

Swiftest HB1

Dry Clinical Chemistry and Electrolyte Analyzer



FDA- 510 K CLEARED*



28 Test Parameters
*Biochemistry, Immunoassay
& Electrolyte*



200 μ l Whole Blood



15 Mins. Test Time



Built-in Centrifuge
No Sample Pre-treatment

SPEED MEETS QUALITY

 **Rapid**  **Reliable**  **Convenient**

KEY FEATURES

Rapid

- Fully Automated
- Test Time - 15 minutes
- Wide Test Profile - 8 panels, 28 test items
- Built-in Centrifuge

Reliable

- Principle - Colorimetric System
- LEDs 340 nm~940 nm wavelength
- IQC with self-calibration of optical system and interference alerts functions
- Fixed 200 μ L Micropipette provided

Convenient

- Sample type - Whole blood/serum/plasma
- Micro sample - 200 μ L
- Built-in Printer
- LIS/HIS Compatible
- Up to 50,000 results storage

SINGLE STEP PROCEDURE

Walk- Away System



1
Inject 200 μ L blood sample

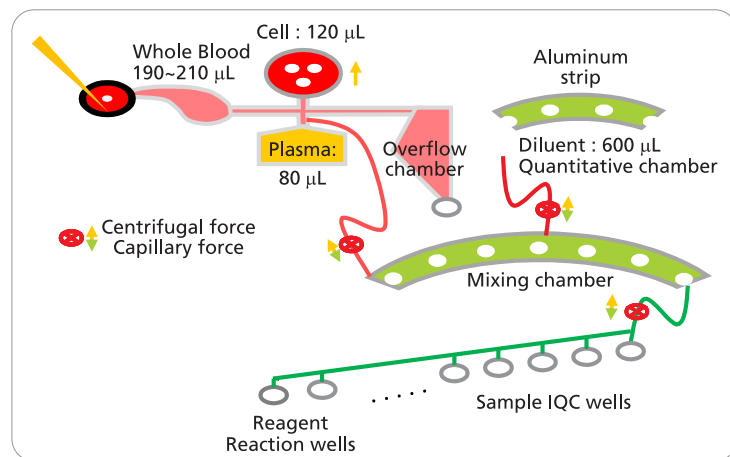
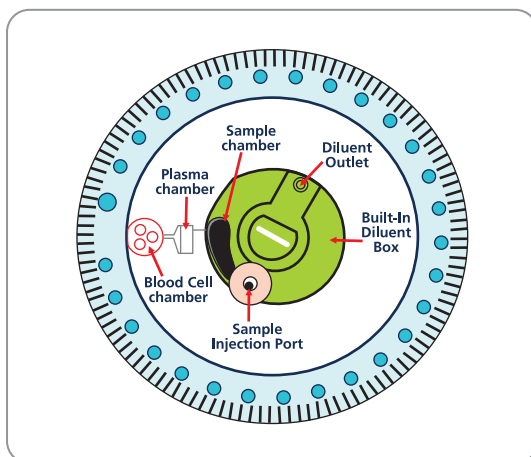


2
Press START and insert reagent disc



3
Read the results

DISC WORKING THEORY



Test Profiles

General Biochemistry Panel (12+3)	ALB, ALP, ALT, AST, BUN, CREA, GGT, GLU, TBIL, TC, TP, UA, A/G#, eGFR#, GLOB#
Basic Biochemistry Panel (7+3)	ALB, ALT, BUN, CREA, GLU, TP, UA, A/G#, eGFR#, GLOB#
Metabolic Panel (13+3)	ALB, ALT, AST, BUN, CREA, GLU, TP, UA, Ca, Cl, K, Na, PHOS, A/G#, eGFR#, GLOB#
Liver Panel (9+3)	ALB, ALP, ALT, AST, DBIL, GGT, GLU, TBIL, TP, A/G#, GLOB#, IBIL#
Renal Panel (10+1)	ALB, BUN, CPK, CREA, GLU, Ca, Cl, K, Na, PHOS, eGFR#
Lipid Panel (4+2)	GLU, HDL, TC, TG, LDL#, VLDL#
ER Panel (13+1)	ALT, AMY, AST, BUN, CPK, CREA, GLU, LIPA, Ca, Cl, K, Na, PHOS, eGFR#
Electrolyte Panel II	Cl, K, Na, tCO ₂ , Ca, PHOS, Mg

INTELLIGENT INTERFERENCE ELIMINATING (IIE) SYSTEM

Use of multiple wavelengths LEDs eliminates the effect of sample lipemia (LIP), hemolysis (HEM) and icterus (ICT) interference to provide high accuracy results.



Test Report

Basic Biochemistry Panel

QC Report OFF

Header

LITEON Hospital
 30-09-2021 17:05:07
 Sample Type: Whole Blood
 Patient ID: 1234567890412
 Name: Andy Liu
 Gender: Male
 Age: 48 Yr
 Operator ID: 123456789012
 PR Code: 1140109201AMOFAMOD
 QC: OK
 LIP:+++ HEM:0 ICT:+

Sample Interference Condition:
LIP = Lipemia
HEM = Hemolysis
ICT = Icterus
O : clear
+ : mild
++ : moderate
+++ : severe

Analyzed

Item	Result	Range	Unit
ALB	4.12	3.5-5.3	g/dL
TP	2.12	6.0-8.3	g/dL
GLU	80	70-100	mg/dL
ALT	>1100	M0-41	U/L
BUN	12.12	F0-31	U/L
CREA	L:H:I	8-20	mg/dL
		MO. 7-1.3	mg/dL
		FO. 6-1.0	mg/dL

Calculated

#GLOB	12.12	2.3-3.5	g/dL
#A/G	N.A	1.0-1.8	
#eGFR	123	≥90	mL/min

↑, ↓ : Out of Ref. Range

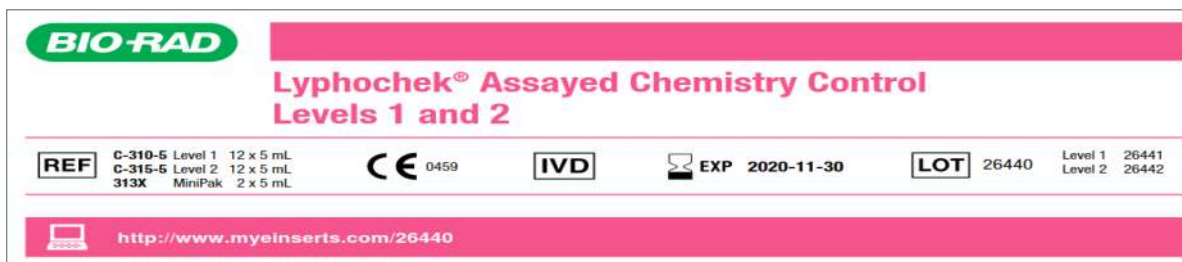
Ref. Range

The result cannot be calculated

>, < : Out of Dynamic Range

EXTERNAL QUALITY CONTROL

BIO-RAD Lyphochek® Assayed Chemistry Control Level 1/2 and BIO-RAD Liquid Assay Multiquald® Control Level 1/2/3 values provided on request.



BIO-RAD

Lyphochek® Assayed Chemistry Control Levels 1 and 2

REF C-310-5 Level 1 12 x 5 mL
 C-315-5 Level 2 12 x 5 mL
 313X MiniPak 2 x 5 mL

CE 0459

IVD

EXP 2020-11-30

LOT 26440

Level 1 26441
 Level 2 26442

<http://www.myinserts.com/26440>

Specifications

Throughput	Max.15 test results / 15 minutes
Display	5" Color LCD Touch Screen
USB Socket	USB type A (Host) for External USB Printer, USB flash drive for External Barcode Scanner, USB port for Wifi dongle (optional)**
Interface	RS232 serial port or RJ45 (LAN)
Power Supply	100 - 240 VAC, 50 - 60 Hz
Dimensions	223 (W) X 285 (D) X 300 (H) mm
Operating Environment	Temperature : 10 - 32°C, Humidity : 5 - 90%
LEDs	340, 405, 450, 510, 540, 600, 650, 940
Weight	5.5 kg

* ALP, ALT, AST, BUN, Creatinine

** No FDA 510K for model with wifi dongle

Assay	Test Item	Unit	Methodology	Working Range
ALB	Albumin	g/dL	Bromocresol green	1.0 - 6.0 g/dL
ALP	Alkaline Phosphatase	U/L	PNNP, AMP Buffer	41 - 2000 U/L
ALT	Alanine Aminotransferase	U/L	UV with P5P	20 - 1100 U/L
AMY	Amylase	U/L	Gal-G ₂ -CNP	22 - 3000 U/L
AST	Aspartate Aminotransferase	U/L	UV without P5P	20 - 1000 U/L
BUN	Blood Urea Nitrogen	mg/dL	Urease, UV (GLDH)	2 - 120 mg/dL
Ca	Calcium	mg/dL	Arsenazo III	4 - 15 mg/dL
Cl	Chloride	mmol/L	Enzymatic, α-amylase activation	70 - 140 mmol/L
CPK	Creatinine Phosphokinase	U/L	IFCC	40 - 2400 U/L
CREA	Creatinine	mg/dL	Enzymatic	0.6 - 20 mg/dL
CRP	C-Reactive Protein	mg/L	Immunoturbidimetric	5 - 40 mg/L
DBIL	Direct Bilirubin	mg/dL	Vanadate Oxidation	0.1 - 15 mg/dL
GGT	Gamma Glutamyl Transferase	U/L	IFCC	10 - 1500 U/L
GLU	Glucose	mg/dL	Hexokinase	30 - 600 mg/dL
HDL	High Density Lipoprotein	mg/dL	Direct Measurement	20 - 75 mg/dL
LIPA	Lipase	U/L	DGGMR, Colorimetric	60 - 1500 U/L
Mg	Magnesium	mg/dL	Hexokinase	0.1 - 8.0 mg/dL
PHOS	Phosphorous	mg/dL	Enzymatic	0.4 - 18 mg/dL
K	Potassium	mmol/L	Enzymatic	1.5 - 8.5 mmol/L
Na	Sodium	mmol/L	Enzymatic	110 - 170 mmol/L
TBIL	Total Bilirubin	mg/dL	Vanadate Oxidation	0.4 - 30 mg/dL
TC	Total Cholesterol	mg/dL	Dehydrogenase, Esterase	50 - 540 mg/dL
tCO ₂	Total CO ₂	mmol/L	Enzymatic (Phosphoenolpyruvate Carboxylase)	10 - 40 mmol/L
TG	Triglycerides	mg/dL	Enzymatic GPO	35 - 600 mg/dL
TP	Total Protein	g/dL	Biuret	1.5 - 10 g/dL
UA	Uric Acid	mg/dL	Uricase	1 - 20 mg/dL

Calculated parameter [#]	Indication	Unit	Equation
Globulin	#GLOB	g/dL	GLOB = TP - ALB
Albumin/Globulin ratio	#A/G		ALB/#GLOB = ALB/(TP - ALB)
VLDL - Cholesterol	#VLDL	mg/dL	VLDL = TG/5
LDL - Cholesterol	#LDL	mg/dL	LDL = TC - (HDL+VLDL)
Estimated Glomerular Filtration Rate	#eGFR (MDRD)	mL/min/1.73 m ²	Male - 186*CREA ^{-1.154} x Age ^{-0.203} x 1 Female - 186*CREA ^{-1.154} x Age ^{-0.203} x 0.742
Estimated Glomerular Filtration Rate	#eGFR (CKD-EPI)	mL/min/1.73 m ² (CREA : Common unit)	Male - CREA ≤ 0.9, eGFR = 141 x (Cr/0.9) ^{-0.411} x (0.993) ^{95e} CREA > 0.9, eGFR = 141 x (Cr/0.9) ^{-1.209} x (0.993) ^{95e} Female - CREA ≤ 0.7, eGFR = 144 x (Cr/0.7) ^{-0.329} x (0.993) ^{95e} CREA > 0.7, eGFR = 144 x (Cr/0.7) ^{-1.209} x (0.993) ^{95e}
Indirect Bilirubin	#IBIL	mg/dL	IBIL = TBIL - DBIL
Non HDL	#NHDL	mg/dL	NHDL = TC - HDL

ABOUT KIN

KIN Diagnostics is a company specialized in Point-of-Care products. Founded in 2008, guided by the philosophy of 'Transforming Healthcare', KIN Diagnostics aims to transform the conventional methods of diagnostic testing by providing point-of-care solutions to ensure patients receive faster diagnosis, treatment & therapeutic management.



Swiftest iChroma II
Immunochemistry Analyzer



Swiftest Blood Gas
& Chemistry Analyzer



Swiftest
Protein Analyzer

KIN DIAGNOSTICS

122/2, Panchanantala Road, Kolkata, West Bengal – 700041 **Other Branches** : Mumbai | Delhi | Bangalore

sales@kindiagnostics.com | www.kindiagnostics.com

Toll Free No.
18008914193