³ /μL	RBC 10 ⁹ /μL	HGB g/dL	PLT 10 ³ /μL	Status	Technical alarms
20/07/2021 07:46:11 AM	LAB	0.01	0.00	0.0	1	Passed	
20/07/2021 11:28:47 AM	technician	0.04	0.00	0.0	2	Passed	

Repeatability Report (part 1)

Number of repeatability run report selected for statistic calculation 6/6

Coefficient	WBC (10 ³ /μL)	RBC (10 ⁶ /μL)	HGB (g/dL)	HCT (%)	PLT (10 ³ /μL)	MCV (μm ³)	RDW-CV (%)	RDW-SD (μm ³)	P-LCR (%)
Minimum	8.11	4.47	13.5	39.4	331	87.4	11.8	38.3	14.6
Maximum	8.38	4.59	13.7	40.4	347	88.2	12.0	39.1	16.3
Mean	8.23	4.55	13.6	40.0	339	87.9	11.9	38.4	15.2
Difference	0.28	0.12	0.2	1.0	16	0.7	0.2	0.8	1.7
2 SD	0.24	0.09	0.2	0.8	11	0.5	0.2	0.7	1.2
CV(%)	1.47	0.99	0.70	0.96	1.66	0.30	0.69	0.85	4.05

Sel	Run Date &Time	WBC (10 ³ /μL)	RBC (10 ⁶ /μL)	HGB (g/dL)	HCT (%)	PLT (10 ³ /μL)	MCV (μm ³)	RDW-CV (%)	RDW-SD (μm ³)	P-LCR (%)	Operator
✓	20/07/2021 11:43:17 AM	8.13	4.47	13.6	39.4	336	88.1	11.9	38.3	15.0	technician
✓	20/07/2021 11:44:45 AM	8.38	4.56	13.7	40.0	347	87.8	12.0	39.1	15.1	technician
✓	20/07/2021 11:46:16 AM	8.15	4.59	13.7	40.4	342	88.0	11.9	38.3	14.6	technician
✓	20/07/2021 11:47:48 AM	8.27	4.59	13.7	40.4	342	88.2	11.9	38.3	15.5	technician
✓	20/07/2021 11:49:21 AM	8.36	4.53	13.6	39.9	336	88.0	11.9	38.3	14.8	technician
✓	20/07/2021 11:51:40 AM	8.11	4.57	13.5	40.0	331	87.4	11.8	38.3	16.3	technician

Repeatability Report (part 2)

Number of repeatability run report selected for statistic calculation 6/6

Coefficient	NEU% (%)	LYM% (%)	MON% (%)	EOS% (%)	BAS% (%)	LIC% (%)
Minimum	60.5	31.1	2.2	2.7	0.8	0.3
Maximum	62.5	33.0	2.9	3.1	1.1	0.6
Mean	61.5	31.8	2.4	2.8	1.0	0.5
Difference	2.0	1.9	0.7	0.4	0.3	0.3
2 SD	1.4	1.3	0.6	0.3	0.3	0.2
CV(%)	1.11	2.08	12.10	5.31	13.07	20.34

Sel	Run Date &Time	NEU% (%)	LYM% (%)	MON% (%)	EOS% (%)	BAS% (%)	LIC% (%)	Operator
✓	20/07/2021 11:43:17 AM	61.4	31.4	2.7	2.9	1.1	0.5	technician
✓	20/07/2021 11:44:45 AM	61.6	31.5	2.9	2.7	0.8	0.5	technician
✓	20/07/2021 11:46:16 AM	61.7	31.7	2.3	2.8	0.9	0.6	technician
✓	20/07/2021 11:47:48 AM	62.5	31.1	2.2	2.8	1.1	0.3	technician
✓	20/07/2021 11:49:21 AM	60.5	33.0	2.2	2.7	1.1	0.5	technician
✓	20/07/2021 11:51:40 AM	61.1	31.9	2.3	3.1	1.1	0.5	technician

Calibration Report

Sample ID CX460
Lot number CX460

Name ABX MINOCAL

Exp. date 05/08/2021
Modified on

Coefficient	WBC	RBC	HGB	HCT	PLT	MPV
New	1.046	0.980	0.942	1.043	1.037	1.069
Current	1.040	0.948	0.942	1.070	1.020	1.160
Target	8.70	4.55	13.4	38.7	250	10.6
Mean	8.65	4.40	13.4	38.4	246	11.5
CV(%)	1.26	0.81	0.39	0.73	2.93	0.61

Number of calibration run selected for coefficient calculation (minimum 5) 6/6

Sel.	Run Time	WBC (10 ³ /μL)	RBC (10 ⁶ /μL)	HGB (g/dL)	HCT (%)	PLT (10 ³ /μL)	MPV (μm ³)
✓	20/07/2021 11:59:59 AM	8.48	4.41	13.4	38.6	238	11.5 h
✓	20/07/2021 12:01:34 PM	8.70	4.46	13.5	38.9	259	11.6 h
✓	20/07/2021 12:03:04 PM	8.73	4.36	13.4	38.1	248	11.5 h
✓	20/07/2021 12:04:39 PM	8.76	4.38	13.4	38.2	241	11.6 h
✓	20/07/2021 12:06:16 PM	8.55	4.37	13.4	38.2	245	11.4 h
✓	20/07/2021 12:07:55 PM	8.67	4.41	13.5	38.4	246	11.4 h

QC - Control Run Report

Run Date 20/07/2021 12:11:17 PM

Operator technician

Name ABXdifftrol L

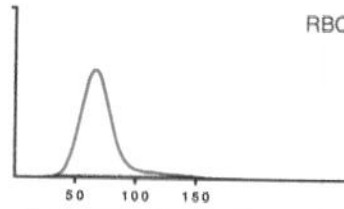
Sample ID PX430L

Level Low

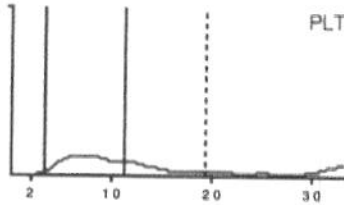
Exp. date 15/09/2021

Lot number PX430L

			Range
RBC	2.13	10 ⁶ /μL	1.99 - 2.31
HGB	5.5	g/dL	5.1 - 5.9
HCT	16.1	%	14.8 - 17.8
MCV	75.3	μm ³	71.0 - 81.0
MCH	25.6	pg	23.6 - 27.6
MCHC	34.0	g/dL	30.7 - 36.7
RDW-CV	14.2	%	13.0 - 21.0
RDW-SD	39.1	μm ³	32.0 - 48.0

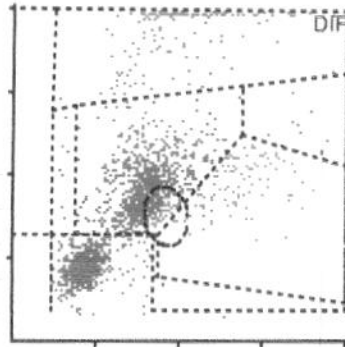


			Range
PLT	56	10 ³ /μL	46 - 86
MPV	9.6	μm ³	8.0 - 12.0



Alarms

			Range		Range
WBC	2.79	10 ³ /μL	2.25 - 3.05		
	#		Range	%	Range
NEU	1.27		1.01 - 1.71	45.3	41.5 - 61.5
LYM	1.09		0.44 - 1.10	39.2	17.0 - 41.0
MON	0.14		0.00 - 0.50	5.0	0.0 - 19.0
EOS	0.23		0.00 - 0.38	8.3	0.0 - 14.0
BAS	0.06		0.00 - 0.16	2.2	0.0 - 6.0



Raw Data

PLT counts (by sections)

S1	S2	S3	S4	S5	S6
99	82	77	103	107	99
S7	S8	S9	S10	S11	S12
88	91	87	95	87	103

RBC counts (by sections)

S1	S2	S3	S4	S5	S6
1992	2002	1993	2034	2026	2010
S7	S8	S9	S10	S11	S12
2001	2072	1931	2085	2025	2035

WBC counts (by sections) and others

S1	S2	S3	S4	S5	S6
197	205	213	207	172	192
S7	S8	S9	S10	S11	S12
217	191	189	205	186	

HBG measures (Optical intensity)

LI1	LI2	LI3	LI4	LI5	LI6
3841	3841	3841	1980	1980	1980
LI7	LI8	LI9	LI10	LI11	LI12
1980	1981	1981	1981	1981	1981
LI13					
1981					

RMeasured : 2065

Correlated : 2054

Optical intensity 193

QC - Control Run Report

Run Date 20/07/2021 12:12:46 PM

Operator technician

Name ABXdifftrol H

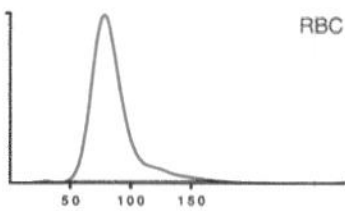
Sample ID PX430H

Level High

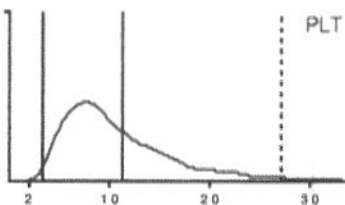
Exp. date 15/09/2021

Lot number PX430H

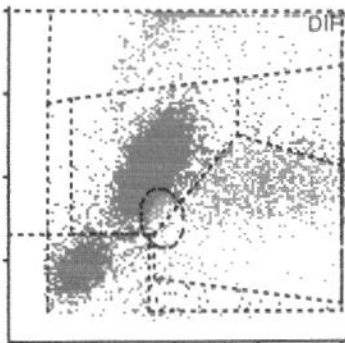
			Range
RBC	5.25	10 ⁶ /μL	5.04 - 5.54
HGB	16.0	g/dL	15.6 - 16.8
HCT	46.7	%	44.6 - 49.6
MCV	89.1	μm ³	84.0 - 94.0
MCH	30.4	pg	28.1 - 33.1
MCHC	34.2	g/dL	31.4 - 37.4
RDW-CV	12.3	%	11.0 - 19.0
RDW-SD	40.7	μm ³	37.0 - 53.0



			Range
PLT	483	10 ³ /μL	474 - 574
MPV	10.4	μm ³	8.3 - 12.3



			Range		Range
WBC	16.92	10 ³ /μL	14.60 - 19.00		
	#		Range	%	Range
NEU	10.85		9.02 - 12.82	64.2	55.0 - 75.0
LYM	3.37		1.36 - 4.36	19.9	9.0 - 25.0
MON	1.60		0.00 - 3.70	9.4	0.0 - 22.0
EOS	0.84		0.00 - 1.52	4.9	0.0 - 9.0
BAS	0.26		0.00 - 0.84	1.6	0.0 - 5.0



Alarms

Raw Data											
PLT counts (by sections)						RBC counts (by sections)					
S1	S2	S3	S4	S5	S6	S1	S2	S3	S4	S5	S6
380	404	399	419	455	437	4494	4513	4508	4508	4441	4539
S7	S8	S9	S10	S11	S12	S7	S8	S9	S10	S11	S12
387	369	414	387	425	471	4415	4531	4444	4505	4497	4501
WBC counts (by sections) and others						HGB measures (Optical intensity)					
S1	S2	S3	S4	S5	S6	LI1	LI2	LI3	LI4	LI5	LI6
1222	1204	1207	1170	1225	1161	3840	3840	3840	612	612	612
S7	S8	S9	S10	S11	S12	LI7	LI8	LI9	LI10	LI11	LI12
1177	1148	1178	1183	1183		612	612	612	612	612	612
						LI13					
						612					
RMeasured : 10089											
Correlated : 10079											
Optical intensity 193											