

CALIBRATION CERTIFICATE

Calibration of the **LIFOTRONICS-H9** (HPLC Analyzer) has been carried out as per the recommendations of the principle company **SHENZHEN LIFOTRONIC TECHNOLOGY CO., LTD, China.**

Customer Name & Address: REDCLIFF PATHOLOGY LAB, SCHEME NO. 140, BUILDING NO. 5, ANANDVAN BUILDING, INDORE – 462061.	Installation Date: 07-07-2022 Calibration Date: 07-07-2022 Calibration Due Date: 06-07-2023
--	--

Serial No:	IA2B00001124
------------	---------------------

Software Version Information:

Sensor Type:	A1
System Version:	01.00.21-S
MCU1 Version:	01.00.02-H
MCU2 Version:	01.00.01-G
User Interface version:	B8

Monitoring Information:

Test Mode	96s
HP Pump PPS	103
Column Temp	40
H9 Temp	25
LED	1910
ADC 415	24518
ADC 500	17944
ABS	5641



INSTRUMENT CALIBRATION DATAS:

System Parameter:

2D Arm Settings:

X-axis	Value
X Axis Rack Routine (50 – 200mm)	116
X Axis ST Routine (50 – 200mm)	147

Y-axis	Value
Z Axis Blood Collection Tube Routine (10-250mm)	117
Z Axis Diluted Tube Routine (10-250mm)	47
Z Axis Diluted Cup Routine (10-250mm)	200
Z Axis Press Cap Routine (10-100mm).	50

Parameter Settings:

Elution Parameter Setting.	Value
HbA1a Start Time (1 – 250s)	07
HbA1a End Time (1 – 250s)	14
HbA1b Start Time (1 – 250s)	14
HbA1b End Time (1 – 250s)	18
HbF Start Time (1 – 250s)	18
HbF End Time (1 – 250s)	23
La1c Start Time (1 – 250s)	23
La1c End Time (1 – 250s)	28
HbA1c Start Time (1 – 250s)	34
HbA1c End Time (1 – 250s)	47
HbA0 Start Time (1 – 250s)	50
HbA0 End Time (1 – 250s)	90

Variant Parameter Setting.	Value
HbA2 Start Time (1 – 250s)	200
HbA2 End Time (1 – 250s)	239
HbD Start Time (1 – 250s)	240
HbD End Time (1 – 250s)	259
HbS Start Time (1 – 250s)	260
HbS End Time (1 – 250s)	289
HbC Start Time (1 – 250s)	290
HbC End Time (1 – 250s)	310



Pressure Settings:

Parameters	Value
High Pressure Limit (10-15MPa)	12
Low Pressure Limit (10-15MPa)	3
N.P (%)	65
N.P <	60
HP Pump Stepping Value (100-200ms/step)	103

Flow cell Adjustment:

Parameters	Value
DAC_LED	2000
Gain 415	24310
Gain 500	17709

Reagent Setup:

Parameters	Value
Reagent Version	A1
Test Mode	96s
Column Version	A2

Matrix Labs. Representatives: SATHISH KUMAR G

Date: 07-07-2022

A. Performed By:

Instrument has been checked thoroughly and ensured the performance of the instrument and can be released for the routine operation.

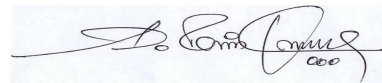
G Sathish

SATHISH KUMAR G

(Manager – Field Support Signature & Name)

B. Verified By:

Instrument has been verified & released for the routine operation.



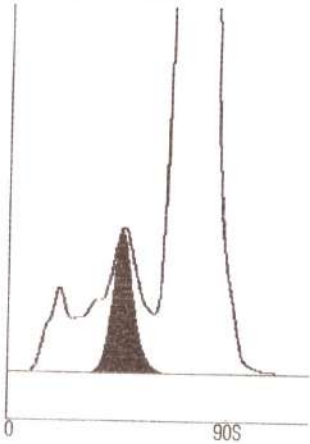
A. RAVIKUMAR

(G.M.-Engineering Services Signature & Name)



HbA1c

Time: 10:13:12
 Date: 2022-08-31
 Type: Prediluted
 Rack No.: 0001
 Rack Position: 02
 Sample ID: QC 1
 Running No.: 0002



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0018	0.065	0.3
HbA1b	16	0.0039	0.170	0.8
HbF	22	0.0034	0.212	1.0
LA1c	39	0.0087	0.164	0.7
HbA1c	41	0.0088	1.170	5.9*
HbA0	68	0.2698	19.203	91.3
V_Win	0	0.0000	0.000	0.0

Total Area: 20.984

HbA1c	5.9% *	NGSP
HbA1c	40.9mmol/mol	IFCC
eAG	6.7mmol/l	ADA
eAG	122.2mg/dl	ADA

*****Error Code: E2 *****
 Reference Range: 4.0%-5.7%
 Operator:

Lab Name:

Lab Address:

Lab Telephone:

2022-08-30 20:19:45

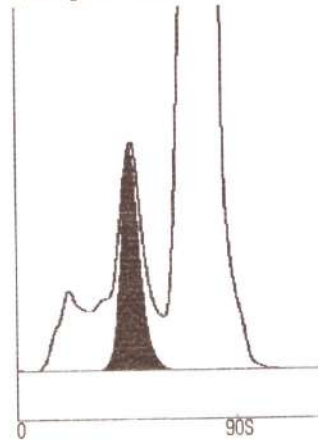
Error 12:

Pressure Too Low!

[Handwritten Signature]

HbA1c

Time: 10:14:51
 Date: 2022-08-31
 Type: Prediluted
 Rack No.: 0001
 Rack Position: 03
 Sample ID: QC 2
 Running No.: 0003



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0017	0.059	0.3
HbA1b	16	0.0037	0.160	0.9
HbF	22	0.0040	0.227	1.2
LA1c	39	0.0133	0.180	1.0
HbA1c	41	0.0139	1.635	10.0
HbA0	68	0.2186	15.263	86.6
V_Win	0	0.0000	0.000	0.0

Total Area: 17.524

HbA1c	10.0% ↑	NGSP
HbA1c	85.7mmol/mol	IFCC
eAG	13.3mmol/l	ADA
eAG	239.5mg/dl	ADA

Reference Range: 4.0%-5.7%
 Operator:

Lab Name:

Lab Address:

Lab Telephone:

[Handwritten Signature]