# MAGLUMI® X8 Chemiluminescence Immunoassay (CLIA) System

# **Technical Specifications**

## **Reagent Features**

- Flash chemiluminescence label-ABEI, with high sensitivity and long stability
- Superparamagnetic microbeads separation technology; fast and efficient

### **Main Features**

- Throughput: up to 600 tests/hour (Single module)
- Time to first result: 15 minutes
- 24 hours ready to use
- Up to 2800 walk-away tests
- Modular Expanding Flexibility:
- \*Capable to integrated several modules including Snibe Immunoassay, biochemistry and ISE module
- \*Capable to link with Laboratory Automation system (TLA/LAS)

## Sample Loading

- Up to 300 sample positions
- Continuous loading, STAT available
- Auto remeasuring function
- Sample editing mode:
- Lis connection, Barcode recognition, Auto named, Manual editing

### **Reagent Loading**

- 42 reagent positions on board
- Continuous loading
- RFID technology
- 24-hour refrigerated
- Working Temp. 8°C-12°C, Storage Temp. 2°C-8°C

### **Reagent Needle**

- Titanium needle for crushproof
- Teflon coated for carry-over prevention
- Dual-arm design to pipette different reagents simultaneously
- Liquid level detection, Collision detection
- Probe depth adjustment automatically

## **Reagent Integral**

- Ready to use, no pretreatment required
- Calibrators and internal controls included
- · RFID tag storing all info of reagent
- 2-point re-calibration
- Calibration stability: up to 4 weeks
- Storage temperature: 2°C-8°C

## Sampling System

- Using disposable TIPs
- One pipetting for multiple tests
- Clot detection
- Liquid level detection
- Bubble detection
- Collision detection

## **Reaction Disk**

- Incubating 252 cuvettes simultaneously
- Stable 37.0°C incubation
- Non-contact mix technology

## **Tip Storage**

- Up to 576 TIPs loaded one time (6 boxes)
- Intelligent loading technology, continuous loading, real-time reserve monitoring

## **Cuvette Storage**

- Single cup design
- Up to 2912 cuvettes loaded one time (16 boxes)
- Intelligent loading technology, continuous loading, real-time reserve monitoring

### Washer

- 4-step washing technology, high speed single channel design
- Intelligent magnetic field design ensuring excellent separation
- Non-contact Magnetic Microbeads suspension technology

### Software System

- Bidirectional LIS connection by TCP/IP and COM Port
- Supporting SnibeLinker remote diagnosis system

# **Dimensions Weight**

# • Input: AC 100-240V,50/60Hz

• Dimensions and Weight:192\*118\*150 (cm), 670Kg

# MAGLUMI<sup>®</sup> X8

Fully Automatic Chemiluminescence Immunoassay (CLIA) System



# Snibe

Shenzhen New Industries Biomedical Engineering Co., Ltd. (SNIBE Co., Ltd)

No.23, Jinxiu East Road, Pingshan District, 518122 Shenzhen, P.R. China

Tel: +86 755 26501514 Fax: +86 755 26654850 Email: sales@snibe.com Web: www.snibe.com

Follow us o



1012E01-210222

# The Fastest CLIA Solution





www.snibe.com sales@snibe.com

# **Outstanding Technologies 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<sub>2</sub>O<sub>2</sub>) 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.

# **Advantages** of MAGLUMI® X8



- Throughput: up to 600 tests/hour(Single module)
- Up to 2400 tests/hour (Four modules combined)

# **Excellent reliability**

- · Magnetic microbeads separation , fast and efficient
- Flash chemiluminescence label-ABEI
- · Intelligent magnetic field design ensuring excellent separation
- Disposable tips to prevent carry-over









Reaction Module

Disposal TIP

Starter 1+2









# **High capacity**

- Sample positions: 300
- Reagent Position: 42
- Up to 2800 walk-away tests

# **Advanced intelligence**

- · Capable to integrated several modules including Snibe Immunoassay, biochemistry and ISE module
- Capable to link with Laboratory Automation system(TLA/LAS)
- · User-friendly interface, easy operation
- Intelligent consumable loading technology
- Intelligent information monitoring system

# MAGLUMI®

- Flash chemiluminescence label-ABEI, with high sensitivity and long stability
- Magnetic Microbeads separation, fast and efficient



# Sampling Loading

- Up to 300 sample positions
- Continuous loading, STAT function available
- Auto remeasuring function, auto dilution function
- Sample editing mode:
- Lis connection, barcode recognition, auto named, manual editing



# **Tip Storage**

- Intelligent loading technology, continuous loading, real-time reserve monitoring

# Sample transport system/Sampling system

- 3 channels, High speed loading
- Specific channel for STAT samples
- Disposable tips
- One pipetting for multiple tests
- Clot detection
- Liquid level detection
- Bubble detection
- Collision detection



# **Cuvette Storage**

- reserve monitoring



# **Reagent Area**

- 42 reagent positions on board
- Continuous loading
- RFID technology
- 24-hour refrigerated
- Working Temp. 8°C-12°C, Storage Temp. 2°C-8°C



# Reagent needle

- Titanium needle for crushproof
- Teflon coated for carry-over prevention
- Dual-arm design to pipette different reagents simultaneously
- Liquid level detection, Collision detection



# Software System

- Multilingual support
- Report system including editing, storage, query and printing





• Up to 576 TIPs loaded one time (6 boxes)

- Single cuvettes design
- Up to 2912 cuvettes loaded one time (16 boxes)
- Intelligent loading technology, continuous loading, real-time

# Consumable management

- Intuitive and concise design
- Intelligent reminding

- Brand new user-friendly UI interface
- Supporting SnibeLinker remote diagnosis system
- Touch screen, easy operation

# **Operation Software**

# **Test Menu**



m



# 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 ASTM

| Thyroid   |
|---|
| TSH (3rd Generation)<br>T4<br>T3<br>FT4<br>FT3<br>Tg (Thyroglobulin)<br>TGA (Anti-Tg)<br>Anti-TPO<br>TRAb<br>TMA<br>Rev T3<br>*T-Uptake |
| Hepatic Fibrosis  |
| HA<br>PIIIP N-P   |
| C IV<br>Laminin   |
| Cholyglycine  |
| TORCH   |
| Toxo lgG<br>Toxo lgM  |
| Rubella IgG<br>Rubella IgM  |
| CMV IgG<br>CMV IgM  |
| HSV-1/2 lgG<br>HSV-1/2 lgM<br>HSV-2 lgG   |
| *HSV-2 IgM<br>*HSV-1 IgG  |
| *HSV-1 IgM  |
| EBV   |
| EBV EA IgG<br>EBV EA IgA  |
| EBV VCA IgG<br>EBV VCA IgM  |
| EBV VCA IgA<br>EBV NA IgG   |
| EBV NA IgA  |
| Inflammation  |
| Monitoring  |
| hs-CRP<br>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 IqG 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

lgΜ ΙġΑ lgE lgG

# Kidney Function $\beta_2$ -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

HBsAq 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 SARS-CoV-2 Neutralizing Antibody SARS-CoV-2 Ag \*Anti-HBc IgM

# Drug Monitoring

Digoxin CSA (Cyclosporine A) FK 506 (Tacrolimus)

# Cardiac CK-MB Troponin I Myoglobin hs-cTnl 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 \*EPO 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