

## MAGLUMI® X3

Fully-auto Chemiluminescence Immunoassay (CLIA) System



## **Save Your Space without Compromise**

Powerful Performance and Compact Design Compatible with Small and Medium-sized Hospitals and Labs

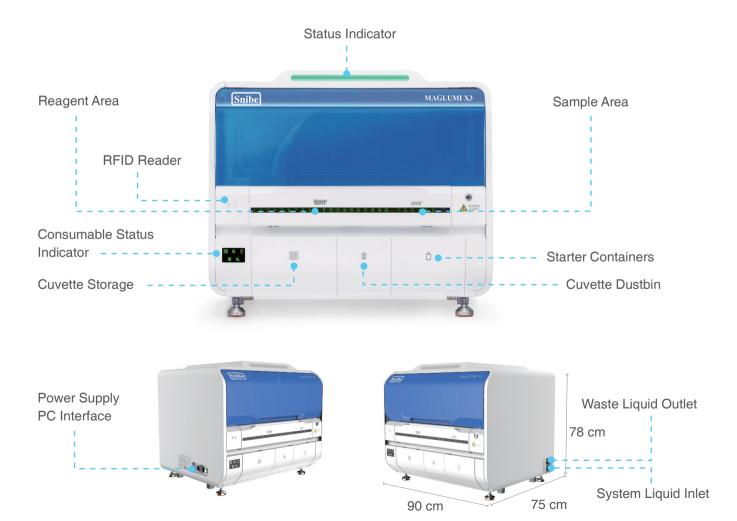


## MAGLUMI® X3

### **Features & Benefits**

- Small but powerful, the throughput is up to 200 tests/hour, and throughput per unit area is 294 T/h/m<sup>2</sup>.
- Compatible with all MAGLUMI® reagents, one of the broadest automated CLIA test menus in the world (256 parameters).
- The latest intelligent washing technology and bidirectional temperature control measurement guarantee accurate and reliable results. The comprehensive advanced design of MAGLUMI® X3 ensures excellent performance.
- Single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall.
- No-pause loading/unloading of reagents/samples/reaction cups without waiting or interrupting tests.

#### **Functional Modules**



## All Balanced and Strong





## Reagent and Sample Loading

- 72 sample positions with barcode reader
- Sample in each position can be defined as STAT
- 20 reagent positions with RFID reader, 24h refrigerated at 10°C (±3°C)
- No-pause loading/unloading of reagents/samples/reaction cups without waiting or interrupting tests
- Reagent and sample indicator light available, real-time status monitoring, no need to check on the computer monitor



### **Single Reaction Cup with Integrated Packaging**

- Single reaction cup can avoid light pollution and increase the cuvette utilization
- Single reaction cup with integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall



### **Intelligent UI Design**

- New user-friendly UI design (Support multi-language)
- Real-time display for monitoring each test procedure, reagent, and consumable quantities, makes it convenient for the management
- Intelligent error recovery



### **Convenient Management of Analyzer Status**

 Intuitive indicator light of reagent, sample, and consumable. No need to focus on the monitor, the status can be known by looking at the analyzer from a distance

### **Accurate Pipetting Technology**

- Single needle coated with TEFLON to avoid carry-over
- Independent washing unit for the needle, with different washing modes depending on different assays
- Pipetting detection technologies include liquid level, clot, and crash detection to ensure accurate pipetting



### **Accurate Incubation Technology**

- Single reaction cup with five-sided heating at 37.0°C (±0.3°C), ensuring accurate, quick and uniform incubation
- Incubating 80 cuvettes simultaneously
- Non-contact mixing with different modes before incubation, ensuring sufficient reaction



## **High-Efficiency Washing Technology**

- Magnetic separation washing with 4-step independent units and non-contact vortex mixing can reduce non-specific binding
- Different mixing modes depending on different assays, ensuring a sufficient washing to improve sensitivity



### **Stable and Accurate Measuring Chamber**

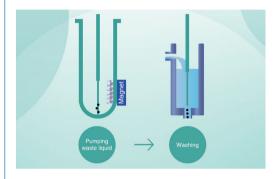
- ABEI-label exclusive proprietary technology
- PMT with heating and cooling function, ensuring the detection precision
- Independent measuring room, avoiding light cross-contamination



# Outstanding Technologies

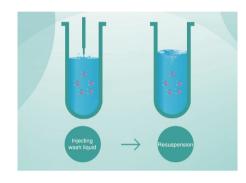
### **Exclusive Intelligent Washing Technology**

## Independent washing units for waste liquid needles



In the wash station, four waste liquid needles are equipped with four independent washing units to avoid the carry-over.

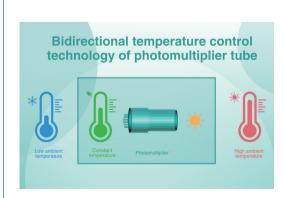
## Magnetic separation washing and non-contact vortex mixing

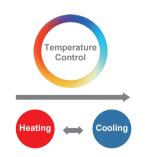


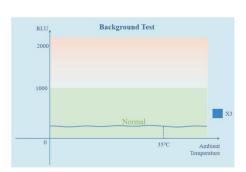


Magnetic separation washing and non-contact vortex mixing units, with different mixing modes depending on different assays, ensure a sufficient washing to reduce the non-specific binding.

### **Stable and Accurate Measuring Chamber**







Automatic temperature control in the measuring chamber can keep a stable background value, not affected by the ambient temperature, ensuring the accuracy of measurement results.



## **Top 10 Highlights of MAGLUMI® X3**

- One of the highest space efficiency CLIA analyzers combines one of the broadest automated CLIA test menus.
- The throughput is up to 200 tests/hour (Throughput per unit area is 294 T/h/m²). No worry about the lack of laboratory space.
- 3 MAGLUMI® reagent kits (256 parameters) and consumables are compatible with MAGLUMI® X3.
- 4 The comprehensive advanced design of MAGLUMI® X3 ensures excellent performance.
- 5 Single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall.
- No-pause loading/unloading of reagents/samples/reaction cups without waiting or interrupting tests.
- Pipetting detection technologies include liquid level, clot, and crash detection to ensure accurate pipetting.
- The latest intelligent washing technology and bidirectional temperature control measurement guarantee accurate and reliable results.
- 9 Intelligent UI design, user-friendly, easy, and convenient operation.
- Intuitive indicator lights make users no need to check reagents and consumables frequently.

## MAGLUMI® X3 Reagent and Consumables



Reagent Kit



Reaction Cup



Starter 1+2



Light Check



– Wash Concentrate –



System Tubing Cleaning Solution -

## **Broad CLIA Test Menu with 256 Assays**



TSH (3rd Generation)

Total T4 @

Total T3 🙉

Free T4

Free T3

Tg (Thyroglobulin) TGA (Anti-Tg)

Anti-TPO

TRAh

TMA Rev T3

T-Uptake

### Fertility

FSH

LH

Total β-HCG A

PRL (Prolactin)

Estradiol

Testosterone

free Testosterone DHFA-S

Progesterone

Unconjugated Estriol

17α-OH Progesterone

AMH SHBG

Androstenedione

PIGF

sFlt-1 \*Inhibin A

\*Inhibin B

#### Tumor Markers

AFP CA 72-4 CEA NSE Total PSA S-100

free PSA SCCA CA 125 TPA-snibe

CA 15-3 CA 19-9 PAP

HF4 HFR-2

ProGRP

PIVKA-II

\*AFP-L3%

CA 50 CA 242

CYFRA 21-1

#### Cardiac

CK-MB

Troponin I Mvoalobin

hs-cTnl

hs-CRP

H-FABP

NT-proBNP

BNP D-Dimer

Lp-PLA2

MPO

HCY (Homocysteine) \*sST2

\*hs-cTnl STAT-X™

\*NT-proBNP STAT-XTM

\*Myoglobin STAT-X™

\*D-Dimer STAT-X™

\*hs-cTnl STAT-X™ \*D-Dimer STAT-X\*\* \*NT-proBNP STAT-XTM \*PCT STAT-XTM \*Myoglobin STAT-X™ \*CRPSTAT-X™

#### Hepatitis

HBsAa Anti-HBs HBeAg

Anti-HBe

Anti-HBc

Anti-HBc IgM

Anti-HCV

Anti-HAV

HAV IgM

\*HBV Pre-S1 Ag

\*HEV IaG

\*HEV IgM

\*HDV IgG

\*HDV IgM \*Anti-HDV

#### Respiratory

2019-nCoV lgG 2019-nCoV IgM

SARS-CoV-2 S-RBD IgG

SARS-CoV-2 Neutralizing Antibody

SARS-CoV-2 Ag

Mycoplasma pneumoniae IgG

Mycoplasma pneumoniae IgM

Chlamydia pneumoniae IgG

Chlamydia pneumoniae IgM \*Respiratory Syncytial Virus IgM

\*Coxsackievirus B IgM

\*Adenovirus IaM

\*Influenza A Virus IgM

\*Influenza B Virus IgM

\*Legionella pneumophila IgM

\*Human Parainfluenza Virus IgM

#### Others

HIV Ab/Ag Combi

Syphilis Chagas

HTLV I+II H. pylori IgG

H. pylori IqA

H. pylori IgM

\*H. pylori Aq Dengue Virus IgG

Dengue Virus NS1

\*Dengue Virus IgM

Monkeypox Virus Ag

\*TB-IGRAs

\*Zika Virus IgG

\*Zika Virus IgM

\*Zika Virus NS1

\*Chlamydia trachomatis IqA

\*Chlamydia trachomatis IgG

#### ) Glyco Metab

ICA

C-Peptide IAA (Anti Insulin) Insulin Proinsulin Anti-GAD (GAD65) \*Glucagon Anti-IA2 \*Anti-ZnT8

#### Connective Tissue Disease

ANA Screen

FNA Screen

Anti-dsDNA laG

Anti-Sm IgG

Anti-Rib-P IgG

Anti-SS-B IgG Anti-SS-A/Ro IgG (Ro60)

Anti-Jo-1 IgG

Anti-Scl-70 IgG

Anti-Centromeres IaG

Anti-Histones IgG Anti-Sm/RNP IgG

Anti-Ro-52 IgG

\*Anti-PM-Scl IaG

\*Anti-Nucleosome IgG

#### **Rheumatoid Arthritis**

Anti-CCP

\*RF IgM

\*RF IgG \*RF IgA

\*RF Screen

#### Celiac Disease

Anti-tTG IqA Anti-tTG IgG

DGP laA

DGP lgG

**Autoimmune Liver Disease** AMA-M2 IgG

### Endocrinology

Anti-TPO TGA (Anti-Tg)

TRAb

TMA

Anti-GAD (GAD65) Anti-IA2

ICA

IAA (Anti Insulin)

## \*Anti-ZnT8

Vasculitis

Anti-MPO IgG

\*Anti-PR3 IgG \*Anti-GBM IgG

**Antiphospholipid Syndrome** Anti-Cardiolipin IgG

Anti-Cardiolipin IgM

\*Anti-Cardiolipin IgA

\*Anti-Cardiolipin Anti-β2-Glycoprotein I IgG

Anti-β2-Glycoprotein I IgM \*Anti-β2-Glycoprotein I IgA

\*Anti-β2-Glycoprotein I

\*BAP

Calcitonin Osteocalcin 25-OH Vitamin D Intact PTH в-стх total P1NP \*PTH (1-84)

#### Prenatal Screening

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

Unconjugated Estriol

\*Inhibin A

TORCH Toxo IgG

Toxo IqM

Rubella IgG Ruhella IdM

CMV lgG

CMV IgM

HSV-1/2 lgG

HSV-1/2 lgM HSV-1 IgG

HSV-2 laG

HSV-1 IgM HSV-2 IaM

\*Toxo IgG Avidity

\*CMV IgG Avidity \*Parvovirus B19 lgG

\*Parvovirus B19 IgM

Vitamin R12

Ferritin

Folate (FA) FPO

RBC Folate

\*Anti-Intrinsic Factor \*Active B12

Drug Monitorin Digoxin

CSA (Cyclosporine A)

FK 506 (Tacrolimus) \*Sirolimus

\*Everolimus \*Mycophenolic Acid

Hypertension Direct Renin Aldosterone Angiotensin I

Angiotensin II

## ACTH

Cortisol

) Metabolism Pepsinogen I Pepsinogen II Gastrin-17 GH (hGH) IGF-I

IGFBP-3

β<sub>2</sub>-Microglobulin Albumin \*NGAI

laM lgΑ

ΙgΕ lgG

NSF

S-100 \*β-Amyloid (1-40) CSF

\*β-Amyloid (1-42) CSF \*Phospho-Tau (181P) CSF

\*Total-Tau CSF

## Inflammation Monitoring

PCT (Procalcitonin)

IL-6 (Interleukin 6) SAA (Serum Amyloid A)

\*VFGF \*PCT STAT-X<sup>DI</sup> \*CRP STAT-XTM

Hepatic Fibrosis

Hyaluronic Acid (HA) PIIIP N-P

GP73

CIV

Laminin Cholyglycine

) EBV EBV EA IgG

EBV EA IaA

EBV VCA IgG EBV VCA IaM

EBV VCA IgA EBV NA IqG EBV NA IgA

Coagulation Markers D-Dimer TAT TM PIC tPAIC

\*FDP

## Veterinary Testing

cTSH cTT4 cFT4 \*cCortiso



## **Technical Specifications**

#### **Chemiluminescence Principle**

- Direct chemiluminescence
- Magnetic microbeads separation, fast and efficient
- Key technology of ABEI-label and magnetic microbead separating enhances stability and sensitivity of MAGLUMI® reagents

#### **Main Features**

- Throughput: up to 200 tests/hour
- Space occupied < 0.68 m<sup>2</sup>, throughput of per unit area > 294 T/h/m<sup>2</sup>
- 24 hours ready to use

#### **Reagent Loading**

- 20 reagent positions on board with no-pause loading/unloading
- 24-hour refrigerated, constant at 10°C (±3°C) in reagent area
- RFID reading all information of reagent
- Indicator light available, real-time status monitoring

#### Sample Loading

- Up to 72 sample positions
- No-pause loading/unloading, STAT available
- Indicator light available, real-time status monitoring
- · Barcode recognition: barcode reader available
- Types of sample tube: micro sample cup, blood collection tube, plastic test tube
- Sample editing mode: LIS connection, barcode recognition, manual editing

#### **Reagent Features**

- MAGLUMI® reagent kits are compatible with all MAGLUMI® analyzers
- Calibrators and internal controls included
- 10 points master curve, 2-points re-calibration
- · RFID tag storing all informations of reagents
- Storage temperature: 2°C-8°C

#### **Reaction System**

- Single reaction cup with five-sided heating at 37.0°C (±0.3°C) incubation, ensuring accurate, quick and uniform incubation
- Incubating 80 cuvettes simultaneously
- Non-contact mixing with different modes before incubation, ensuring sufficient reaction

#### Sampling System

- Titanium needle for crushproof
- Teflon coated for carry-over prevention
- Liquid level detection, clot detection, prevent bubble interference, collision detection, wash automatically

#### **Consumable System**

- Single cup design, no-pause loading/unloading
- Starters: 230 mL of Starter 1 and Starter 2
- System liquid: Up to load 10 L at one time
- Indicator light monitors real-time consumable quantity

#### Washer

- 4-step washing technology
- Intelligent magnetic field design ensures excellent separation
- Three independent non-contact magnetic microbeads vortex cleaning technology
- Resuspension washing mode efficiently reduces non-specific binding and improves sensitivity
- Independent washing unit for waste liquid needle can completely wash without residue

#### **Measuring Chamber**

- High-sensitivity and low-noise photomultiplier tube (PMT)
- Heating and cooling bidirectional temperature control function included
- Original light pollution isolation technology prevents light pollution and ensures accurate and reliable results

#### **Software System**

- Friendly software UI design, humanized instrument operation procedure
- Real-time status display for each test procedure
- Self-recovery function makes sure the analyzer running smoothly without unnecessary manual intervention
- Bidirectional SnibeLis<sup>TM</sup> connection by TCP/IP and COM Port
- $\bullet$  Supporting  $SnibeLinker^{\text{TM}}$  remote diagnosis system

#### **Dimensions & Weight**

• Dimensions: 78 (h)  $\times$  90 (w)  $\times$  75 (d) cm

• Weight: 127 kg

 $\label{eq:maglumi} {\bf MAGLUMI^{\$}, SnibeLis^{\tiny{TM}}} \ \ {\bf and} \ \ {\bf SnibeLinker^{\tiny{TM}}} \ \ {\bf are} \ \ {\bf trademarks} \ \ {\bf of} \ \ {\bf Snibe}.$  All other product names and trademarks are the property of their respective owners.



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