



# IMMUNOLOGICAL & BIOCHEMICAL DIAGNOSTIC MATERIALS

# COMPANY PROFILE

Wuhan Huamei Biotech Co.,LTD.,located in "Optics Valley of China" founded in 2007, is a high-tech enterprises of independently researching& producing and selling protein, antibody, diagnostic reagent raw materials, scientific research kits and other products. Relying on experts and technical teams from Wuhan University, Wuhan Institute of Virology, Chinese Academy of Sciences, Huazhong University of Science and Technology, Huazhong Agricultural University and other universities and research institutes, the company has provided related products and customized technical services for well-known domestic and foreign manufacturers of diagnostic reagents, pharmaceutical R&D companies, universities, enterprises and research institutes. Industrial Raw Materials Division is an independent production line of high-quality biological raw materials of Wuhan Huamei Biotech Co.,LTD., currently focusing on the research and development, production and sales of raw materials used in in vitro diagnostic reagents and other fields.

Industrial Raw Materials Division can provide the majority of in vitro diagnostic reagent manufacturers with high quality monoclonal antibodies, polyclonal antibodies, diagnostic proteins, biochemical enzymes, molecular biology and general raw materials, at the same time can provide customers with OEM reagents and professional customized services. The products are comprehensively cover inflammation markers, cardiac markers, tumor markers, liver and kidney function, thyrohormone, autoimmune diseases, respiratory pathogens, animal infectious diseases and other fields; Widely used in CLIA,TRF-LFIA,ELISA,LETIA and other platforms.



# CORE COMPETENCE

Wuhan Huamei Biotech Co.,LTD.©Industrial Raw Materials Division has profound technology accumulation and R&D innovation strength. Based on molecular biology, synthetic biology and immunology, we provide industrial customers with key biological raw materials and related services. We have formed a complete system of R&D、 production、 quality、 storage、 sales and service.



Over the years, the company's R&D investment accounted for more than 12% of the operating income



More than 60% of the total number of professional research and development team



100+ core patented technology



Accumulated nearly 10 years of experience in project management



Perfect design development and product quality management process

CUSABIO

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# 01 /PRODUCT CATALOG

## Antigen&Antibody

### ◎ Inflammation

Product Name	Type	Catalogue #	Application
Interleukin-6 (IL-6)	Monoclonal Antibody	CSB-DA436EmN①	ELISA,CLIA,LEIA
		CSB-DA436EmN② <b>Detection</b>	
		CSB-DA436EmN③	
		CSB-DA436EmN④ <b>Capture</b>	
	Recombinant Protein	CSB-DP436E	Calibrator, Control
Serum amyloid A protein (SAA1)	Monoclonal Antibody	CSB-DA118BmN② <b>Capture</b>	LEIA,LETIA
		CSB-DA118BmN⑤ <b>Detection</b>	
	Recombinant Protein	CSB-DP118B	Calibrator, Control
C-reactive protein (CRP)	Monoclonal Antibody	CSB-DA402GmN①	LETIA
		CSB-DA402GmN② <b>Detection</b>	CLIA
		CSB-DA402GmN③ <b>Capture</b>	
		CSB-DA402GmN④	CLIA,LEIA
		CSB-DA402GmN⑤ <b>Detection</b>	LEIA
		CSB-DA402GmN⑥ <b>Capture</b>	
	Natural Protein	CSB-DP402G	Calibrator, Control
Procalcitonin (PCT)	Monoclonal Antibody	CSB-DA131DmN①	ELISA,CLIA,LEIA
		CSB-DA131DmN② <b>Detection</b>	
		CSB-DA131DmN③ <b>Capture</b>	
		CSB-DA131DmN⑤ <b>Detection</b>	
		CSB-DA131DmN⑥ <b>Detection</b>	
		CSB-DA131DmN⑦ <b>Capture</b>	CLIA,LEIA
		CSB-DA131DmN⑧ <b>Detection</b>	
	Recombinant Protein	CSB-DP131D	Calibrator, Control
Heparin-binding protein (HBP)	Monoclonal Antibody	CSB-DA600ImN① <b>Capture</b>	LEIA
		CSB-DA600ImN② <b>Detection</b>	
		CSB-DA600ImN③ <b>Capture</b>	CLIA,LEIA
		CSB-DA600ImN④ <b>Detection</b>	
	Recombinant Protein	CSB-DP600I	Calibrator, Control
Trypsinogen-2 (PRSS2)	Monoclonal Antibody	CSB-DA441BmN① <b>Detection</b>	ELISA,LEIA
		CSB-DA441BmN② <b>Capture</b>	
		CSB-DA441BmN③	
		CSB-DA441BmN④	
	Recombinant Protein	CSB-DP441I	Calibrator, Control
Calprotectin	Recombinant Protein	CSB-DP261B	Calibrator, Control
S100 calcium-binding protein A8 (S100A8)	Recombinant Protein	CSB-DP267B	Calibrator, Control
S100 calcium-binding protein A9 (S100A9)	Recombinant Protein	CSB-DP474B	Calibrator, Control

## Cardiac Markers

Product Name	Type	Catalogue #	Application
Platelet-activating factor acetylhydrolase (Lp-PLA2)	Monoclonal Antibody	CSB-DA113BmN① <span>Capture</span>	ELISA, CLIA, LEIA, LETIA
		CSB-DA113BmN②	
		CSB-DA113BmN③ <span>Capture/Detection</span>	
		CSB-DA113BmN④	
		CSB-DA113BmN⑤ <span>Detection</span>	LETIA
		CSB-DA113BmN⑥	ELISA, CLIA
		CSB-DA113BmN⑦	LETIA
		CSB-DA113BmN⑧	
		CSB-DA113BmN⑨	
	Polyclonal Antibody	CSB-DA113BRN	LETIA
	Recombinant Protein	CSB-DP113B	Calibrator, Control
Growth Differentiation Factor-15 (GDF-15)	Recombinant Protein	CSB-DP128B	Calibrator, Control
Myeloperoxidase (MPO)	Monoclonal Antibody	CSB-DA406HmN① <span>Capture</span>	ELISA, CLIA, LEIA, LETIA
		CSB-DA406HmN② <span>Detection</span>	
	Natural Protein	CSB-DP406H	Calibrator, Control
Fatty acid-binding protein (H-FABP)	Monoclonal Antibody	CSB-DA006AmN① <span>Detection</span>	ELISA, CLIA
		CSB-DA006AmN② <span>Capture</span>	
	Recombinant Protein	CSB-DP006A	Calibrator, Control
D-Dimer	Monoclonal Antibody	CSB-DA220HmN①	CLIA, LEIA, LETIA
		CSB-DA220HmN②	
		CSB-DA220HmN③	LETIA, LEIA
		CSB-DA220HmN④	
	Natural Protein	CSB-DP220H	Calibrator, Control
Fibrin/Fibrinogen degradation products (FDP)	Monoclonal Antibody	CSB-DA444HmN①	LETIA
		CSB-DA444HmN②	
	Natural Protein	CSB-DP444H	Calibrator, Control
N-terminal pro-B type natriuretic peptide (NT-proBNP)	Monoclonal Antibody	CSB-DA005AmN①	CLIA
	Recombinant Protein	CSB-DP005A	Calibrator, Control
Troponin I, cardiac muscle protein (cTnI)	Recombinant Protein	CSB-DP007B	Calibrator, Control
Myoglobin (MYO)	Recombinant Protein	CSB-DP008A	Calibrator, Control
Creatine Kinase isoenzymes MB (CK-MB)	Recombinant Protein	CSB-DPK784J	Calibrator, Control
Creatine kinase M-type protein (CKM)	Recombinant Protein	CSB-DP015A	Calibrator, Control
Galectin-3 protein (Galectin3)	Recombinant Protein	CSB-DP081A	Calibrator, Control
Apolipoprotein A-I (APOA1)	Recombinant Protein	CSB-DP321B	Calibrator, Control

## © Respiratory

Product Name	Type	Catalogue #	Application
SARS-CoV-2 coronavirus spike glycoprotein RBD (RBD protein)	Monoclonal Antibody	CSB-DA703ImN①	LEIA
	Recombinant Protein	CSB-DP703I	LFIA,ELISA,CLIA
SARS-CoV-2 Angiotensin-converting enzyme 2 (ACE2)	Recombinant Protein	CSB-DP581I	LFIA,ELISA,CLIA
SARS-CoV-2 coronavirus nucleocapsid protein (N protein)	Monoclonal Antibody	CSB-DA701BmN⑦ <span>Detection</span>	LFIA,ELISA,CLIA
		CSB-DA701BmN⑧ <span>Capture</span>	
	Recombinant Protein	CSB-DP701B	LFIA,ELISA,CLIA
		CSB-DP579B	
SARS-CoV-2 coronavirus spike protein (S protein)	Monoclonal Antibody	CSB-DA702ImN①	LFIA,ELISA,CLIA
		CSB-DA702ImN②	
		CSB-DA702ImN③ <span>Detection</span>	
		CSB-DA702ImN④ <span>Capture</span>	
	Recombinant Protein	CSB-DP702I	LFIA,ELISA,CLIA
		CSB-DP580I	
SARS-CoV-2 Nucleocapsid sFv, hIgG-Fc	Recombinant Antibody	CSB-DA493HmN	Calibrator, Control
SARS-CoV-2 Spike S1 sFv, hIgG-Fc	Recombinant Antibody	CSB-DA494HmN	Calibrator, Control
Respiratory syncytial virus Fusion glycoprotein (RSV-F)	Monoclonal Antibody	CSB-DA764BmN① <span>Detection</span>	LFIA
		CSB-DA764BmN② <span>Capture</span>	
	Recombinant Protein	CSB-DP764B	ELISA
Respiratory syncytial virus glycoprotein G (RSV-G)	Recombinant Protein	CSB-DP765B	ELISA
Respiratory syncytial virus A nucleoprotein (RSVA-NP)	Recombinant Protein	CSB-DP766B	ELISA
Respiratory syncytial virus B nucleoprotein (RSVB-NP)	Recombinant Protein	CSB-DP921B	ELISA
Influenza A (FluA)	Monoclonal Antibody	CSB-DA769BmN①	LFIA
		CSB-DA769BmN②	
	Recombinant Protein	CSB-DP769B	ELISA, Control
Influenza B (FluB)	Monoclonal Antibody	CSB-DA770BmN①	LFIA
		CSB-DA770BmN②	
	Recombinant Protein	CSB-DP770B	ELISA, Control

## © Diabetes

Product Name	Type	Catalogue #	Application
HemoglobinA1c (HbA1C)	Monoclonal Antibody	CSB-DA446HmN①	LETIA
	Natural Protein	CSB-DPK446H	Calibrator, Control, WB
Adiponectin (ADPN)	Monoclonal Antibody	CSB-DA120AmN①	LETIA
		CSB-DA120AmN③ <span>Capture</span>	CLIA,LEIA
		CSB-DA120AmN④ <span>Detection</span>	
	Recombinant Protein	CSB-DP120B	Calibrator, Control

## © Autoimmune Disease

Product Name	Catalogue #	Application
Streptolysin O protein (SLO)	CSB-DP013A	LETIA



## ◎ Autoimmune Disease

Product Name	Catalogue #	Application
Anti-Streptolysin O protein (Anti-SLO)	CSB-DA013AmN①	Calibrator, Control, WB
Rheumatoid factor antigen (RF)	CSB-DPK718H	LETIA

## ◎ Tumor Markers

Product Name	Type	Catalogue #	Application
Ferritin (FER)	Monoclonal Antibody	CSB-DA027BmN① <a href="#">Capture</a>	CLIA,LEIA
		CSB-DA027BmN② <a href="#">Detection</a>	
		CSB-DA027BmN③	LETIA
		CSB-DA027BmN④	
	Recombinant Protein	CSB-DP027B	Calibrator, Control
Epididymis protein E4 (HE4)	Monoclonal Antibody	CSB-DA018BmN①	ELISA,CLIA
		CSB-DA018BmN② <a href="#">Capture</a>	
		CSB-DA018BmN③ <a href="#">Detection</a>	
	Recombinant Protein	CSB-DP018B	Calibrator, Control
Alpha-fetoprotein (AFP)	Monoclonal Antibody	CSB-DA214HmN① <a href="#">Detection</a>	ELISA,CLIA
		CSB-DA214HmN②	
		CSB-DA214HmN③ <a href="#">Capture</a>	
	Recombinant Protein	CSB-DP214C	Calibrator, Control
Transferrin (TRF)	Monoclonal Antibody	CSB-DA485HmN① <a href="#">Capture</a>	LEIA
		CSB-DA485HmN② <a href="#">Detection</a>	
		CSB-DA485HmN③ <a href="#">Detection</a>	
	Natural Protein	CSB-DP485H	Calibrator, Control
Carbonhydrate Antigen 125 (CA125)	Recombinant Protein	CSB-DP127B	Calibrator, Control
	Natural Protein	CSB-DPK127H	Calibrator, Control
Carbonhydrate Antigen 50 (CA50)	Natural Protein	CSB-DPK707H	Calibrator, Control
Carbonhydrate Antigen 19-9 (CA19-9)	Natural Protein	CSB-DPK708H	Calibrator, Control
Carbonhydrate Antigen 242 (CA242)	Natural Protein	CSB-DPK710H	Calibrator, Control
Carbonhydrate Antigen 72-4 (CA72-4)	Natural Protein	CSB-DPK711H	Calibrator, Control
Squamous cell carcinoma antigen 1(SCCA)	Recombinant Protein	CSB-DPK715J	Calibrator, Control
Neuron-specific enolase (NSE)	Recombinant Protein	CSB-DP009D	Calibrator, Control
free Prostate-specific antigen (fPSA)	Natural Protein	CSB-DPK714J	Calibrator, Control
Prostate-specific antigen (PSA)	Recombinant Protein	CSB-DP274I	Calibrator, Control
Pepsinogen I (PGI)	Monoclonal Antibody	CSB-DA442ImN①	LETIA
		CSB-DA442ImN②	
	Recombinant Protein	CSB-DP442I	Calibrator, Control
Pepsinogen II (PGII)	Monoclonal Antibody	CSB-DA252AmN①	LETIA
		CSB-DA252AmN②	
	Recombinant Protein	CSB-DP252A	Calibrator, Control
Gastrin-17 (G17)	Monoclonal Antibody	CSB-DA590ImN① <a href="#">Capture</a>	CLIA
		CSB-DA590ImN② <a href="#">Detection</a>	
	Recombinant Protein	CSB-DP590B①	Calibrator, Control
		CSB-DP590B②	
Helicobacter pylori urease A subunit protein (UreA)	Recombinant Protein	CSB-DP922B	Calibrator, Control
Helicobacter pylori urease B subunit protein (UreB)	Recombinant Protein	CSB-DP923B	Calibrator, Control
Matrix metalloproteinase-3 (MMP3)	Monoclonal Antibody	CSB-DA303ImN① <a href="#">Capture</a>	LETIA,CLIA
		CSB-DA303ImN② <a href="#">Detection</a>	

## ◎ Tumor Markers

Product Name	Type	Catalogue #	Application
Matrix metalloproteinase-3 (MMP3)	Recombinant Protein	CSB-DP303I	Calibrator, Control
S-100 protein beta chain (S100B)	Recombinant Protein	CSB-DP129B	Calibrator, Control

## ◎ Renal & Liver Function

Product Name	Type	Catalogue #	Application
Tissue Inhibitors Of Metalloproteinase 1 (TIMP1)	Monoclonal Antibody	CSB-DA228AmN① <span>Capture/Detection</span>	ELISA, CLIA
		CSB-DA228AmN② <span>Detection/Capture</span>	
	Recombinant Protein	CSB-DP228A	Calibrator, Control
Cholic acid (CA)	Monoclonal Antibody	CSB-DA008ICmN①	ELISA
	Recombinant Protein	CSB-DM008B1 CSB-DM008O1	Calibrator, Control
Cholyglycine (CG)	Monoclonal Antibody	CSB-DA476HmN①	LETIA, CLIA
	Recombinant Protein	CSB-DP476H	Calibrator, Control
Chenodeoxycholic acid (CDCA)	Monoclonal Antibody	CSB-DA007ICmN①	ELISA
	Recombinant Protein	CSB-DM007B1 CSB-DM007O1	Calibrator, Control
Prealbumin (PA)	Recombinant Protein	CSB-DP322B	Calibrator, Control
Neutrophil gelatinase-associated lipocalin (NGAL)	Monoclonal Antibody	CSB-DA001DmN① <span>Detection</span>	ELISA, CLIA, LEIA
		CSB-DA001AmN① <span>Capture</span>	
		CSB-DA001AmN② <span>Capture</span>	ELISA, CLIA, LETIA
		CSB-DA001AmN③ <span>Capture</span>	ELISA, CLIA, LEIA
	Polyclonal Antibody	CSB-DA001ARN	LETIA
Beta-2-microglobulin (β2-MG)	Monoclonal Antibody	CSB-DA003CmN①	ELISA, LEIA
		CSB-DA003CmN③	LETIA
		CSB-DA003CmN⑤ <span>Detection</span>	LEIA
		CSB-DA003CmN⑥ <span>Capture</span>	LETIA
		CSB-DA003CmN⑦	LETIA
	Polyclonal Antibody	CSB-DA003ARN	LETIA
	Recombinant Protein	CSB-DP003A	Calibrator, Control
Retinol-binding protein 4 (RBP4)	Monoclonal Antibody	CSB-DA002AmN① <span>Capture</span>	ELISA, CLIA, LETIA
		CSB-DA002AmN② <span>Detection</span>	
	Recombinant Protein	CSB-DP002A	Calibrator, Control
Cystatin-C protein (CYSC)	Monoclonal Antibody	CSB-DA004AmN① <span>Capture</span>	LETIA
		CSB-DA004AmN②	
		CSB-DA004AmN③ <span>Detection</span>	LEIA
	Recombinant Protein	CSB-DP004A	Calibrator, Control
Alpha-1-microglobulin protein (α1-MG)	Monoclonal Antibody	CSB-DA141AmN①	LETIA
		CSB-DA141AmN②	
	Recombinant Protein	CSB-DP141A	Calibrator, Control



## © Thyroid & Hormone

Product Name	Type	Catalogue #	Application
Thyroglobulin (TG)	Monoclonal Antibody	CSB-DA263HmN① <span>Capture</span>	ELISA, CLIA
		CSB-DA263HmN② <span>Detection</span>	
		CSB-DA263HmN③ <span>Detection</span>	
	Natural Protein	CSB-DP263H	Calibrator, Control
Insulin-like growth factor-binding protein 1 (IGFBP1)	Monoclonal Antibody	CSB-DA286GmN① <span>Detection</span>	LEIA
		CSB-DA286GmN②	
		CSB-DA286GmN④ <span>Capture</span>	
	Recombinant Protein	CSB-DP286I	Calibrator, Control
Muellerian hormone (AMH)	Monoclonal Antibody	CSB-DA344BmN①	CLIA
	Recombinant Protein	CSB-DP344B	Calibrator, Control
Follicle-stimulating hormone (FSH)	Monoclonal Antibody	CSB-DA443BmN① <span>Capture</span>	ELISA, CLIA, LEIA
		CSB-DA443BmN② <span>Detection</span>	
	Recombinant Protein	CSB-DP443I	Calibrator, Control
Luteinizing hormone (LH)	Monoclonal Antibody	CSB-DA280ImN①	CLIA
		CSB-DA280ImN②	CLIA, LEIA
		CSB-DA280ImN③ <span>Capture</span>	
		CSB-DA280ImN④ <span>Detection</span>	
	Recombinant Protein	CSB-DP280I	Calibrator, Control
Prolactin (PRL)	Monoclonal Antibody	CSB-DA320ImN① <span>Capture</span>	ELISA, CLIA
		CSB-DA320ImN②	
		CSB-DA320ImN③ <span>Detection</span>	
	Recombinant Protein	CSB-DP320G	Calibrator, Control
Estradiol (E2)	Monoclonal Antibody	CSB-DA006IcMn①	ELISA
	Recombinant Protein	CSB-DM006B1	Competitor
		CSB-DM006O1	
Testosterone (Ts)	Monoclonal Antibody	CSB-DA005IcMn①	ELISA
	Recombinant Protein	CSB-DM005B1	Competitor
		CSB-DM005O1	
17 $\alpha$ -Hydroxyprogesterone (17 $\alpha$ -OHP)	Monoclonal Antibody	CSB-DA011IcMn①	CLIA
		CSB-DA011IcMn②	
	Recombinant Protein	CSB-DM011B1	Competitor
		CSB-DM011O1	
Folic acid (FA)	Monoclonal Antibody	CSB-DA009IcMn①	CLIA, ELISA
	Recombinant Protein	CSB-DM009B1	Competitor
		CSB-DM009O1	
Corticosterone (COR)	Monoclonal Antibody	CSB-DA004IcMn①	ELISA
	Recombinant Protein	CSB-DM004B1	Competitor
		CSB-DM004O1	
Cortisol (Col)	Monoclonal Antibody	CSB-DA001IcMn①	ELISA
	Recombinant Protein	CSB-DM001B2	Competitor
		CSB-DM001O2	
Insulin-like growth factor 1 (IGF-1)	Recombinant Protein	CSB-DPK717J	Calibrator, Control

## © Alzheimer's Disease

Product Name	Type	Catalogue #	Application
Amyloid $\beta$ -protein 40 (A $\beta$ 40)	Monoclonal Antibody	CSB-DA627AmN①	CLIA,ELISA
		CSB-DA627AmN②	
	Recombinant Protein	CSB-DP627B	Calibrator, Control
Amyloid $\beta$ -protein 42 (A $\beta$ 42)	Monoclonal Antibody	CSB-DA900AmN①	CLIA,ELISA
	Recombinant Protein	CSB-DP900B	Calibrator, Control

## © Animal Infectious Diseases

Product Name	Type	Catalogue #	Application
Monkeypox virus protein A29L (MPXV-A29L)	Chimeric Antibody	CSB-DA602HmN①	ELISA
	Chimeric Antibody	CSB-DA602HmN②	ELISA
	Chimeric Antibody	CSB-DA602HmN③	ELISA
	Recombinant Protein	CSB-DP602B	Calibrator, Control, WB
	Recombinant Protein	CSB-DP602I	Calibrator, Control, WB
Monkeypox virus protein A29 (VACV-A27)	Recombinant Protein	CSB-DP603I	Calibrator, Control, WB
Cowpox virus (CPXV) protein 162 (CPXV-162)	Recombinant Protein	CSB-DP604I	Calibrator, Control, WB
Monkeypox virus protein L1R (MPXV-L1R)	Recombinant Protein	CSB-DP605B	Calibrator, Control, WB
Monkeypox virus protein L1R (MPXV-L1R)	Recombinant Protein	CSB-DP605I	Calibrator, Control, WB
Monkeypox virus protein E8L (MPXV-E8L)	Recombinant Protein	CSB-DP606I	Calibrator, Control, WB
Monkeypox virus protein B21R (MPXV-B21R)	Recombinant Protein	CSB-DP607I	Calibrator, Control, WB
Monkeypox virus protein A35R (MPXV-A35R)	Recombinant Protein	CSB-DP608I	Calibrator, Control, WB

## © Natural Protein

Product Name	Catalogue #	Application
High Density Lipoprotein (HDL)	CSB-DPK782H	Calibrator, Control, WB
Low Density Lipoprotein (LDL)	CSB-DPK783H	Calibrator, Control, WB
Complement 3 (C3)	CSB-DPK792H	Calibrator, Control, WB
Complement 4 (C4)	CSB-DPK793H	Calibrator, Control, WB
Immunoglobulin A (IgA)	CSB-DPK794H	Calibrator, Control, WB
Immunoglobulin G (IgG)	CSB-DPK795H	Calibrator, Control, WB
Immunoglobulin M (IgM)	CSB-DPK796H	Calibrator, Control, WB
Apolipoprotein A-I (APOA1)	CSB-DPK321H	Calibrator, Control, WB
Apolipoprotein B (APOB)	CSB-DPK164J	Calibrator, Control, WB
Apolipoprotein A-I/Apolipoprotein B (APOA1/APOB)	CSB-DPK632H	Calibrator, Control, WB

## © General Materials

Product Name	Type	Catalogue #	Application
Goat anti-Mouse IgG	Quality control line	CSB-DPK866J	LFIA,ELISA
Goat anti-Chicken IgY	Quality control line	CSB-DPK870J	LFIA,ELISA
Mouse anti-Chicken IgY	Quality control line	CSB-DPK871J	LFIA,ELISA
2,4-Dinitrophenylhydrazine-BSA (DNP-BSA)	Quality control line	CSB-DPK873J	LFIA,ELISA
Rabbit Anti-DNP	Quality control line	CSB-DPK874J	LFIA,ELISA
Anti-Red Blood Cells (RBC antibody)	Accessory antibody	CSB-DA499HmN	LFIA
Protein protectant CT	Accessory reagents	CSB-DPF0005	Calibrator, Control
	Accessory reagents	CSB-DPF0006	Calibrator, Control
	Accessory reagents	CSB-DPF0011	Calibrator, Control

# 01/Product Catalog

## Enzymes

Product Name	Catalogue #	Application
Pyranose Oxidase (PROD)	CSB-DE009	1,5-Anhydro-D-sorbitol detection reagent
Hexokinase (HK)	CSB-DE001	Glucose detection reagent
Acetyl-coenzyme A Synthetase (Acs)	CSB-DE008	Free fatty acid detection reagent
Acyl-CoA oxidase (ACO)	CSB-DE007	Free fatty acid detection reagent
Cystathionine beta-synthase (CBS)	CSB-DE021	Homocysteine Detection Reagent
Cystathionine beta-lyase (CBL)	CSB-DE022	Homocysteine Detection Reagent
Creatininase amidohydrolase (CAH)	CSB-DE004	Creatinine Detection Reagent
Creatine amidinohydrolase (CRH)	CSB-DE019	Creatinine Detection Reagent
Sarcosine oxidase (SOX)	CSB-DE003	Creatinine Detection Reagent
Malate dehydrogenase (MDH)	CSB-DE010	CO2 detection reagent
Purine-nucleoside phosphorylase (PNP)	CSB-DE012	5'-nucleotidase detection reagent Adenosine Deaminase Detection Reagent



## 02 /Product Recommendation

### Interleukin-6 (IL-6)

Interleukin-6 (IL-6) is a widely functional and pleiotropic cytokine. The human IL-6 gene is located on chromosome 7, with a length of approximately 5 kb, consisting of 5 exons and 4 introns. The human IL-6 molecule is composed of 212 amino acid residues, including a 28 amino acid signal sequence, and mature IL-6 consists of 184 amino acid residues with a molecular weight of 26 kDa. IL-6 plays a central role in acute inflammatory responses and is directly related to inflammatory diseases and the degree of infection. According to the "Expert Consensus on the Clinical Significance of Infection-Related Biomarkers" (2017), IL-6 can be used to assist in the early diagnosis of acute infections in the diagnosis of inflammation. IL-6 can be used to evaluate the severity of infection and predict prognosis. Dynamic monitoring of IL-6 levels can also help understand the progression of infectious diseases and the response to treatment. At the same time, the serum concentration of IL-6 increases earlier than PCT and CRP. Combined testing of IL-6 and PCT can assist doctors in diagnosis, disease assessment, guide treatment, and reduce unnecessary use of antibiotics.

#### ◎ Magnetic Particle Based Chemiluminescent Immunoassay (MPCLIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA436EmN②,CSB-DA436EmN④
- Comparison reagent: Roche
- Number of serum samples: 52
- Linearity range: 1.5-5000 pg/mL
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV \leq 10\%$
- Thermostability: Titer change < 10% at 37°C for 14 days

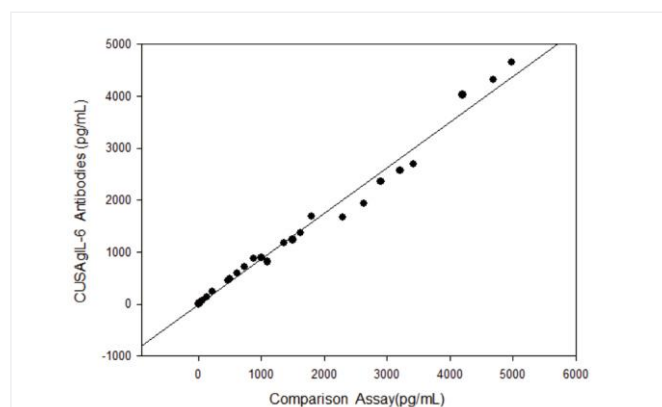


Fig.1 CUSAg IL-6 for serum samples detection on MPCLIA platform

#### ◎ Fluorescence immunochromatography Assay (FICA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA436EmN②,CSB-DA436EmN④
- Comparison reagent: Roche
- Number of serum samples: 50
- Linearity range: 3.2-5000 pg/mL
- Clinical correlation:  $R^2=0.97$
- Precision:  $CV < 15\%$
- Thermostability: Titer change < 10% at 37°C for 14 days

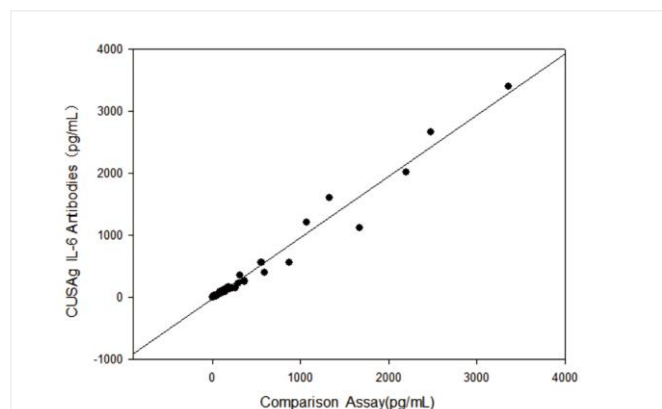


Fig.2 CUSAg IL-6 for serum samples detection on FICA platform

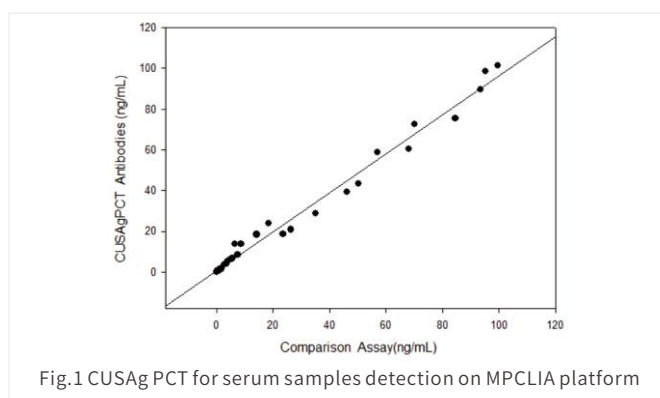
## Procalcitonin (PCT)

Procalcitonin (PCT) is a protein composed of 116 amino acids with a molecular weight of approximately 13 kDa. It is the precursor of calcitonin (CT) and lacks calcitonin-like hormone activity. Its molecule is composed of calcitonin, calcitonin gene-related peptide, and an N-terminal fragment containing 57 amino acids. PCT is mainly synthesized in the parafollicular cells of the thyroid gland and can also be produced by neuroendocrine cells in the lungs and small intestines. In normal serum of humans, PCT is present at very low levels ( $<0.05$  mg/L). However, in certain pathological conditions, such as severe bacterial infections, sepsis, and septicemia, bacterial endotoxins, TNF- $\alpha$ , IL-6, and other factors can act on neuroendocrine cells or special cells in the liver, spleen, kidney, and lungs to produce PCT, which can increase to more than 100 mg/L.

PCT is a new and innovative indicator used to diagnose and monitor severe bacterial infections, sepsis, and septicemia. It is an ideal indicator because its concentration does not increase or only slightly increases in local infections, viral infections, chronic non-specific inflammation, cancer fever, transplant rejection reactions, or autoimmune diseases. It only significantly increases in severe systemic infections, which makes PCT a better tool than CRP, IL-6, body temperature, white blood cell count, and erythrocyte sedimentation rate in monitoring severe infections. This also determines the high specificity of PCT, which can be used for differential diagnosis in various clinical situations.

### ◎ Magnetic Particle Based Chemiluminescent Immunoassay (MPCLIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA131DmN⑦, CSB-DA131DmN⑧
- Comparison reagent: Roche
- Number of serum samples: 40
- Linearity range: 0.03-100 ng/mL
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV \leq 10\%$
- Thermostability: Titer change  $< 10\%$  at  $37^\circ\text{C}$  for 14 days

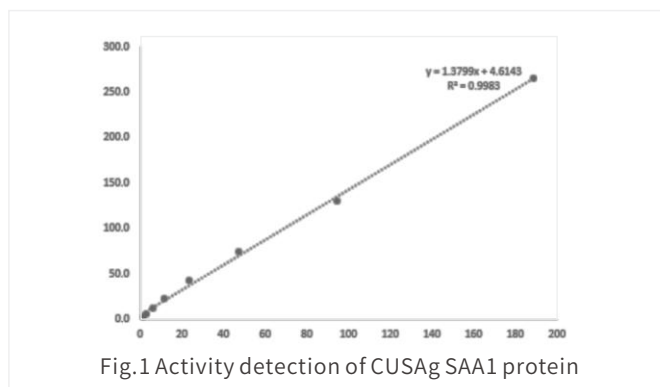


## Serum amyloid A 1(SAA1)

Serum amyloid A protein (SAA) is an acute-phase response protein that belongs to the heterogeneous protein family of lipoproteins. There are four SAA genes in the human body, namely SAA1-SAA4. SAA1 and SAA2 are two proteins in the acute phase called A-SAA, and the difference between the two proteins is 7 amino acids. SAA3 is a hypothetical gene that does not translate into protein, and SAA4 is a constitutive protein that has always existed in cells. Similar to C-reactive protein (CRP), the concentration of SAA in serum is a sensitive indicator of early inflammation in infectious diseases. However, there is an important difference: SAA significantly increases during viral infections, while CRP does not increase or only increases slightly during viral infections without bacterial infections. Therefore, SAA can be used to diagnose viral infections. For transplant rejection, SAA testing is a sensitive indicator. In irreversible transplant rejection testing, its average concentration is higher than that in reversible rejection cases. The chronic increase in SAA concentration in patients with rheumatoid arthritis, tuberculosis, or leprosy is a prerequisite for the synthesis of AA-amyloid fibers, which is also used to diagnose secondary amyloidosis.

The combination of SAA and CRP testing can better reflect complementary advantages and provide more evidence for the diagnosis and differential diagnosis of bacterial and viral infections. The SAA/CRP ratio can better reflect the clinical significance that a single indicator cannot reflect. It can guide the application of antibiotics in the treatment of chronic obstructive pulmonary disease. The combination of SAA and CRP testing can compensate for the lack of significant differences in CRP levels during viral infections, which is beneficial for the early diagnosis of pediatric infectious diseases. The CRP+SAA combination test is also a sensitive indicator for the early diagnosis, efficacy, and prognosis evaluation of hospital infections in gynecological chemotherapy patients.

- Product category: protein
- Catalog Number: CSB-DP118B
- Source: E.coli
- Relative purity:  $90\% \pm 5\%$  by SDS-PAGE



## Heparin binding protein (HBP)

Heparin-binding protein (HBP), also known as azurocidin, is a member of the serine protease family with a structure similar to that of elastase but without protease activity. HBP is mainly released by neutrophilic granulocytes when stimulated by external factors, and therefore, the normal level of HBP in human blood is low. When an infection occurs, some bacteria invade the blood vessels, and substances such as toxins released by the bacteria stimulate neutrophilic granulocytes to release HBP, resulting in an increase in the level of HBP in the blood.

HBP can be used for the auxiliary diagnosis and differential diagnosis of infectious diseases, evaluation of the severity of infection, prediction of sepsis, hypotension, organ dysfunction, diagnosis of sepsis, and prognosis evaluation of sepsis. The concentration of HBP in the patient's body can increase within 72 hours before the onset of sepsis. Most patients show an increase in HBP concentration within 10.5 hours before the onset of sepsis (median), and compared with other biomarkers, HBP is of great significance for the early diagnosis and prediction of sepsis. It is the only predictive index for sepsis and has been included in guidelines and expert consensus, such as the "China Severe Sepsis/Sepsis Shock Treatment Guidelines (2014)" and the "Expert Consensus on Early Prevention and Diagnosis of Sepsis 2020", which recommend the clinical significance of HBP in the diagnosis, treatment, and prediction of sepsis.

### © Fluorescence immunochromatography Assay (FICA)

- Product category: monoclonal antibody
- Catalog Number:  
Combination A: CSB-DA6001mN①,CSB-DA6001mN②  
Combination B: CSB-DA6001mN③,CSB-DA6001mN④
- Comparison reagent: Nakhan Sheng Tai
- Number of serum samples: 66
- Linearity range: 5.9-300 ng/mL
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV<15\%$
- Thermostability: Titer change  
< 15% at 37°C for 14 days

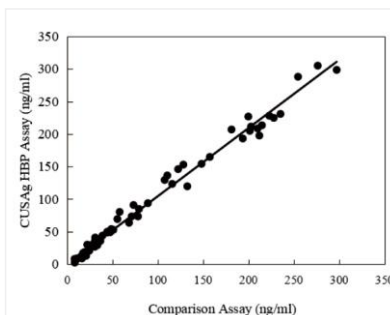


Fig.1 CUSAg HBP combination A for serum samples detection on FICA platform

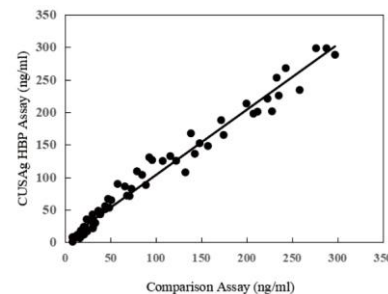


Fig.2 CUSAg HBP combination B for serum samples detection on FICA platform

### © Magnetic Particle Based Chemiluminescent Immunoassay (MPCLIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA6001mN③,CSB-DA6001mN④
- Comparison reagent: Nakhan Sheng Tai
- Number of serum samples: 42
- Linearity range: 5.9-300 ng/mL
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV<10\%$
- Recovery:102.56%
- Thermostability: Titer change < 10% at 37°C for 14 days

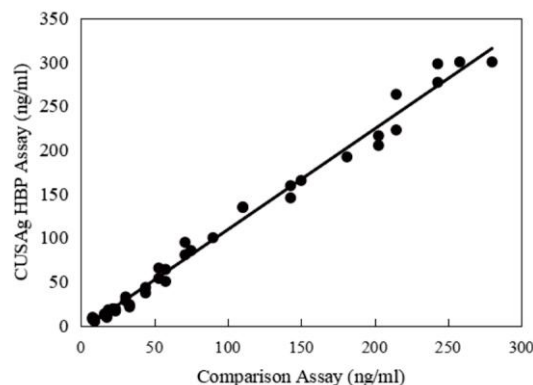


Fig.3CUSAg HBP for serum samples detection on MPCLIA platform

## Lipoprotein-associated phospholipase A2 (Lp-PLA2)

Lipoprotein-associated phospholipase A2 (Lp-PLA2), also known as platelet-activating factor acetylhydrolase (PAF-AH), is composed of 441 amino acids encoded by the PLA2G7 gene with a molecular weight of approximately 45 kDa. Lp-PLA2 is synthesized and secreted by mature macrophages and lymphocytes and is regulated by inflammatory mediators, playing a role in promoting inflammation and atherosclerosis.

In recent years, increasing evidence has shown that Lp-PLA2 plays a role in promoting atherosclerosis (AS) and is a new inflammatory marker of AS. The concentration of Lp-PLA2 in the blood can dynamically reflect the degree of inflammation of atherosclerotic plaques, and the higher the concentration, the greater the risk. In addition, detecting the level of Lp-PLA2 in the blood can be used to identify high-risk individuals with coronary heart disease. According to the research of Mayo Medical Laboratories, when the concentration of Lp-PLA2 in the blood is higher than 235 ng/mL, it indicates an increased risk of cardiovascular diseases such as myocardial infarction, coronary heart disease, and ischemic stroke.

Lp-PLA2 is an independent risk factor for reflecting the rupture of atherosclerotic plaques and the formation of blood clots, and has high consistency and accuracy with it. It is an accurate risk assessment marker for high-risk patients with acute atherosclerotic thrombotic events.

### © Chemiluminescent Immunoassay (CLIA)

- Product category: monoclonal antibody
- Catalog Number:  
Combination A: CSB-DA113BmN①-CSB-DA113BmN③  
Combination C: CSB-DA113BmN③-CSB-DA113BmN①  
Combination E: CSB-DA113BmN④-CSB-DA113BmN⑤  
Combination F: CSB-DA113BmN⑦-CSB-DA113BmN②
- Comparison reagent: Diasys
- Number of serum samples: 72
- Linearity range: 1.95-1500 ng/mL
- Clinical correlation:  $R^2=0.88$
- Precision:  $CV<10\%$
- Stability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

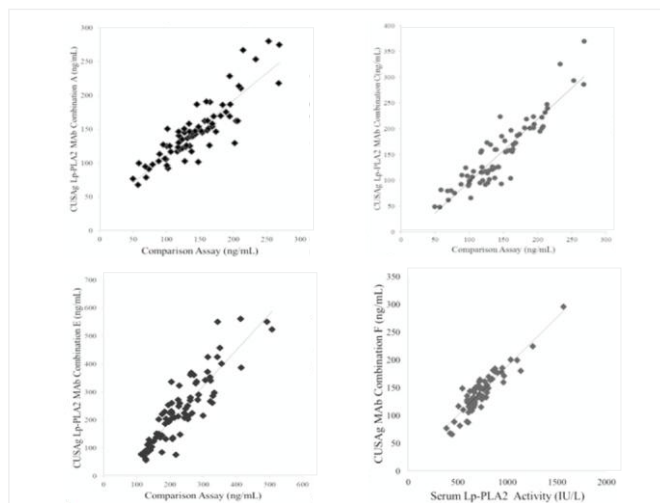


Fig.1 CUSAg Lp-PLA2 mAb for serum samples detection on CLIA platform

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number:  
CSB-DA113BmN⑧-CSB-DA113BmN⑨
- Comparison reagent: Diasys
- Number of serum samples: 40
- Linearity range: 1.95-1000 ng/mL
- Clinical correlation:  $R^2=0.85$
- Precision:  $CV<10\%$

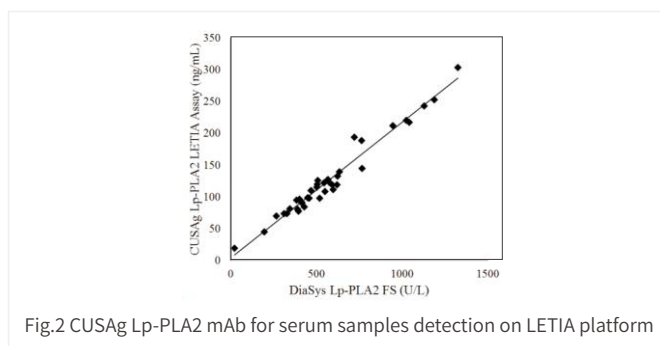


Fig.2 CUSAg Lp-PLA2 mAb for serum samples detection on LETIA platform

- Product category: polyclonal antibody
- Catalog Number: CSB-DA113BRN
- Comparison reagent: Diasys
- Number of serum samples: 36
- Linearity range: 5-1000 ng/mL
- Clinical correlation:  $R^2=0.85$
- Precision:  $CV<10\%$
- Thermostability:  $\Delta\text{ABS}$  change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

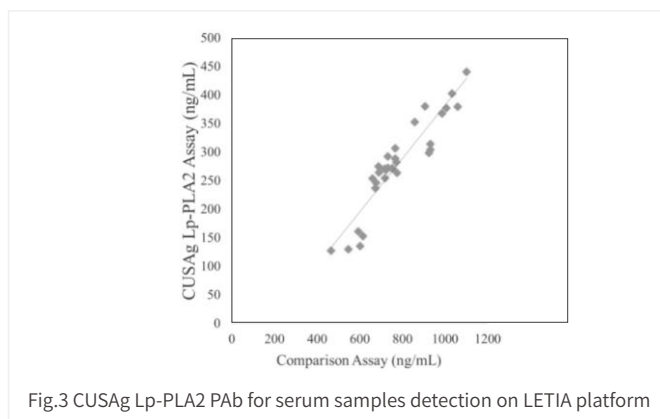


Fig.3 CUSAg Lp-PLA2 PAb for serum samples detection on LETIA platform



## Myeloperoxidase (MPO)

Myeloperoxidase (MPO) is a heme protein that is rich in neutrophils. It is synthesized and stored in the granules of myeloid cells before entering the circulation. External stimuli can cause neutrophils to aggregate and release MPO. The relative molecular weight of MPO is 150kDa, and it is a tetramer formed by covalent binding of two subunits. Each subunit consists of a heavy chain  $\alpha$  (relative molecular weight of 60kDa) and a light chain  $\beta$  (relative molecular weight of 15kDa).

MPO can catalyze the production of hypochlorous acid by oxidizing chloride ions to kill microorganisms in phagocytes, and can also destroy various target substances and play a role in producing and regulating inflammatory reactions. More importantly, its oxidative modification of low-density lipoprotein (LDL) can cause atherosclerosis, so MPO is considered to be related to the occurrence of cardiovascular disease.

Currently, MPO is considered the most promising cardiovascular biomarker. An increase in MPO content in the body indicates a risk of atherosclerosis and coronary heart disease, and it is an early warning sign of myocardial infarction. It is more sensitive and can diagnose and assess risks earlier than other indicators such as cardiac troponin T, CK-MB, and CRP. MPO levels can significantly increase within 2 hours of chest pain, so for patients with chest pain, MPO will have greater clinical significance in diagnosing acute coronary syndrome (ACS).

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA406HmN①, CSB-DA406HmN②
- Comparison reagent: Byron
- Number of serum samples: 72
- Linearity range: 25-1000 ng/mL
- Clinical correlation:  $R^2=0.94$
- High value linearity:  $R^2=0.99$
- Stability:  $\Delta$ ABS change < 10% at 37°C for 14 days

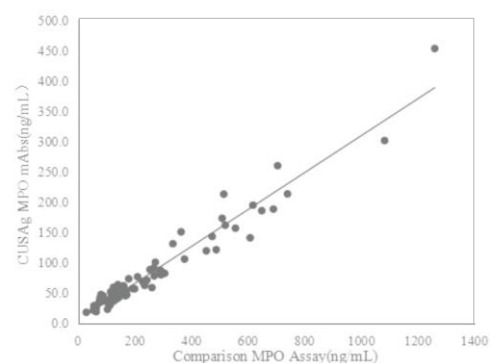


Fig.1 CUSAg MPO for serum samples detection on LETIA platform

### © Chemiluminescent Immunoassay (CLIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA406HmN①, CSB-DA406HmN②
- Comparison reagent: Byron
- Number of serum samples: 72
- Linearity range: 0-1000 ng/mL
- Clinical correlation:  $R^2=0.90$
- Dilution linearity:  $R^2=0.97$

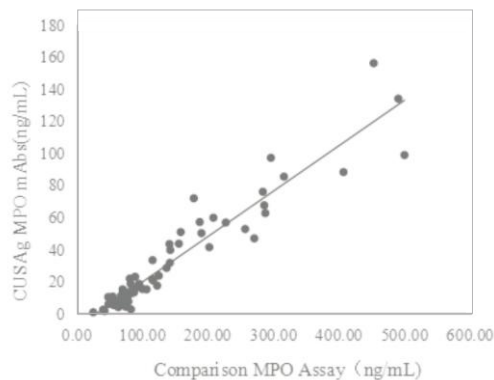


Fig.2 CUSAg MPO for serum samples detection on CLIA platform

## D-Dimer

D-dimer is a specific molecular marker of cross-linked protein produced by the action of fibrinolysin. It contains two identical subunits, each of which is composed of three polypeptide chains: alpha, beta, and gamma. The so-called "D-dimer" is not a structurally simple and uniform substance in the circulatory system, but a mixture of fragments with different sizes containing D-dimer structures, such as DD, DY, XD, XY, DXD, YXD, DXXD, etc., with molecular weights ranging from 190 kDa to 720 kDa.

In the past two decades, D-dimer testing has been widely used to exclude deep vein thrombosis (DVT) and pulmonary embolism (PE). In addition, D-dimer appears in secondary fibrinolysis and has important diagnostic value for other thrombotic diseases such as disseminated intravascular coagulation (DIC), cerebrovascular disease, liver disease, and malignant tumors. D-dimer testing can also be used as a monitoring indicator for thrombolytic therapy.

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA220HmN③,CSB-DA220HmN④
- Comparison reagent: Sysmex
- Number of plasma samples: 40
- Linearity range: 0.5-30 mg/L
- Clinical correlation:  $R^2=0.97$
- Precision: CV<10%
- Stability: Titer change < 10% at 37°C for 14 days

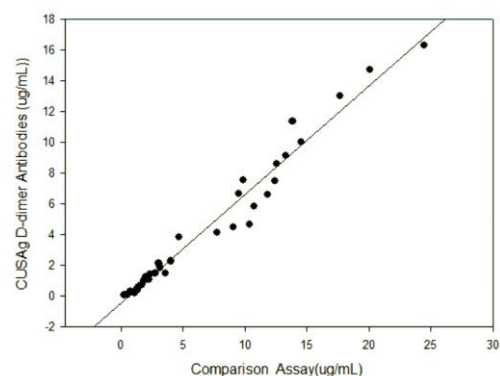


Fig.1 CUSAg D-Dimer for plasma samples detection on LETIA platform

### © Lateral-flow immunochromatographic assay (LFIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA220HmN③,CSB-DA220HmN④
- Comparison reagent: Sysmex
- Number of plasma samples: 34
- Linearity range: 0.5-30 mg/L
- Clinical correlation:  $R^2=0.97$
- Precision: CV< 15%
- Stability: Titer change < 10% at 37°C for 14 days

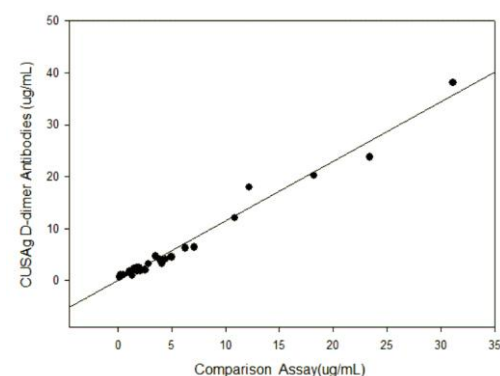


Fig.2 CUSAg D-Dimer for plasma samples detection on LFIA platform

## Fibrinogen degradation products (FDP)

Fibrinolysin is a serine protease that degrades fibrin or fibrinogen when fibrinolysis is excessive. The degradation products are collectively called fibrinogen degradation products (FDP), which are composed of substances with different molecular weights, such as X-fragment, Y-fragment, D-fragment, D-dimer, etc.

FDP is an indicator of fibrinolysis system activity and is often tested in coagulation experiments. Especially for the diagnosis of disseminated intravascular coagulation (DIC) and the follow-up of postoperative patients, FDP is one of the important reference indicators.

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA444HmN①,CSB-DA444HmN②
- Comparison reagent: SEKISUI
- Number of plasma samples: 54
- Linearity range: 1.0-60 mg/L
- Clinical correlation:  $R^2=0.95$
- Precision: CV<10%
- Thermostability:  $\Delta$ ABS change < 10% at 37°C for 14 days

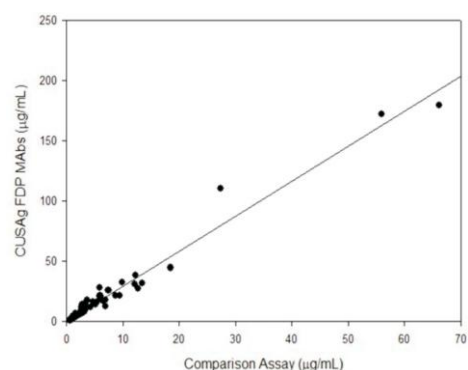


Fig.1 CUSAg FDP for plasma samples detection on LETIA platform

## Adiponectin(ADPN)

Adiponectin (ADPN) is a protein hormone mainly secreted by adipocytes and widely present in the bloodstream, accounting for about 0.01% (5-30  $\mu\text{g/ml}$ ) of the total plasma protein in humans. It plays an important role in regulating insulin sensitivity and glucose metabolism.

Human adiponectin monomer consists of 244 amino acids, including four regions: N-terminal signal peptide, non-homologous region, collagen repeat sequence, and globular carboxy-terminal domain. The collagen repeat sequence has a strong correlation with the evolution of species. Adiponectin exists in multiple subtypes in the bloodstream. The monomeric adiponectin (28kDa) first aggregates into a biologically active trimer (65kDa) in adipocytes, and then aggregates into a hexamer (150 kDa) and an asymmetric bouquet-like high molecular weight form (18-36 monomers, >280kDa), which is secreted into the circulation. The properties of adiponectin in normal human plasma are stable, and several subtypes of adiponectin do not convert to each other.

Adiponectin is a new indicator for early risk prediction of type 2 diabetes. Unlike blood glucose and glycated hemoglobin, which are diagnostic indicators for diabetes, adiponectin is a risk prediction indicator for diabetes. Adiponectin can screen out high-risk individuals for diabetes whose blood glucose is still normal but whose physiological metabolism has already been abnormal. Adiponectin can dynamically reflect the body's insulin resistance level and is closely related to individual metabolism health.

### ☉ Latex Enhanced Turbidimetric Immunoassay(LETIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA120AmN①
- Number of plasma samples: 31
- Linearity range: 1.1-40 mg/L
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV<10\%$
- Thermostability: Titer change < 10% at 37°C for 14 days

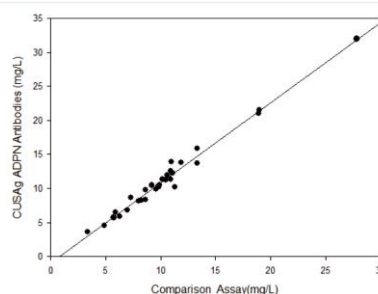


Fig.1 CUSAg ADPN for plasma samples detection on LETIA platform

### ☉ Chemiluminescent Immunoassay (CLIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA120AmN③, CSB-DA120AmN④
- Number of plasma samples: 39
- Linearity range: 0.9-40 mg/L
- Clinical correlation:  $R^2=0.92$
- Precision:  $CV<10\%$
- Recovery rate: 105.56%
- Thermostability: Titer change < 10% at 37°C for 14 days

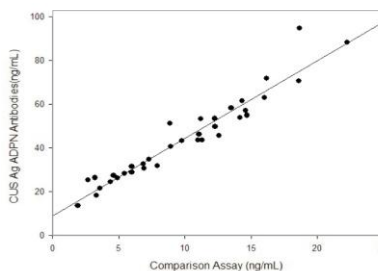


Fig.2 CUSAg ADPN for plasma samples detection on CLIA platform

### ☉ Lateral-flow immunochromatographic assay (LFIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA120AmN③, CSB-DA120AmN④
- Number of plasma samples: 39
- Linearity range: 1.5-40 mg/L
- Clinical correlation:  $R^2=0.92$
- Precision:  $CV<15\%$
- Thermostability: Titer change < 10% at 37°C for 14 days

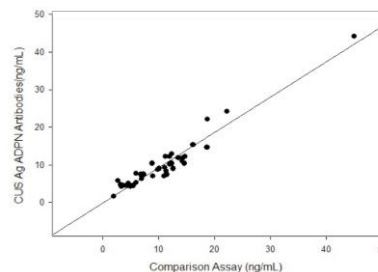


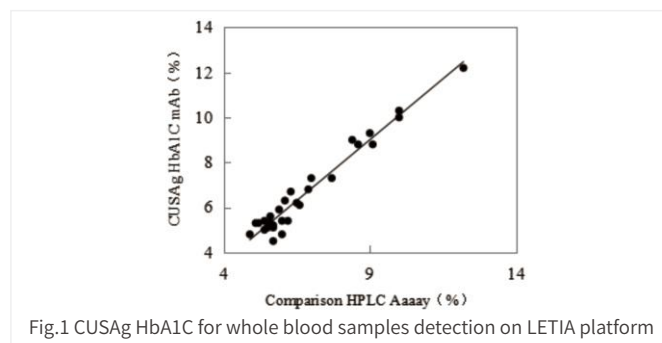
Fig.3 CUSAg ADPN for plasma samples detection on LFIA platform

## Glycohemoglobin A1C (HbA1C)

Adult hemoglobin (Hb) consists of HbA (97%), HbA2 (2.5%), and HbF (0.5%). HbA includes two alpha chains and two beta chains, which are easily glycosylated by glucose, 1,6-diphosphofructose, 6-phosphogluconate, and pyruvate. HbA1c and other glycosylated hemoglobin products are collectively referred to as total glycosylated hemoglobin (GHb). GHb or HbA1c is measured clinically. Since HbA1c is a product of glucose-glycosylated hemoglobin and accounts for most of GHb, HbA1c directly reflects the level of blood glucose in the body. HbA1c is a better indicator for monitoring glycemic control in diabetic patients than total GHb.

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA446HmN①
- Comparison reagent: Bio-Rad
- Number of whole blood samples: 30
- Linearity range: 2-14 %
- Clinical correlation:  $R^2=0.95$
- High value linearity:  $R^2=0.99$
- Thermostability:  $\Delta$ BS change < 10% at 37°C for 14 days



## Transferrin (TRF)

Transferrin (TRF) is a single-chain glycoprotein synthesized mainly by liver cells with a molecular weight of approximately 79.6 kD. TRF can reversibly bind to multivalent cations such as iron, copper, zinc, and cobalt. The main physiological function of plasma TRF is to transport iron ions and it belongs to negative acute-phase reactant protein.

Transferrin can be used for differential diagnosis of anemia. In iron-deficiency (hypochromic) anemia, compensatory synthesis of TRF increases, but the iron saturation is far below 30%. In aplastic anemia, TRF is normal or low, while iron saturation is increased. TRF can also be used to assess nutritional status and liver function. In malnutrition and chronic liver disease, TRF decreases, and in nephrotic syndrome, TRF is lost in large amounts in the urine, leading to a decrease in serum TRF levels.

### © Colloidal gold platform

- Product category: monoclonal antibody
- Catalog Number:  
CSB-DA485HmN①, CSB-DA485HmN②  
CSB-DA485HmN③
- Comparison reagent: W.H.P.M.
- Number of Fecal samples: 100
- Accord rate: 99 %
- Thermostability: Titer change < 10% at 37°C for 14 days

CUSAg result	Comparison reagent result		Total
	Positive	Negative	
Positive	9 (A)	1 (B)	10
Negative	1 (C)	89(D)	90
Total	10	90	100

## Ferritin (Fer)

Ferritin (FER) is a spherical protein composed of 24 light and heavy chains with a molecular weight of 450 kDa. It is an important iron storage protein in eukaryotes and its function is to maintain the soluble and non-toxic state of iron ions in the body. Ferritin is distributed throughout the body, especially in liver cells and reticuloendothelial cells. It exists in trace amounts in the serum and can reflect the iron ion content in the body.

Measurement of ferritin levels is currently the most accurate way to detect iron deficiency. In fact, all patients with low serum iron and ferritin levels have iron deficiency. Serum ferritin levels are an important indicator for distinguishing iron-deficiency anemia (decreased serum ferritin levels) from anemia of chronic disease (normal or elevated serum ferritin levels). It can also be used to differentiate microcytic anemia (low ferritin levels) from mild thalassemia (normal or elevated ferritin levels). Iron deficiency with decreased ferritin levels often occurs in women of childbearing age, children, and during menstruation. Patients with hemochromatosis, acute hepatitis, malignant tumors, and chronic inflammatory diseases may have elevated serum ferritin levels.

### © Chemiluminescent Immunoassay (CLIA)

- Product category: monoclonal antibody
- Catalog Number:  
CSB-DA027BmN①,CSB-DA027BmN②  
CSB-DA027BmN③,CSB-DA027BmN④
- Comparison reagent: Abbott
- Number of serum samples: 70
- Linearity range: 2.5-600 mg/L
- Clinical correlation:  $R^2=0.97$
- Precision:  $CV<10\%$
- Thermostability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

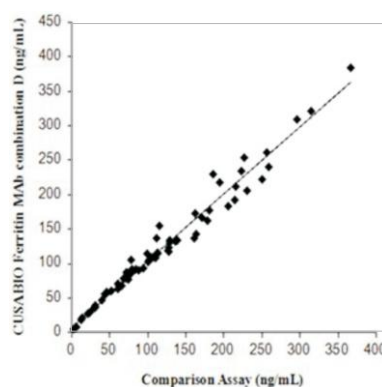


Fig.1 CUSAg Fer for serum samples detection on CLIA platform

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: monoclonal antibody
- Catalog Number: CSB-DA027BmN③,CSB-DA027BmN④
- Comparison reagent: Abbott
- Number of serum samples: 35
- Linearity range: 8-1000 mg/L
- Clinical correlation:  $R^2=0.98$
- Precision:  $CV<10\%$
- Thermostability:  $\Delta\text{ABS}$  change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

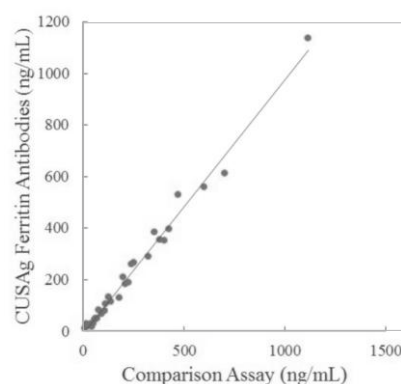


Fig.2 CUSAg Fer for serum samples detection on LETIA platform

## Streptolysin O (SLO)

Streptolysin O (SLO) is a toxic and immunogenic protein produced by most group A streptococci. In infected individuals, SLO acts as an antigen to increase the patient's immune response.

Clinically, the rise of anti-SLO antibody (ASO) levels in serum has been shown to be associated with streptococcal diseases such as glomerulonephritis and rheumatic fever. After infection, ASO levels rise after one week and reach their peak at 2-4 weeks. If there are no complications or reinfections, ASO levels often decrease to pre-infection levels after 6-12 weeks.

Normal ASO levels in serum are generally not higher than 160 IU/mL. If someone has a level higher than this, doctors will consider the possibility of a streptococcal infection. ASO testing is of great significance for the auxiliary diagnosis of streptococcal infections.

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: protein
- Catalog Number: CSB-DP013A
- Comparison reagent: Ningbo Mediasystem
- Number of serum samples: 100
- Linearity range: 0-800 IU/mL
- Clinical correlation:  $R^2=0.99$
- High value linearity:  $R^2=0.99$
- Precision:  $CV<10\%$

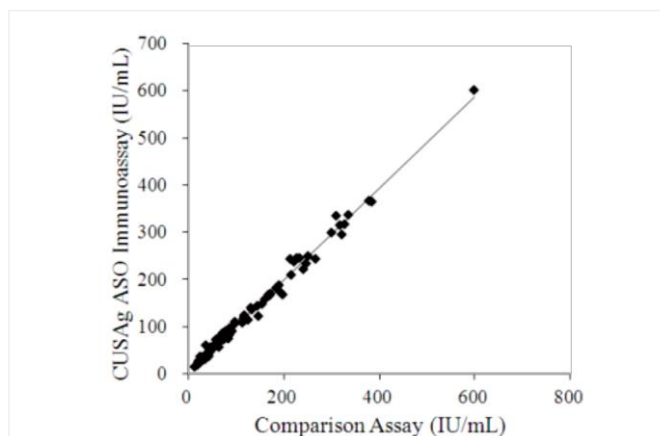


Fig.1 CUSAg SLO for serum samples detection on LETIA platform

## Rheumatoid factor (RF)

Rheumatoid factor (RF) is a specific antibody that targets the Fc fragment of human IgG molecules and is used as a serological marker for the diagnosis of rheumatoid arthritis (RA). RF has five types, including IgM, IgG, IgA, IgD, and IgE, with IgM being the main type. In clinical practice, the detection of IgM-type RF is usually used for the diagnosis, classification, and efficacy observation of RA.

### © Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: protein
- Catalog Number: CSB-DPK718H
- Comparison reagent: Denka
- Number of serum samples: 52
- Linearity range: 5-160 IU/mL
- Clinical correlation:  $R^2=0.99$
- Precision:  $CV<10\%$

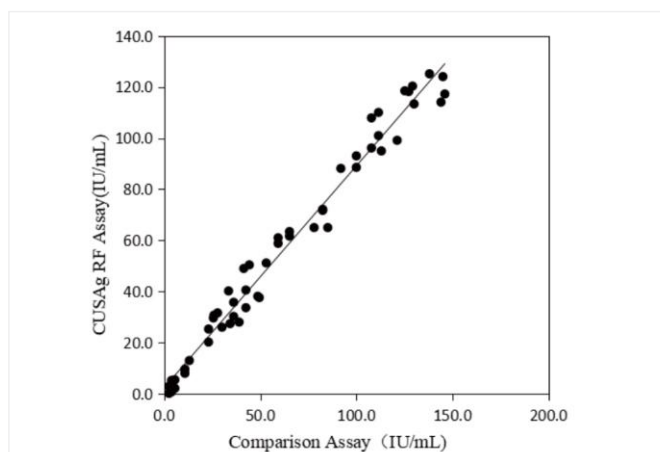


Fig.1 CUSAg RF for serum samples detection on LETIA platform

## Neutrophil gelatinase-associated lipocalin (NGAL)

Neutrophil gelatinase-associated lipocalin (NGAL), also known as human lipocalin 2 (Lipocalin 2, Ln2), is a member of the human lipocalin protein family and consists of 178 amino acid residues.

NGAL is a small molecular weight protein expressed in neutrophils and epithelial cells of some tissues and organs, including renal tubules. Its expression in the kidney increases significantly due to various reasons for renal injury, and it is released into urine and blood. Its level can increase within 2 hours of kidney injury. Studies have shown that the range of NGAL in urine of healthy people is 0.7-9.6 ng/mL, and in plasma is 3-106 ng/mL. NGAL level increases sharply after kidney injury, thus NGAL is used as an early sensitive biomarker for kidney injury.

NGAL in blood and urine reflects the presence, severity, and progression of chronic kidney disease. NGAL levels may also moderately increase in infections and certain cancers.

### Chemiluminescent Immunoassay (CLIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA001DmN①, CSB-DA001AmN①
- Number of serum samples: 50
- Linearity range: 0-1000 ng/mL
- Clinical correlation:  $R^2=0.92$
- Precision:  $CV<10\%$
- Recovery rate: 101.06%
- Thermostability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

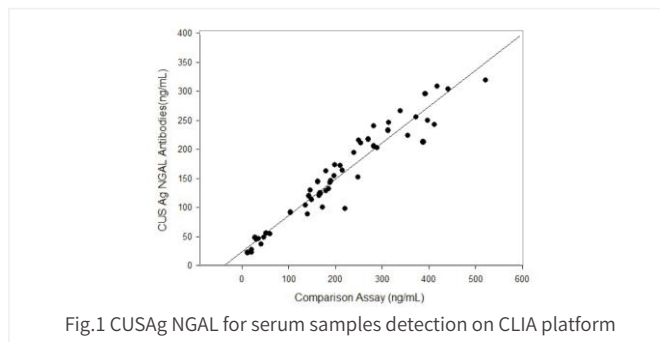


Fig.1 CUSAg NGAL for serum samples detection on CLIA platform

### Magnetic Particle Based Chemiluminescent Immunoassay (MPCLIA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA001DmN①, CSB-DA001AmN①
- Number of serum samples: 18
- Linearity range: 0-1000 ng/mL
- Clinical correlation:  $R^2=0.92$
- Precision:  $CV<10\%$
- Thermostability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

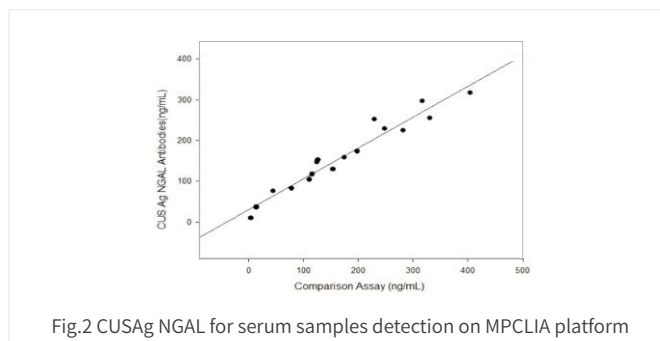


Fig.2 CUSAg NGAL for serum samples detection on MPCLIA platform

### Fluorescence immunochromatography Assay (FICA)

- Product category: Monoclonal antibody
- Catalog Number: CSB-DA001DmN①, CSB-DA001AmN①
- Number of serum samples: 39
- Linearity range: 0-1000 ng/mL
- Clinical correlation:  $R^2=0.94$
- Thermostability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

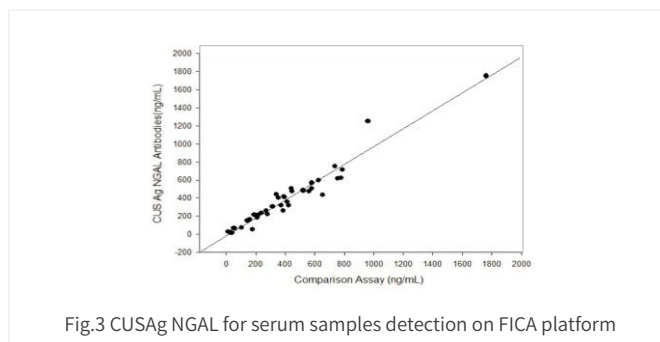


Fig.3 CUSAg NGAL for serum samples detection on FICA platform

### Latex Enhanced Turbidimetric Immunoassay (LETIA)

- Product category: polyclonal antibody
- Catalog Number: CSB-DA001ARN
- Number of serum samples: 50
- Linearity range: 0-5000 ng/mL
- Clinical correlation:  $R^2=0.98$
- Thermostability: Titer change  $<10\%$  at  $37^\circ\text{C}$  for 14 days

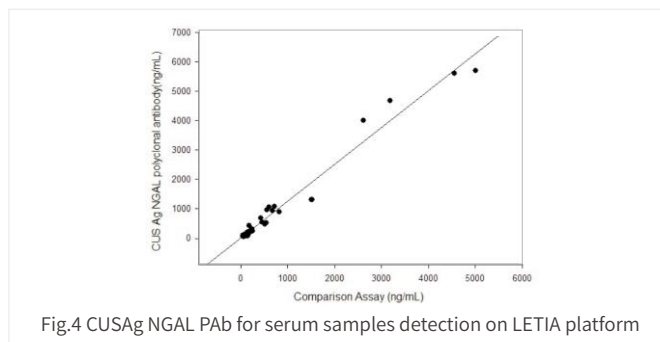


Fig.4 CUSAg NGAL PAb for serum samples detection on LETIA platform



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