



MAGLUMI® 4000 Plus

Fully Automatic 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 (H₂O₂) 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® 4000 Plus





- For labs and hospitals with high throughput, simple and smart operation with Modular design and humanized appearance
- Broad test menu to meet different needs and it is expanding according to your requirement
- Free quality control and calibrators help to reduce the cost per test
- Quality guaranteed by the third party quality control and external quality assessment (EQA)
- Key technologies of ABEI and magnetic microbeads enhance stability and sensitivity of MAGLUMI® reagents







Pipettor

- Aspirate reagent / sample with high speed
- Titanium needle with crush-proof function
- Clot detection & liquid level detection
- Teflon coated for carry-over prevention
- Inner & external washing



Automated cuvette loader

- Capable of loading reaction modules continuously
- Up to 160 reaction modules, 960 tests
- Walk away time around 3.5 hours



Pneumatic spring

 Sample area door and reagent area door are equipped with damping brace, providing good user experience.



Sample area

- 144 positions with barcode reader, can be extended to 280 positions
- Continuous loading & cooling function
- Random access, Batch and Emergency mode



A AAA

Convenient consumables placement

 Well designed drawer tray contribute to conveniently replace: wash liquid, waste liquid, starter 1, starter 2, waste cuvettes



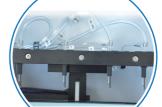
Measuring Unit

- High-sensitivity and low-noise photo multiplier tube (PMT)
- Cuvette detection and anti-overflow



Modular Expanding Flexibility

- Capable to integrated several modulars including Snibe immunoassay, biochemistry and ISE modular
- Capable to link with Laboratory Automation system (TLA/LAS)



Patented Washer design

- Powerful washer with anti-overflow function
- Intelligent magnetic field design ensure good separation

Reagent area

- Cooling function ensures reagent stability
- 25 reagents on board, with continuous loading function
- RFID label storing reagent information
- Easy and fast adding and updating





Comprehensive Software

- User-friendly interface
- Real-time status monitoring for each test
- Monitoring reagent and consumable status
- Intelligent alarm function
- Multilingual support, 10 kinds of languages more 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 analyer



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

Broad CLIA Test Menu with More Than 200 Assays



Thyroid

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

Fertility

free Testosterone SHBG FSH DHFA-S Androstenedione HCG/β-HCG 🕮 Progesterone PIGE PRL (Prolactin) free Estriol sFlt-1 Estradiol 17-OH Progesterone *Inhibin A AMH Testosterone *Inhibin B

Autoimmune

Verfügbar ab 01. Oktober 2024

Bone Metabolism

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

Hepatic Fibrosis

НА CIV Cholyglycine PIIIP N-P Laminin GP73

Immunoglobulins

ΙgΕ lgG IgM

Infectious Disease

Respiratory Hepatitis HIV Ab/Ag Combi 2019-nCoV lgG Syphilis 2019-nCoV lgM Anti-HBs Chagas SARS-CoV-2 S-RBD lgG HBeAa SARS-CoV-2 Neutralizing Antibody Anti-HBe HTLV I+II H.pvlori laG SARS-CoV-2 Ag Anti-HBc H.pylori IgA Anti-HBc IgM Mycoplasma pneumoniae IgG Mycoplasma pneumoniae IgM Anti-HCV H.pylori IqM *H.pylori Ag Chlamydia pneumoniae IgG Anti-HAV Dengue Virus IgG Chlamydia pneumoniae IgM HAV IgM *HBV Pre-S1 Ag Dengue Virus NS1 *Respiratory Syncytial Virus IgM *Dengue Virus IgM *Coxsackievirus B IgM *HEV IgG Monkeypox Virus Ag *Adenovirus IgM *HEV IgM *Influenza A Virus IgM

- *Influenza B Virus IaM
- *Legionella pneumophila IgM
- *Human Parainfluenza Virus IgM

Inflammation Monitoring

IL-6 (Interleukin 6) PCT (Procalcitonin) SAA (Serum Amyloid A) *VEGF TNF-α

Glyco Metabolism

Anti-IA2 ICA *Glucagon Insulin GAD 65 IAA (Anti Insulin) *Anti-ZnT8

TORCH

Toxo IgG CMV IgM *HSV-1 IgM Toxo IgM HSV-1/2 lgG *HSV-2 IgM HSV-1/2 lgM Rubella laG *Toxo IgG Avidity Rubella IgM HSV-1 IgG *CMV IgG Avidity CMV lgG HSV-2 lgG

Metabolism

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

Tumor Markers

AFP PAP SCCA CA 50 CEA TPA-snibe Total PSA CYFRA 21-1 ProGRP f-PSA CA 242 HE4 CA 125 CA 72-4 HER-2 CA 15-3 NSF PIVKA-II CA 19-9 S-100 *AFP-L3%

EBV

EBV VCA IgG EBV EA IgG EBV NA IgG EBV VCA IaM EBV EA laA EBV NA IaA EBV VCA IgA

Kidney Function

β₂-MG Albumin *NGAL

Anemia

Vitamin B12 FPO *Anti-Intrinsic Factor Ferritin RBC Folate *Active B12 Folate (FA)

Prenatal Screening

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

Drug Monitoring

Digoxin CSA (Cyclosporine A) FK 506 (Tacrolimus)

Hypertension

Direct Renin Angiotensin I Cortisol Aldosterone Angiotensin II ACTH

Cardiac

CK-MB H-FABP Lp-PLA2 MPO NT-proBNP Troponin I BNP HCY Myoglobin hs-cTnl D-Dimer *sST2 hs-CRP

Coagulation Markers

tPAIC D-Dimer TM PIC *FDP

Veterinary Testing

cTSH cTT4 vFT4

Technical Specifications

Reagent Feature	 Flash chemiluminescence label-ABEI, with high sensitivity and long stability Superpara magnetic microbeads separation technology, fast and efficient
Main Features	 Throughput: up to 280 tests/hour 24 hours ready to use Time to first result: 16 minutes
Modes of Operation	Random Access, Batch and Emergency mode
Sample Loading	 Up to 144 sample positions, can be extended to 280 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	 25 reagent positions on board Continuous loading RFID reading all info of reagent Refrigerated reagent area with independent power supply
Reagent Integral	 Ready-to-use, no pretreatment required Buildit-in calibrators RFID tag storing all info of reagent RFID tag with built-in master curve 10 points master curve, 2 points calibration Calibration stability: Max 4 weeks
Other Features	 Clot detection Liquid level detection Automatic dilution with optional ratio for High concentration sample Constant 36.8 ± 0.5°C incubation Reflex tests with editable ranges
Operation System	Windows 7, Windows 10Color screen
Interconnection	Bidirectional LIS connection by TCP/IP and COM
Dimensions Weight	 Input: AC 110/230 Vac, 50/60 Hz, Max 900W Dimension: 138cm×89cm×160cm (No monitor table) 208cm×89cm×160cm (Monitor table extended) Weight: 270kg

 $\mathbf{MAGLUMI}^{(\!R\!)}$ is a trademark of Snibe. All other product names and trademarks are the property of their respective owners.





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