

MAGLUMI 800

Chemiluminescence Immunoassay (CLIA) System



Outstanding Technology Power of Maglumi

Chemiluminescence Immunoassay (CLIA) System

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

Labeling Technology

Two types of labeling 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 solution. As fast chemiluminescence, ABEI chemical reaction with sodium hydroxide (NaOH) and Hyperoxide (H_2O_2) finishes the process in 3 seconds.

Separation Technology

Maglumi uses Nano Magnetic Microbeads. As separation technology, it has been widely used in the field of CLIA. Compared with traditional separation technology, 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 capture of antigens and antibodies.
- Reducing inter or intra-assay discrepancies significantly by mixing the reagents thoroughly in a liquid separation platform.
- Enhancing the accuracy by absorbing antigens and antibodies through chemical reaction.



TEST MENU

Tumor Markers

Ferritin
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
Pepsinogen I
Pepsinogen II
SCCA
*Gastrin-17

Bone Metabolism

Intact PTH
Calcitonin
Osteocalcin
25-OH Vitamin D

Glyco Metabolism

C-Peptide
Insulin
ICA
IAA
Proinsulin
GAD 65
IA-2

Fertility

FSH
LH
HCG/ β -HCG
PRL
Estradiol
free Estriol
Progesterone
Testosterone
free Testosterone
DHEA-S
*AMH

Thyroid

TSH
T₄
T₃
FT₄
FT₃
TG
TGA
TRAb
TMA
Anti-TPO
Rev T₃

Prenatal Screening

cAFP
free β -HCG
PAPP-A

Inflammation Monitoring

CRP
PCT

Kidney Function

β_2 -MG
Albumin

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-2 IgG
HSV-1/2 IgM

EBV

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

Immunoglobulin

IgM
IgA
IgE
IgG

Anemia

Vitamin B₁₂
Ferritin
FA

Drug Monitoring

Cyclosporine A
Tacrolimus, FK 506
Digoxin

Cardiac

CK-MB
Troponin I
Myoglobin
NT-proBNP
Aldosterone
Angiotensin I
Angiotensin II
D-Dimer
*Renin(PRC)
*LP-PLA2

Infectious

HBsAg
Anti-HBs
HBeAg
Anti-HBe
Anti-HBc
Anti-HCV
*HIV
*Syphilis
*Chagas
*HTLV
*Anti-HAV
*HAV IgM
*H.pylori IgG

Others

GH
IGF-I
Cortisol
ACTH

*Under development
Product availability subject to required regulatory approval

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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 samples tubes
- Continuous loading, STAT available
- Barcode reader recognition or analyzer auto numbered
- LIS connection, auto read sample info
- 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
- Auto and optional ratio for high sample dilution
- Constant 37°C incubation

Operation System

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

Interconnection

- Bi-communication with LIS via ASTM protocol

Dimensions Weight

- Input: AC 110-230V, 50/60HZ, Max 630W
- Dimension and weight: 102 x 72 x 56cm 73kg



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