

MAGLUMI[®] 800

Chemiluminescence Immunoassay (CLIA) System



Outstanding Technology Power of MAGLUMI®

Chemiluminescence Immunoassay (CLIA) System

CLIA uses two important technologies, one is labelling technology which determines reaction mode, and the other is separation technology which determines the sensitivity, accuracy and precision of the reagents.

ABEI Labelling Technology

Two types of labelling technologies are commonly used.

One is enzyme label and the other is non-enzyme small molecule label. Enzyme label reagents are not so stable and are easily affected by the change of storage conditions. MAGLUMI® system applies ABEI labels. ABEI is a non-enzyme small molecule with special molecular formula to enhance stability in acid and alkaline solutions. The chemical reaction process of ABEI with sodium hydroxide (NaOH) and hyperoxide (H_2O_2) finishes in 3 seconds.

Magnetic Microbeads Separation Technology

MAGLUMI® uses Magnetic Microbeads. As a separation technology, it has been widely used in the field of CLIA. Compared with traditional separation technologies, it has the following advantages:

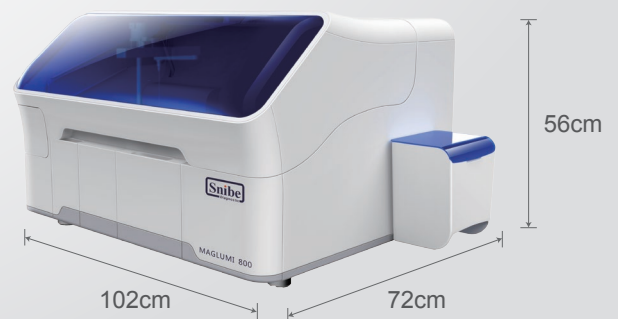
- Shortening the reaction time by enlarging the reaction area of antigens and antibodies.
- Enhancing the sensitivity by better and faster capturing of antigens and antibodies.
- Reducing inter or intra-assay discrepancies significantly by mixing the reagents thoroughly in a liquid separation platform.



Advantage of MAGLUMI[®] 800

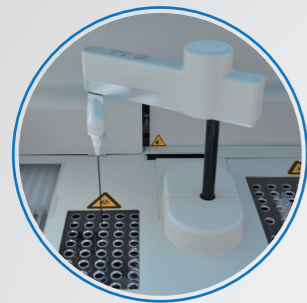


- For small and middle size labs or hospitals
- Simple, Smart, Humanization designed model
- More than enough test menu to meet the different needs and it will be extended according to your requirement
- Free Quality Control and calibrator helps to reduce the cost per of test
- Quality guarantee by the Third party quality control and External Quality Assessment (EQA)
- Key technology ABEI and Nano magnetic microbead enhances stability and sensitivity of MAGLUMI[®] reagents



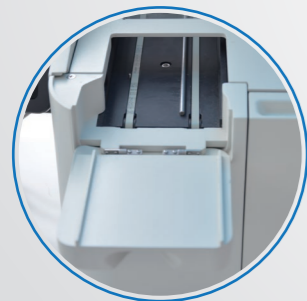
MAGLUMI® 800

- Integrated design and humanized appearance
- Simple and smart operation
- Compact size and weight



Pipettor

- Aspirate reagent / sample with high speed
- Titanium needle with crush-proof function
- Clot detection & liquid level detection
- Coated with TEFLON to prevent carry-over
- Internal & external washing



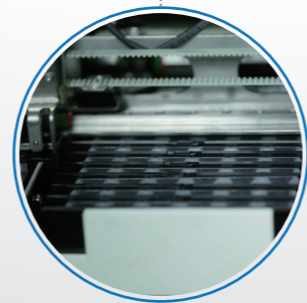
Automated cuvette loader

- Up to 40 modules of 240 tests
- Continuous loading



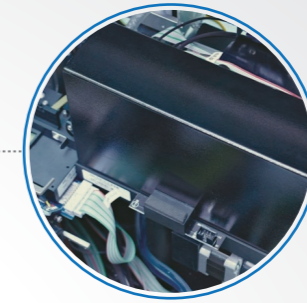
Sample area

- Up to 40 samples on board with barcode
- Continuous loading & cooling function
- Random, batch, and STAT mode



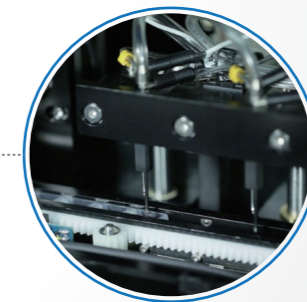
Incubator

- 13 Incubate slots (78 tests at the same time)
- The temperature is $36.8\text{ C} \pm 0.5\text{ C}$



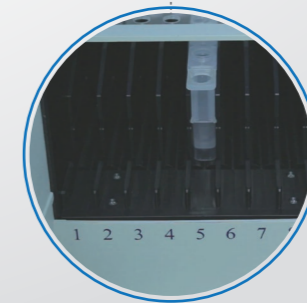
Chamber

- High-sensitivity and low-noise PMT
- Cuvettes detection and anti-overflow



Washer

- Strong magnetic field helps better separation
- Three pairs of washing needles with anti-overflow function



Reagent area

- Up to 9 reagents on board with RFID
- RFID label storing reagent information
- Easy and fast for adding and updating
- RFID tag, high reliability

Operation Software



Comprehensive Software

- User-friendly interface
- Real-time status monitoring for each test
- Monitoring reagent and consumable status
- Intelligent alarm function
- Multilingual support, 10 languages available by request



Maintenance Guide

- Smart Maintenance with step by step guide, ensure performance reliability and reduce unnecessary service calls
- Daily, weekly and monthly maintenance guide for analyzer



Quality Control

- Westgard rules and Levey-Jennings chart for both internal and external quality control



Test Summary Function

- Test summary including system test, calibration, QC, statistics of samples, valid tests and rerun tests
- Search and review test information conveniently



Pre or Post Defined Dilution Function

- Pre- and post- dilution available for the case of high concentration sample



Bidirectional LIS Connection

- Bidirectional LIS connection by TCP/IP and COM

Test Menu

Thyroid

TSH (3rd Generation)
T4
T3
FT4
FT3
Tg (Thyroglobulin)
TGA (Anti-Tg)
Anti-TPO
TRAb
TMA
Rev T3
*T-Uptake

Hepatic Fibrosis

HA
PIIIP N-P
C IV
Laminin
Cholyglycine

TORCH

Toxo IgG
Toxo IgM
Rubella IgG
Rubella IgM
CMV IgG
CMV IgM
HSV-1/2 IgG
HSV-1/2 IgM
HSV-2 IgG
*HSV-2 IgM
*HSV-1 IgG
*HSV-1 IgM

EBV

EBV EA IgG
EBV EA IgA
EBV VCA IgG
EBV VCA IgM
EBV VCA IgA
EBV NA IgG
EBV NA IgA

Inflammation Monitoring

hs-CRP
PCT (Procalcitonin)
IL-6 (Interleukin 6)
*SAA(Serum Amyloid A)

Fertility

FSH
LH
HCG/ β -HCG
PRL (Prolactin)
Estradiol
Testosterone
free Testosterone
DHEA-S
Progesterone
free Estriol
17-OH Progesterone
AMH
SHBG
Androstenedione
*PIGF
*sFlt-1

Autoimmune

Anti-CCP
Anti-dsDNA IgG
ANA Screen
ENA Screen
Anti-Sm IgG
Anti-Rib-P IgG
Anti-Scl-70 IgG
Anti-Centromeres IgG
Anti-Jo-1 IgG
Anti-M2-3E IgG
Anti-Histones IgG
Anti-nRNP/Sm IgG
Anti-SS-B IgG
Anti-SS-A IgG
TGA(Anti-Tg)
Anti-TPO
TRAb
TMA
ICA
IAA(Anti Insulin)
GAD 65
Anti-IA2
*Anti-Cardiolipin IgG
*Anti-Cardiolipin IgM
*Anti-MPO

Immunoglobulin

IgM
IgA
IgE
IgG

Kidney Function

β_2 -MG
Albumin
*NGAL

Tumor Markers

AFP
CEA
Total PSA
f-PSA
CA 125
CA 15-3
CA 19-9
PAP
CA 50
CYFRA 21-1
CA 242
CA 72-4
NSE
S-100
SCCA
TPA-snibe
ProGRP
HE4
HER-2
*PIVKA-II

Hypertension

Direct Renin
Aldosterone
Angiotensin I
Angiotensin II
Cortisol
ACTH

Infectious Disease

HBSAg
Anti-HBs
HBeAg
Anti-HBe
Anti-HBc
Anti-HCV
Syphilis
Anti-HAV
HAV IgM
HIV Ab/Ag Combi
Chagas
HTLV I+II
H.pylori IgG
H.pylori IgA
H.pylori IgM
2019-nCoV IgG
2019-nCoV IgM
SARS-CoV-2 S-RBD IgG
*Anti-HBc IgM

Drug Monitoring

Digoxin
CSA (Cyclosporine A)
FK 506 (Tacrolimus)

Cardiac

CK-MB
Troponin I
Myoglobin
hs-cTnI
H-FABP
NT-proBNP
BNP
D-Dimer
Lp-PLA2
*MPO

Metabolism

Pepsinogen I
Pepsinogen II
Gastrin-17
GH (hGH)
IGF-I
IGFBP-3

Prenatal Screening

AFP(Prenatal Screening)
Free β -HCG
PAPP-A
free Estriol

Anemia

Vitamin B12
Ferritin
Folate (FA)
*RBC Folate

Glyco Metabolism

C-Peptide
Insulin
GAD 65
Anti-IA2
ICA
IAA (Anti Insulin)
Proinsulin

Bone Metabolism

Calcitonin
Osteocalcin
25-OH Vitamin D
Intact PTH
* β -CrossLaps (β -CTX)
*total P1NP

* Available soon

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Chemiluminescence Immunoassay (CLIA) System

Technical Specifications

Reagent Feature

- Flash chemiluminescence label-ABEI, with high sensitivity and long stability
- Nano magnetic microbeads separation, fast and efficient

Main Features

- Throughput: up to 180 tests/hour
- 24 hours ready to use
- Time to first result: 17 minutes

Modes of Operation

- Random, Batch and STAT

Sample Loading

- Up to 40 sample tubes
- Continuous loading, STAT available
- Barcode reader recognition or analyzer automatic numbered
- LIS connection, automatic read sample information
- Refrigerated sample area with independent power supply

Reagent Loading

- 9 reagents on board
- Continuous loading
- RFID reading all info of reagent
- Refrigerated reagent area

Reagent Integral

- Ready-to-use, no pretreatment required
- Including calibrators
- RFID tag storing all info of reagent
- RFID tag with built-in master curve
- 2-point calibration to adjust master curve
- Calibration stability: Max 4 weeks

Other Features

- Clot detection
- Liquid level detection
- Automatic and optional ratio for high sample dilution
- Constant 36.8°C ± 0.5°C incubation

Operation System

- Windows 7
- DELL compatible (Dual-core CPU)
- Color touch screen

Interconnection

- Bidirectional LIS connection by TCP/IP and COM

Dimensions Weight

- Input: AC 110/230 Vac, 50/60 Hz, Max 630W
- Dimension and Weight: 102*72*56cm 73kg