

CALIBRATION CERTIFICATE

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

Customer Name & Address:- Redcliffe Lifetech Private Limited, (Redcliffe Labs) 14-37-38, Krishna Nagar, Maharanipecta, Vishakapatnam - 530 002.	Installation Date : 22.12.2022 Calibration Date : 22.12.2022 Calibration Due Date: 21.12.2023
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Serial No:	IA2B00002644
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Software Version Information:

System Version:	01.00.22-S
MCU1 Version:	01.00.02-H
MCU2 Version:	01.00.01-G

Monitoring Information:

Test Mode	96s - HbA1c
HP Pressure pump stepping Value	115
Column Temp	40
H9 Temp	25
N.P.	66
ADC 415	25266
ADC 500	18065
ADC	7101

INSTRUMENT CALIBRATION DATAS:

Global Data:

System Parameters:

2D Arm Parameters:

X-axis	Value
Rack Routine(50-200mm)	116
ST Routine(50-200mm)	148

Z-axis	Value
Blood Tube Routine(10-250mm)	119
Diluted Tube Routine(10-250mm)	50
Diluting Cup Routine(10-250mm)	200
Press Cap Routine(10-100mm)	50

Hardware Parameter Settings:

High Pressure Pump Stepping value	115
Distance from Rack Detector to 1 st Tube(0-50mm)	3
Distance Between 2 Consecutive Tubes(150-250mm)	195

Operation Parameters:

Test Mode	96s-HbA1c
Reagent Version	SX
E/D/S/C Peak ABS Limit	51
Variant Ratio Limit	10

Elution Parameters:

Peaks	Start Time	End Time
HbA1a	7	14
HbA1b	14	18
HbF	18	23
LA1C	23	28
HbA1C	32	45
P3	45	90

Pressure Settings:

Parameters	Value
N.P(%)	66
N.P.(s)	60
Pressure (Mpa) >	3
Pressure (Mpa) <	12
HP Pump(PPS)	115

Flow cell Adjustment:

Parameters	Value
DAC_LED	1930
Gain 415	25266
Gain 500	18065

Reagent Setup:

Parameters	Value
Reagent Version	SX
Test Mode	96s-HbA1c

Matrix Labs. Representatives:

Date: 22.12.2022

A. Performed By:

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

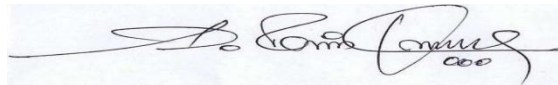


G.RAYAPPAN

(Manager – Customer Support Signature & Name)

B. Verified By:

Instrument has been verified & released for the routine operation.



A.RAVIKUMAR

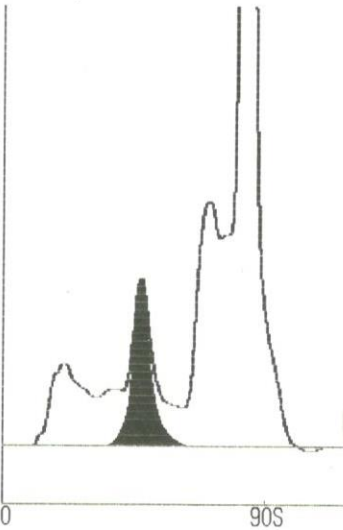
(G.M.-Engineering Services Signature & Name)

HPLC

Dobson

Time: 12:48:25
Date: 2023-08-23
Type: QC
Rack No.: 0001
Rack Position: 03
Sample ID: 9SX1230010
Running No.: 0003

T.8
23/8/23



Peak	Time	ABS	Area	Area
HbA1a	12	0.0007	0.032	0.4
HbA1b	16	0.0037	0.154	2.0
HbF	22	0.0032	0.185	2.4
LA1c	40	0.0079	0.129	1.6
HbA1c	42	0.0079	0.845	10.1
HbA0	72	0.1174	6.312	83.5
V_Win	0	0.0000	0.000	0.0

Total Area: 7.657

HbA1c	10.1% ↑	NGS
HbA1c	86.8mmol/mol	IFC
eAG	13.4mmol/l	ADA
eAG	242.4mg/dl	ADA

Reference Range: 4.0%-6.1%

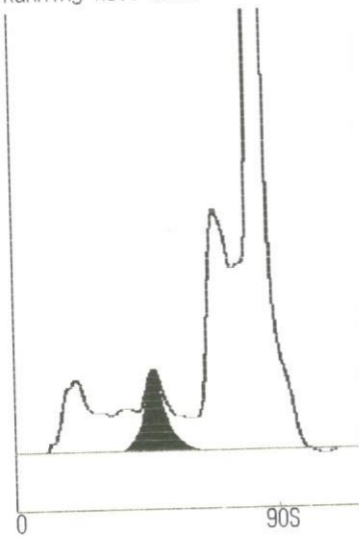
Operator:

M

Doherty
T.S.
23/8/23

HbA1c

Time: 12:46:45
 Date: 2023-08-23
 Type: QC
 Rack No.: 0001
 Rack Position: 02
 Sample ID: 9SX1230010
 Running No.: 0002



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0006	0.028	0.4
HbA1b	16	0.0033	0.136	2.0
HbF	22	0.0022	0.144	2.1
LA1c	40	0.0040	0.094	1.4
HbA1c	42	0.0039	0.485	7.1
HbA0	72	0.1117	5.860	88.0
V_Win	0	0.0000	0.000	0.0

Total Area: 6.747

HbA1c	5.8% -	NGS
HbA1c	39.8mmol/mol	IFC
eAG	6.6mmol/l	ADA
eAG	119.3mg/dl	ADA

Reference Range: 4.0%-6.1%

Operator: 