

Technical Specifications

Methodology	Highperformance liquid chromatography (HPLC)
Test Mode	Standard Mode and Detects Variants present
Test Range	3% - 18%
Precision	CV ≤ 1.5%
Test Speed	130 seconds/test
Sample Type	Venous Blood, Finger peripheral blood, Lyophilized whole blood 10 µL (Whole Blood), 400 µL (Diluted Blood)
Auto Sample Station	5 Positions/Rack
Photometer	415 nm + 500 nm Detector
Filter	≥ 400 T
Display	10.1" TFT True color LCD touch screen
Software	Linux software with self diagnosis to monitor and detect system errors
Reagents	Eluent A, Eluent B, Hemolysin L, Calibrator, QC material
Information Input	Scanner or Touch keypad
Storage	4000 sample results
Connection	USB, LAN, LIS compatible
Printer	Inbuild thermal printer
Temperature	10 – 30 °C (50-86 °F)
Humidity	≤ 80 %
Power	AC 100- 240 V 50/60 Hz 120 VA
Dimensions	450 mm (L) * 360 mm (W) * 540 mm (H)
Weight	32.8 Kg



Exclusively Marketed in India by:
VECTOR BIOTEK PVT. LTD.

Factory & Registered Office:
425, NEW GIDC, KABILPORE, NAVSARI - 396 424. (GUJ.) INDIA
Toll free:1800-270-1027 | Tel : +91-93757 94103 | Fax: +91-2637-265105
E-mail : service@beaconindia.com | Web : www.vectorbiotekindia.com
CIN No. U33112GJ2002PTC040978

TOLL FREE 1800-270-1027



VBPL/APRIL22/UNICORNGH/Ver1.0

UNICORN GH⁺

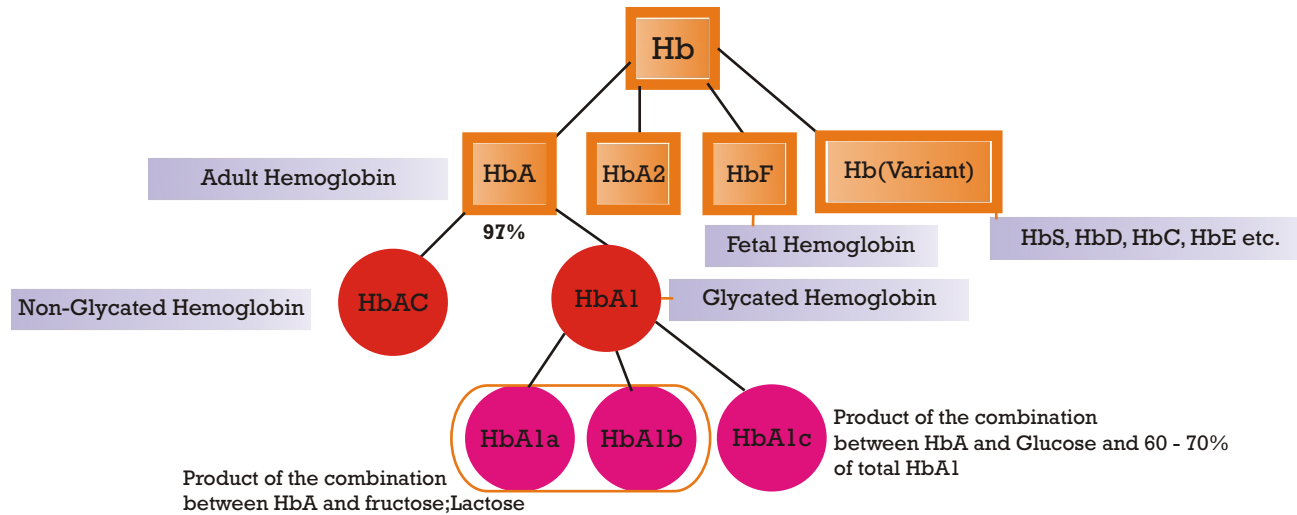
HbA1c Analyzer (HPLC Method)

Fully Automatic | Compact | Fast | Accurate

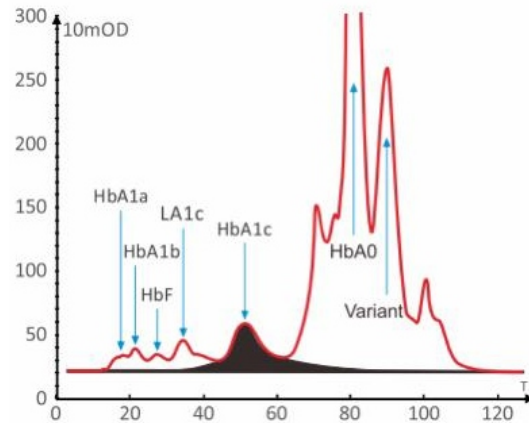
VECTOR BIOTEK PVT. LTD.

UNICORN GH⁺ gives fast results output of HbA1C in 130 Seconds without Hb variant interference.

Elements of Hemoglobin



HPLC Methodology



- High pressure liquid chromatography(HPLC), to separate HbA1C directly with measuring the absorbance points continually to form chromatogram.
- Auto iterative algorithm of Unicorn GH⁺ uses normal distribution curve fitting to get precise HbA1C testing results, excluding interference of variant and unstable hemoglobin like LA1c.
- Unicorn GH⁺ Standard analysis mode will report HbA1a, HbA1b, HbF, LA1c, HbA1c, HbA0 peak areas and percentage.
- Results includes IFCC, NGSP and ADAG value for diverse client needs.

Experience New Flexibility



Easy Start Up and testing

- Single switch operation and easy linking of reagents. HbA1C results within 130 seconds.
- 5 samples loading capacity, suitable for medium to small laboratories and hospitals.



Sample processing

- Fully automated process with no sample preparation
- Auto cleaning after each sample
- Supports external barcode scanner for sample identification



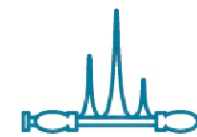
Consistency and reliability

- Clinicians turning to ion exchange HPLC for accurate HbA1C results.
- Inter measuring CV $\leq 1.5\%$ and intra measuring CV $\leq 3.0\%$
- Superior quality of chromatographic resolution which eliminates interferences.



Dual wavelength detection – to avoid interferences

- It avoids reagent peaks interferences.
- More ability to avoid interferences, the mutation factor interferences to the peak can be easily counteracted.
- To eliminate the nonspecific absorption of hemoglobin.



Degasser – For better result accuracy

- More stability to pressure, continuous flow rate by eliminating bubbles existed in elution liquid that transmitted by pump.
- To improve the separation effect of column and prolong its life.



Minimal calibration and Quality control

- Calibrate once with new kit and run Quality control at every 24 hours.