

Immunology- related ELISA Kits



Authorized Distributor:

BTL Biotechno Labs Pvt. Ltd.

613-A, Ansal Chamber-II, Bhikaji Cama Place, New Delhi-110066

Mob : +91- 8860924349; 07291852429

E-mail : info@biotechnolabs.com , Web : www.biotechnolabs.com



YOUR GOOD PARTNER IN BIOLOGY RESEARCH!

Postal Address : 7505 Fannin St. Ste 610-322, Houston, TX 77054, USA

Tel : 301-363-4651 (Available 9 a.m. to 5 p.m. CST from Monday to Friday)

Email: support@cusabio.com Web: www.cusabio.com

Immunology is an important branch of biology, which mainly studies the immune system in organisms. Immune system is a complex biological defense mechanism, which aims to protect the body from external pathogens (such as bacteria, viruses, fungi and parasites) and resist the proliferation of abnormal cells (such as cancer cells). The study of immunology covers all aspects of the immune system, including the structure and function of the immune system, the activation and recruitment of immune cells, the law of immune response and antigen removal, and the pathological process of diseases caused by immune abnormalities, so as to deeply understand the mechanism of immune response.

Immunology has a wide range of applications, including organ transplantation (immune rejection), oncology (immunotherapy), rheumatology (autoimmune diseases), virology, bacteriology, parasitology, psychiatry and dermatology. The study of immunology is helpful to reveal the function of immune system in health and disease, and to develop new treatments and drugs to regulate immune response.

CUSABIO is committed to providing high-quality immunology-related ELISA kits for researchers. These kits are highly sensitive and accurate, and are suitable for a wide range of immunology research fields. Whether you are concerned about cytokines, inflammatory factors, immunoregulatory molecules or other immunological markers, CUSABIO's ELISA kits can provide you with reliable data analysis.

Immune System

The immune system is a highly complex system in the human body. Its main function is to protect the body from external invasive pathogens (such as bacteria, viruses, fungi and parasites), and it is also responsible for eliminating abnormal cells, such as cancer cells, that occur inside the body. The immune system consists of immune organs,immunocyteAnd immune molecules. Among them, immune organs include bone marrow, thymus, tonsils, spleen, lymph nodes, etc., immune cells include lymphocytes (T cells, B cells), phagocytes, NK cells, dendritic cells, etc., and immune molecules include TCR, BCR, cytokines and their receptors, immunoglobulin, etc.

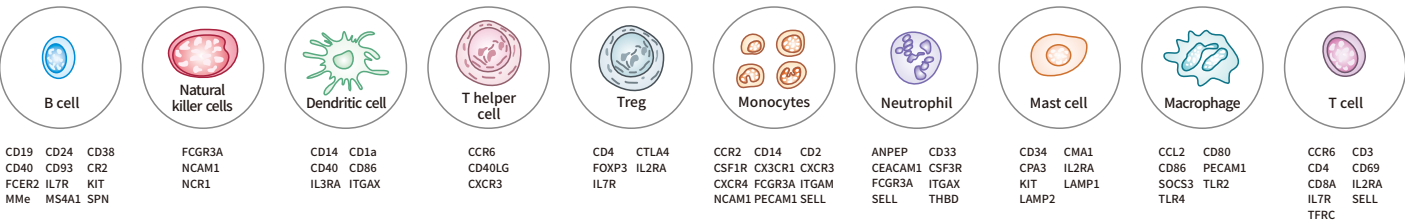
The immune system is mainly divided into two categories: innate immunity and acquired immunity.

- 1.Innate immune system: This is an inherent nonspecific defense mechanism in the human body, also known as innate immunity. The innate immune system includes physical and chemical barriers, phagocytes, natural killer cells and complement system, which can identify and fight against any invading pathogens and provide the earliest immune defense for the body.
- 2.Acquired immune system: This is a highly specific defense mechanism, also known as adaptive immunity. The main feature of the acquired immune system is that it can recognize and remember specific pathogens, and when the body is attacked by the same pathogens again, it can respond faster and more effectively. This immune response is mainly completed by T lymphocytes and B lymphocytes.

Immunocyte Markers

Immunocyte markers are expressed extracellular on the surface of immune cells, which are usually used to distinguish specific cell types from other cell types. The following figure shows common immune cells and their markers.

Immunocyte



Immunology-related Signal Pathways

Immunological research involves a variety of signal pathways, which play a key role in regulating the activity of immune cells, immune response, inflammation and immune tolerance. The following are some common immunological signaling pathways:

Immunology

| | | |
|--|--|---|
| Antigen processing and presentation signal pathway | IL-17 signaling pathway | T cell receptor (TCR) signaling pathway |
| B cell receptor (BCR) signaling pathway | Inflammatory corpuscle signaling pathway | Th1 and Th2 cell differentiation pathways |
| Complement and coagulation cascades reaction | Leukocytes transendothelial migration | Th17 cell differentiation pathway |
| FcεRI signaling pathway | NF-κB signaling pathway | Thyroid hormone synthesis |
| FcγR-mediated phagocytosis | NK cells-mediated cytotoxicity | Toll-like receptor signaling pathway |
| Hematopoietic cell lineage | NOD-like receptor signaling pathway | Virus infection |
| JAK-STAT signal pathway | Osteoclast differentiation | |

Tumor Immunity

Tumor immunology is a branch of immune system related to tumor (cancer), which mainly focuses on how the immune system recognizes, attacks and resists tumor cells. Under normal circumstances, the immune system has a set of mechanisms to prevent the occurrence and development of tumors, including detecting and eliminating potential cancer cells through immune cells and molecules. However, tumor cells can develop a series of escape mechanisms to resist the attack of immune system, which is part of the reason for tumor formation and growth. Tumor immunology mainly focuses on the following aspects:

●Tumor antigen

Tumor antigen (TA) refers to the immunogenic protein and glycoprotein on the surface of tumor cells or lipoproteins. Most tumor antigens are the normal protein of human body, and their immunogenicity is usually low. Tumor antigen is often used as a tumor marker in tumor detection and diagnosis. At the same time, it is also an important target for tumor treatment. Tumor antigen is the core problem in the field of tumor immunology.

●Immune checkpoint

Immune checkpoint is a biological switch that can prevent immune cells from attacking cancer cells to prevent the immune system from being overactive. Some cancer cells use these checkpoints to escape immune attacks. Drugs can activate immune cells by blocking these checkpoints and help them attack cancer cells. For example, PD-1 and CTLA-4 are common immune checkpoint proteins.

●Immunotherapy

Immunotherapy is a treatment method that uses the immune system to fight cancer. It includes the use of antibody drugs, cell therapy (such as CAR-T cell therapy), vaccines and immunomodulatory drugs to activate, strengthen or guide patients' own immune system to attack tumor cells.

●Tumor immune monitoring

This is a method to detect the activity of patients' immune system to help doctors decide the best treatment strategy. Monitoring specific markers and cells in the immune system can provide information about the immune status.

The List of CUSABIO's Immunology-related ELISA Kits

| Code | Product Name | Sensitivity | Target |
|----------------|---|--------------|--------|
| CSB-E09709h | Human Intestinal-type alkaline phosphatase,ALPI ELISA Kit | 0.78 ng/mL | ALPI |
| CSB-E14975h | Human B-cell leukemia/lymphoma 6,Bcl6 ELISA Kit | 4.68 pg/mL | BCL6 |
| CSB-EL002658RA | Rat Beclin-1(BECN1) ELISA kit | 0.039 ng/mL | BECN1 |
| CSB-EL002868HU | Human B- and T-lymphocyte attenuator(BTLA) ELISA kit | 0.11 ng/mL | BTLA |
| CSB-E10360h | Human Eotaxin 2/CCL24 ELISA Kit | 67.660 pg/mL | CCL24 |
| CSB-E07428m | Mouse monocyte chemotactic protein 2,MCP-2 ELISA kit | 1.56 pg/mL | CCL8 |
| CSB-EL004878HU | Human CD109 antigen(CD109) ELISA kit | 23.4 pg/mL | CD109 |
| CSB-E11178r | Rat soluble cluster of differentiation 14,sCD14 ELISA Kit | 7 ng/mL | CD14 |

| Code | Product Name | Sensitivity | Target |
|----------------|--|-------------|----------|
| CSB-E13199h | Human soluble cluster of differentiation 14,sCD14 ELISA Kit | 0.229 ng/mL | CD14 |
| CSB-EL004881HU | Human CD160 antigen(CD160) ELISA kit | 0.156 ng/mL | CD160 |
| CSB-E14050h | Human soluble CD163(sCD163) ELISA Kit | 0.39 ng/mL | CD163 |
| CSB-EL004882MO | Mouse Scavenger receptor cysteine-rich type 1 protein M130(CD163) ELISA kit | | CD163 |
| CSB-EL004905HU | Human Endosialin(CD248) ELISA kit | 0.078 ng/mL | CD248 |
| CSB-E14285h | Human Soluble CD276,sCD276/sB7-H3 ELISA Kit | 0.78 ng/mL | CD276 |
| CSB-E09296h | Human soluble cluster of differentiation 28,sCD28 ELISA Kit | 0.156 ng/mL | CD28 |
| CSB-EL004929MO | Mouse ADP-ribosyl cyclase 1(CD38) ELISA kit | 0.156 ng/mL | CD38 |
| CSB-E11846h | Human cluster Of differentiation,CD44 ELISA Kit | 19.5 pg/mL | CD44 |
| CSB-EL004940HU | Human Leukocyte surface antigen CD47(CD47) ELISA kit | 0.78 pg/mL | CD47 |
| CSB-EL004943HU | Human CAMPATH-1 antigen(CD52) ELISA kit | 19.5 ng/mL | CD52 |
| CSB-E14107h | Human cluster of differentiation 63,CD63 ELISA Kit | 0.156 ng/mL | CD63 |
| CSB-EL004950MO | Mouse CD63 antigen(CD63) ELISA kit | 15.6 pg/mL | CD63 |
| CSB-E13297r | Rat Cluster of Differentiation 68, CD68 ELISA kit | 0.156 ng/mL | CD68 |
| CSB-E14099h | Human cluster of differentiation 73(CD73) ELISA Kit | 0.78 ng/mL | CD73 |
| CSB-E15768h | Human Soluble Cluster of Differentiation 80 (sCD80) ELISA Kit | 31.25 pg/mL | CD80 |
| CSB-EL004960HU | Human CD81 antigen(CD81) ELISA kit | 0.039 ng/mL | CD81 |
| CSB-EL004960MO | Mouse CD81 antigen(CD81) ELISA kit | 11.75 pg/mL | CD81 |
| CSB-EL004969HU | Human CD9 antigen(CD9) ELISA kit | 0.039 ng/mL | CD9 |
| CSB-EL004969MO | Mouse CD9 antigen(CD9) ELISA kit | 1.17 pg/mL | CD9 |
| CSB-EL005166HU | Human Carcinoembryonic antigen-related cell adhesion molecule 6(CEACAM6) ELISA kit | 0.33 ng/mL | CEACAM6 |
| CSB-EL006088HU | Human Cystatin-SN(CST1) ELISA kit | 0.039 ng/mL | CST1 |
| CSB-EL006095MO | Mouse Cystatin-F(CST7) ELISA kit | 0.039 ng/mL | CST7 |
| CSB-E09171h | Human cytotoxic T lymphocyte associated antigen 4,CTLA-4 ELISA Kit | 31.25 pg/mL | CTLA4 |
| CSB-E08183m | Mouse interferon-inducible protein 10,IP-10 ELISA Kit | 0.78 pg/mL | CXCL10 |
| CSB-E08181h | Human interferon-inducible protein 10,IP-10 ELISA Kit | 7.8 pg/mL | CXCL10 |
| CSB-E09024h | Human monocyte interferon gamma inducing factor,MIG ELISA Kit | 7.8 pg/mL | CXCL9 |
| CSB-E14155h | Human defensin, alpha 1 (DEFA1) ELISA kit | 0.156 ng/mL | DEFA1 |
| CSB-EL006655HU | Human Neutrophil defensin 3(DEFA3) ELISA kit | 0.47 ng/mL | DEFA3 |
| CSB-EL006656MO | Mouse Neutrophil defensin 4(DEFA4) ELISA kit | 0.078 ng/mL | DEFA4 |
| CSB-EL006657HU | Human Defensin-5(DEFA5) ELISA kit | 0.156 ng/mL | DEFA5 |
| CSB-EL006658HU | Human Defensin-6(DEFA6) ELISA kit | 0.039 ng/mL | DEFA6 |
| CSB-E14186h | Human β-defensins 1 ELISA Kit | 0.78 pg/mL | DEFB1 |
| CSB-E14187h | Human β-defensins 3 ELISA Kit | 31.25 pg/mL | DEFB103A |
| CSB-E13201h | Human β-defensins 2 ELISA Kit | 15.6 pg/mL | DEFB4 |
| CSB-E08520m | Mouse dipeptidyl peptldase IV,DPPIV ELISA Kit | 0.078 ng/ml | DPP4 |
| CSB-E08519r | Rat dipeptidyl peptldase IV,DPPIV ELISA Kit | 0.195 ng/mL | DPP4 |
| CSB-EL007756HU | Human Eosinophil peroxidase(EPX) ELISA kit | 0.78 ng/mL | EPX |
| CSB-E15830m | Mouse Eosinophil Peroxidase (EPO) ELISA Kit | 0.039 ng/mL | EPX |
| CSB-EL522052MO | Mouse Fibroblast growth factor 15(FGF15) ELISA kit | | FGF15 |

| Code | Product Name | Sensitivity | Target |
|----------------|--|-------------|---------|
| CSB-E10113h | Human fibroblast growth factor-23,FGF-23 ELISA Kit | 0.78 pg/mL | FGF23 |
| CSB-E17661c | Canine Fibroblast Growth Factor 23 (FGF23) ELISA Kit | 0.78 pg/mL | FGF23 |
| CSB-EL008653MO | Mouse Fibrinogen-like protein 1(FGL1) ELISA kit | 7.8 pg/mL | FGL1 |
| CSB-EL008653HU | Human Fibrinogen-like protein 1(FGL1) ELISA kit | | FGL1 |
| CSB-E11859h | Human Vitamin D-binding protein,DBP ELISA Kit | | GC |
| CSB-E09401h | Human leukocyte antigen G,HLA-G ELISA Kit | 0.31 ng/mL | HLA-G |
| CSB-EL010996MO | Mouse Indoleamine 2,3-dioxygenase 1(IDO1) ELISA kit | 15.6 pg/mL | IDO1 |
| CSB-EL011047HU | Human Interferon alpha/beta receptor 2(IFNAR2) ELISA kit | | IFNAR2 |
| CSB-E16948B | Bovine Interferon-Tau ELISA Kit | 1.56 pg/mL | IFN-tau |
| CSB-EL011577HU | Human Zinc finger protein Aiolos(IKZF3) ELISA kit | 6.25 pg/mL | IKZF3 |
| CSB-E13687h | Human interleukin-18 binding prorein(IL-18BP) ELISA Kit | 3.9 pg/ml | IL18BP |
| CSB-EL011616HU | Human Interleukin-36 receptor antagonist protein(IL1F5) ELISA kit | | IL1F5 |
| CSB-EL011660MO | Mouse L-amino-acid oxidase(IL4I1) ELISA kit | 3.9 pg/mL | IL4I1 |
| CSB-EL011822HU | Human Interferon regulatory factor 7(IRF7) ELISA kit | 5.8 pg/mL | IRF7 |
| CSB-EL012719HU | Human Lymphocyte activation gene 3 protein(LAG3) ELISA kit | 0.039 ng/mL | LAG3 |
| CSB-E16370B | Bovine lipopolysaccharide binding protein (LBP) ELISA kit | 3.9 ng/mL | LBP |
| CSB-E11184r | Rat lipolysaccharide binding protein,LBP ELISA Kit | 15.6 pg/mL | LBP |
| CSB-E09629h | Human lipolysaccharide binding protein,LBP ELISA Kit | 0.156 μg/mL | LBP |
| CSB-EL012775MO | Mouse Lipopolysaccharide-binding protein(LBP) ELISA kit | 3.12 ng/mL | LBP |
| CSB-EL012853HU | Human Liver-expressed antimicrobial peptide 2(LEAP2) ELISA kit | 0.078 ng/mL | LEAP2 |
| CSB-EL012935HU | Human Leukocyte immunoglobulin-like receptor subfamily A member 3(LILRA3) ELISA kit | 0.039 ng/mL | LILRA3 |
| CSB-E11812h | Human leukocyte immunoglobulin-like receptor subfamily B member 4,LILRB4 ELISA Kit | 7.81 pg/mL | LILRB4 |
| CSB-EL013066BO | Bovine lactoperoxidase (LPO) ELISA kit | 1.56 mU/mL | LPO |
| CSB-EL013220MO | Mouse Lymphotoxin-beta(LTB) ELISA kit | 3.12 pg/mL | LTB |
| CSB-E11289b | Bovine Lactoferrin,LTF/LF ELISA kit | 3.12 μg/mL | LTF |
| CSB-E17965h | Human mannan-binding lectin serine peptidase 1 (C4/C2 activating component of Ra-reactive factor) (MASP1)ELISA kit | 0.78 ng/mL | MASP1 |
| CSB-EL013510MO | Mouse Mannan-binding lectin serine protease 2(MASP2) ELISA kit | 31.2 pg/mL | MASP2 |
| CSB-E09012h | Human mast cell tryptase,MCT ELISA Kit | 0.39 ng/mL | MCT |
| CSB-E14326m | Mouse Mast Cell Tryptase(MCT) ELISA Kit | 7.8 pg/mL | MCT |
| CSB-E16222h | Human Macroprolactin ELISA Kit | 0.5 μIU/mL | MPRL |
| CSB-EL015249HU | Human Interferon-induced GTP-binding protein Mx1(MX1) ELISA kit | 3.9 pg/mL | MX1 |
| CSB-EL017237HU | Human Alpha-1-acid glycoprotein 1(ORM1) ELISA kit | 7.8 ng/mL | ORM1 |
| CSB-E12730r | Rat α1-Acid glycoprotein(α1-AGP) ELISA Kit | 3.125 ng/mL | ORM1 |
| CSB-E08579b | Bovine α1-Acid glycoprotein,α1-AGP ELISA Kit | 15.6 ng/mL | ORM1 |
| CSB-E15980h | Human Prolactin Inducible Protein(PIP)ELISA Kit | | PIP |
| CSB-E14124h | Human proteoglycan 4(PRG4) ELISA Kit | | PRG4 |
| CSB-E14125r | Rat proteoglycan 4(PRG4) ELISA kit | 0.39 ng/mL | PRG4 |
| CSB-E10028h | Human Prothymosin alpha (PTMA) ELISA Kit | 3.9 pg/mL | PTMA |
| CSB-E12926h | Human Pentraxin 3 (PTX3)ELISA Kit | 19.5 pg/ml | PTX3 |

| Code | Product Name | Sensitivity | Target |
|----------------|---|-------------|----------|
| CSB-E13852h | Human Resistin-like Molecule β (RELM- β) ELISA Kit | 11.7 pg/mL | RETNLB |
| CSB-EL019737HU | Human Receptor-interacting serine/threonine-protein kinase 3(RIPK3) ELISA kit | | RIPK3 |
| CSB-EL020623HU | Human Protein S100-A10(S100A10) ELISA kit | 0.078 ng/mL | S100A10 |
| CSB-E17221c | Canine S100 calcium binding protein A12/Calgranulin-C(S100A12) ELISA Kit | 0.156 ng/mL | S100A12 |
| CSB-EL020632MO | Mouse Protein S100-A4(S100A4) ELISA kit | 15.6 pg/mL | S100A4 |
| CSB-E13089h | Human S100 calcium binding protein A6/calgranulin A(S100A6) ELISA Kit | 7.8 pg/ml | S100A6 |
| CSB-EL020636HU | Human Protein S100-A7A(S100A7A) ELISA kit | 0.078 ng/mL | S100A7A |
| CSB-EL020641RA | Rat Protein S100-A8(S100A8) ELISA kit | 0.78 ng/mL | S100A8 |
| CSB-E11336h | Human soluble cluster of differentiation 146,sCD146 ELISA Kit | 0.31 ng/mL | sCD146 |
| CSB-EL021065HU | Human Leukocyte elastase inhibitor(SERPINB1) ELISA kit | 0.156 ng/mL | SERPINB1 |
| CSB-EL021135HU | Human 14-3-3 protein sigma(SFN) ELISA kit | | SFN |
| CSB-E07290m | Mouse transforming growth factor α ,TGF- α ELISA Kit | 3.12 pg/mL | TGFA |
| CSB-E04726m | Mouse Transforming Growth factor β 1,TGF- β 1 ELISA kit | 0.2 ng/mL | TGFB1 |
| CSB-E06843p | Pig transforming growth factor β 1(TGF- β 1)ELISA Kit | 0.195 ng/mL | TGFB1 |
| CSB-E04725h | Human Transforming Growth factor β 1,TGF- β 1 ELISA kit | 0.747 ng/mL | TGFB1 |
| CSB-E04796c | Dog Transforming growth factor β 1,TGF- β 1 ELISA Kit | 0.747 ng/ml | TGFB1 |
| CSB-EL023446SH | Sheep Transforming growth factor beta-1(TGFB1) ELISA kit | 3.9 ng/mL | TGFB1 |
| CSB-E09875Ch | Chicken Transforming Growth factor β 1,TGF- β 1 ELISA kit | 0.078 ng/mL | TGFB1 |
| CSB-E14209B | Bovine transforming growth factors β 2,TGF β 2 ELISA Kit | 6.25 ng/mL | TGFB2 |
| CSB-E09785m | Mouse transforming growth factor β 2,TGF β 2 ELISA Kit | 0.39 pg/mL | TGFB2 |
| CSB-E12862m | Mouse Transforming Growth factor β 3,TGF- β 3 ELISA kit | 31.25 pg/mL | TGFB3 |
| CSB-E07000Rb | Rabbit Transforming Growth factor β 1,TGF- β 1 ELISA Kit | 1.78 ng/mL | TGFB1 |
| CSB-EL023453MO | Mouse Transforming growth factor beta receptor type 3(TGFBR3) ELISA kit | 1.56 pg/mL | TGFBR3 |
| CSB-E09821h | Human Toll-like receptor 9,TLR-9 ELISA kit | 19.5 pg/mL | TLR9 |
| CSB-E04836h | Human Triggering Receptor Expresses on Myeloid Cells-1,TREM-1 ELISA Kit | 7.81 pg/mL | TREM1 |
| CSB-EL025554MO | Mouse Mitochondrial brown fat uncoupling protein 1(UCP1) ELISA kit | 1.17 pg/mL | UCP1 |
| CSB-EL026287HU | Human 14-3-3 protein epsilon(YWHAE) ELISA kit | 19.5 pg/mL | YWHAE |
| CSB-EL026289HU | Human 14-3-3 protein eta(YWHAH) ELISA kit | 0.156 ng/mL | YWHAH |
| CSB-EL026293HU | Human 14-3-3 protein zeta/delta(YWHAZ) ELISA kit | 0.156 ng/mL | YWHAZ |