

Product Specifications

Hemoglobin analyzer RC-W		
Measurement Principle	High Performance Liquid Chromatography (HPLC)	
Measurement Wavelength	415 nm / 660 nm (Dual-wavelength colorimetry)	
Sample Type	Human Whole blood (Capillary OR Venous blood specimens*1)	
Required Sample Volume	Approximately 3 μ L (whole blood)	
Storage Memory	Measurement results: max. 4000 Quality control results: max. 50 Operator ID: max. 10	
External Output	USB(A) port X 2 (for barcode reader, USB memory) RC-232C port (male 9-pin D-sub)	
Dimensions	194 mm (W) x 375 mm(D) x 364 mm (H)	
Weight	Approximately 11 kg	
Power Supply	Analyzer	DC 24 V
	AC Adapter	AC 100-240 V, 50/60 Hz
Current Consumption (Analyzer)	Maximum 1.9 A	
Power Consumption (Analyzer)	Maximum 52 VA	
AC adapter	Input Current	Maximum 1.5 A
	Output Current	Maximum 4.2 A
Operating Environment	Temperature: 15 - 30°C, Humidity: 20 - 80% RH (no condensation)	
Storage Conditions	Temperature: -20 - 50°C, Humidity: 20 - 80% RH (no condensation)	

*1 Heparin, citric acid, EDTA anticoagulant, and NaF anticoagulant tubes can be used.

Measurement information

Diabetes Program		
Column	RC-W Column for Diabetes Program	
Reagent Kit	RC-W Reagent Kit for Diabetes Program	
FAST Mode	Measurement Items	HbA1c (stable HbA1c, S-A1c)
	Measurement Range	HbA1c: 4.0 - 15.0% [20-140 mmol/mol]
	Measurement Time	Approx. 5.5 minutes
VARIANT Mode	Measurement Items	HbA1c (stable HbA1c, S-A1c) (HbS, HbC, HbE and HbD can be detected.)
	Measurement Range	HbA1c: 4.0 - 15.0% [20-140 mmol/mol]
	Measurement Time	Approx. 8.5 minutes
Thalassemia Program		
Column	RC-W Column for Diabetes Program	
Reagent Kit	RC-W Reagent Kit for Diabetes Program	
Measurement Items	HbA2 and HbF (HbS, HbC, HbE and HbD can be detected.)	
Measurement Range	HbA2: 1.5 - 12.0% HbF: 1.0 - 30.0%	
Measurement Time	Approx. 8.5 minutes	

Materials Required

For Diabetes Program	For Thalassemia Program
RC-W Column for Diabetes Program [1 pc]	RC-W Column for Thalassemia Program [1 pc]
RC-W Reagent kit for Diabetes Program [1 pc]	RC-W Reagent kit for Thalassemia Program [1 pc]
RC-W HbA1c Calibrator / Level 1 [1 vial], Level 2 [1 vial]	RC-W HbF/A2 Calibrator / Level 1 [1 vial], Level 2 [1 vial]
RC-W HbA1c Control / Level 1 [2 vials], Level 2 [2 vials]	RC-W HbF/A2 Control / Level 1 [2 vials], Level 2 [2 vials]
For Both Programs	
Sampling Device for Hemoglobin Analyzer RC-W [100 pc]	
Sample Cup for Hemoglobin Analyzer RC-W [100 pc]	
Sampling pipette for Hemoglobin Analyzer RC-W [1 pc]	
Pipette tip for Hemoglobin Analyzer RC-W [200 pc]	
Barcode Reader (Optional) [1 pc]	
Printer Paper [10rolls]	

*RC-W" is a trademark or registered trademark of SEKISUI MEDICAL CO., LTD. in Japan and/or other countries.

SEKISUI Manufacturer
SEKISUI MEDICAL CO., LTD.
1-3, Nihonbashi 2-chome, Chuo-ku, Tokyo 103-0027, Japan

SEKISUI

Hemoglobin Analyzer RC-W

HPLC System (HbA1c & HbF/A2)

- ✓ Compact Size
- ✓ Easy to Use
- ✓ High Precision
- ✓ High Accuracy

RC-W
Hemoglobin Analyzer



SEKISUI MEDICAL CO., LTD.

Features & Benefits

Diabetes (HbA1c) & Thalassemia (HbF-A2) Diagnostic Assays on One Hemoglobin Analyzer: RC-W*1

Compact Size

Space-saving compact design; small footprint the size of a piece of A4 printer paper.

Easy to Use

Routine sample analysis is as simple as setting the sample and pressing the start button. HbA1c calibration and control materials are automatically diluted by the instrument.

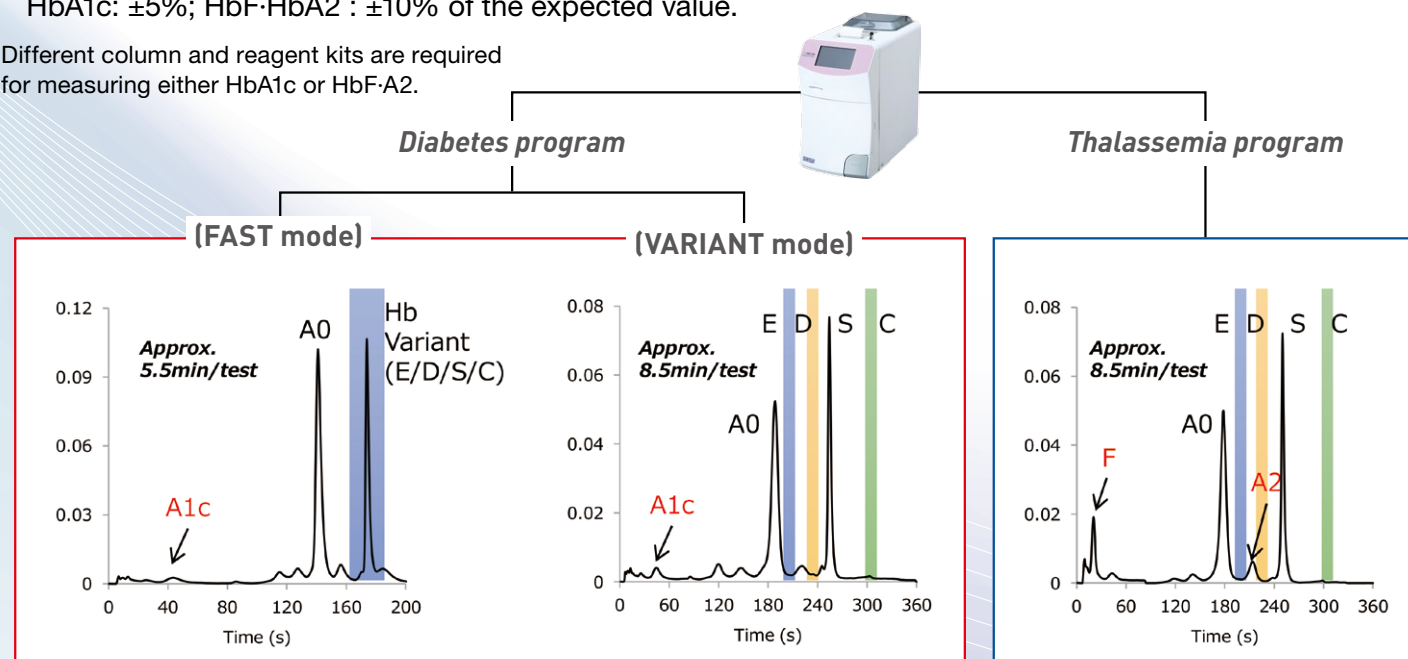
High Precision

HbA1c: C.V.% < 2%; HbF-HbA2 : C.V.% < 5%

High Accuracy

HbA1c: $\pm 5\%$; HbF-HbA2 : $\pm 10\%$ of the expected value.

*1 Different column and reagent kits are required for measuring either HbA1c or HbF-A2.

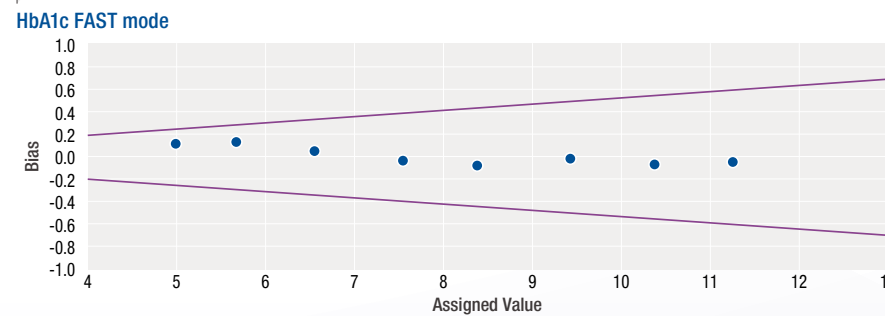


Measurement performance

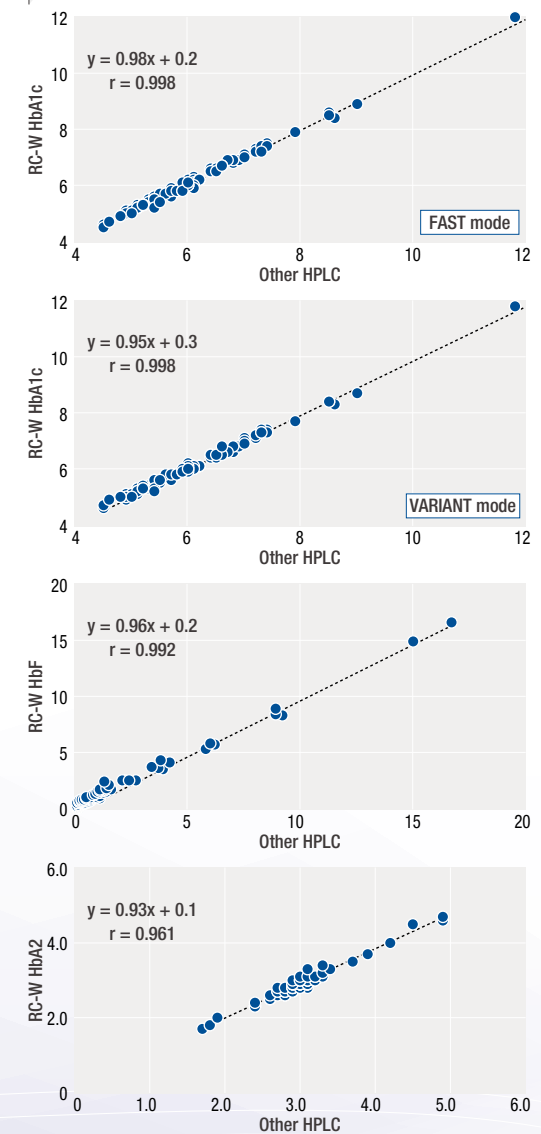
Within precision study results

FAST mode				VARIANT mode			HbF			HbA2			
	Low	Mid.	High	Low	Mid.	High	Low	High	Low	High	Low	High	
1	5.3	8.8	10.8	1	5.2	8.7	11.1	1	1.5	29.6	1	1.5	4.3
2	5.4	8.8	10.8	2	5.2	8.8	11.0	2	1.5	29.6	2	1.5	4.2
3	5.3	8.8	10.8	3	5.2	8.8	11.0	3	1.4	29.6	3	1.6	4.2
4	5.3	8.8	10.8	4	5.2	8.8	11.0	4	1.5	29.7	4	1.6	4.1
5	5.3	8.8	10.8	5	5.2	8.8	11.0	5	1.5	29.6	5	1.6	4.3
6	5.3	8.8	10.8	6	5.2	8.8	11.0	6	1.5	29.6	6	1.6	4.2
7	5.3	8.8	10.8	7	5.2	8.8	11.0	7	1.4	29.5	7	1.6	4.3
8	5.4	8.8	10.8	8	5.2	8.7	11.0	8	1.5	29.6	8	1.6	4.3
9	5.3	8.8	10.8	9	5.1	8.8	11.0	9	1.5	29.6	9	1.6	4.2
10	5.3	8.8	10.8	10	5.1	8.8	11.0	10	1.4	29.2	10	1.6	4.2
mean	5.32	8.80	10.80	mean	5.18	8.78	11.01	mean	1.47	29.56	mean	1.58	4.23
S.D.	0.04	0.00	0.00	S.D.	0.04	0.04	0.03	S.D.	0.05	0.13	S.D.	0.04	0.07
C.V.	0.75	0.00	0.00	C.V.	0.77	0.46	0.27	C.V.	3.40	0.44	C.V.	2.53	1.65

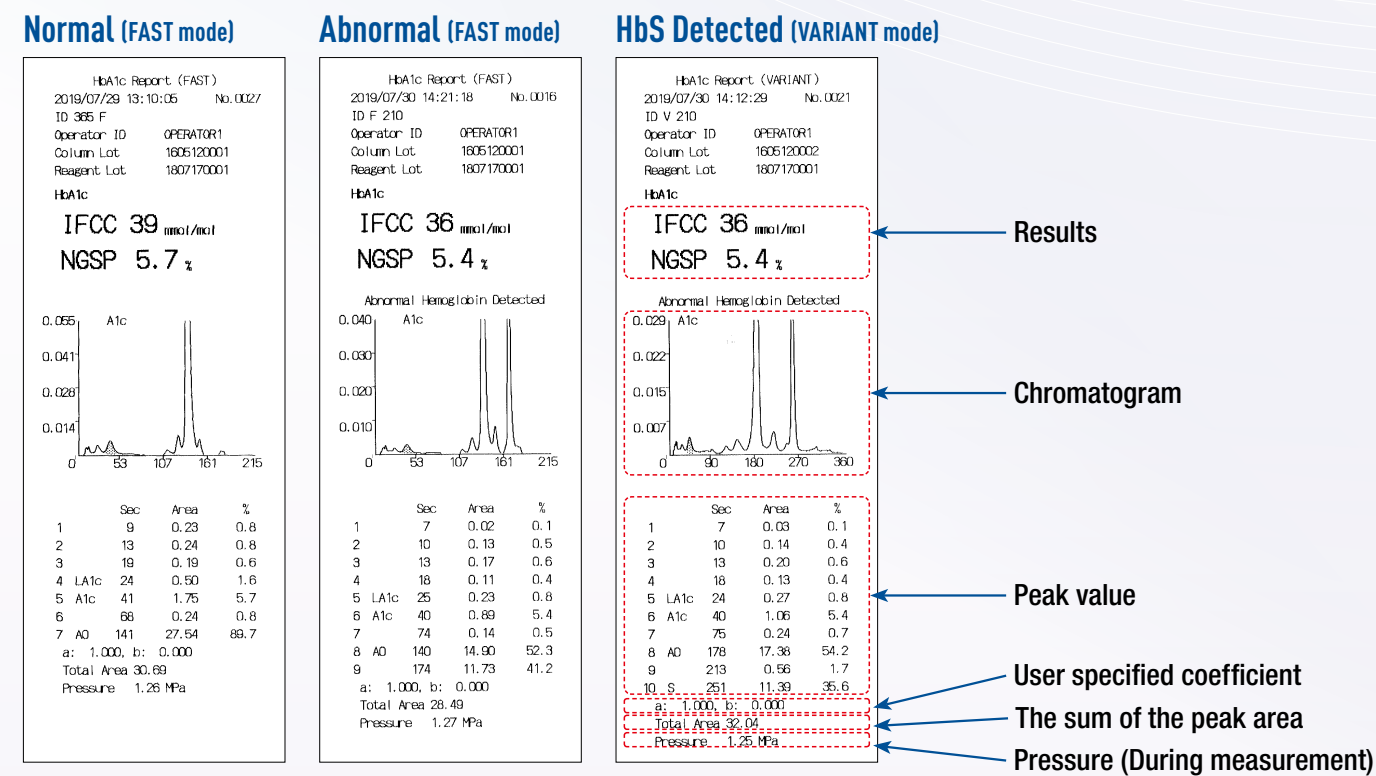
Accuracy (IFCC HbA1c Cal (Lot Durban 2017.125))



Method comparison result

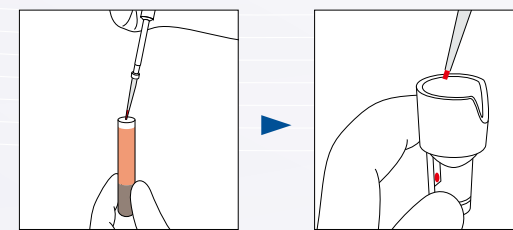


Print Layout



Measurement procedure

Venous Whole Blood Samples



Capillary Whole Blood Samples

