

Bioactive

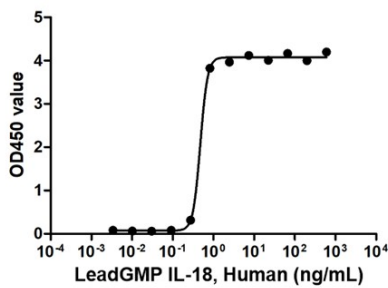
GMP Grade

IL18 (Human) Recombinant Protein

Catalog # P7000

Size 100 ug

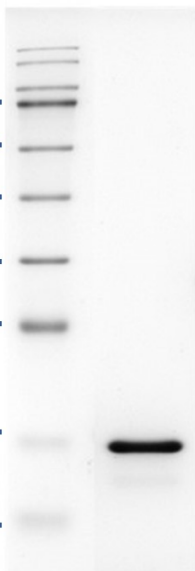
Applications



Functional Study

The ED₅₀ for this effect is <6 ng/mL, measured by the induction of IFN gamma secretion in KG-1 cells.

75 -
60 -
45 -
35 -
25 -
15 -
10 -



Specification

Product Description

Human IL18 recombinant protein with polyhistidine tag at the C-terminus expressed in *Escherichia coli*.

Host	Escherichia coli
Theoretical MW (kDa)	Calculated MW: 18.2
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Purification	Ni-NTA chromatography
Purity	> 97% by SDS-PAGE
Endotoxin Level	< 0.05 EU/ug
Activity	The ED ₅₀ for this effect is < 6 ng/mL, measured by the induction of IFN gamma secretion in KG-1 cell s. The specific activity of recombinant human IL-18 is > 1 x 10 ⁷ IU/mg, which is calibrated against the human IL-18 WHO Reference Reagent (NIBSC code: 03/200).
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.
Regulatory Status	GMP grade
Storage Buffer	Lyophilized from PBS, pH 7.4. Reconstitute the lyophilized protein in sterile H ₂ O to a concentration of at least 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolution. Please use the protein within one month after reconstitution.
Storage Instruction	Store at -20°C for 12 months in lyophilized state. After reconstitution with deionized water, store at -20 or -80°C for 1 month. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study

The ED₅₀ for this effect is <6 ng/mL, measured by the induction of IFN gamma secretion in KG-1 cells.

- SDS-PAGE

Gene Info — IL18

Entrez GeneID [3606](#)

Gene Name	IL18
Gene Alias	IGIF, IL-18, IL-1g, IL1F4, MGC12320
Gene Description	interleukin 18 (interferon-gamma-inducing factor)
Omim ID	600953
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a proinflammatory cytokine. This cytokine can induce the IFN-gamma production of T cells. The combination of this cytokine and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production of B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity. [provided by RefSeq]
Other Designations	IL-1 gamma interferon-gamma-inducing factor interleukin 18 interleukin-1 gamma interleukin-18

Pathway

- [Cytokine-cytokine receptor interaction](#)

Disease

- [Abortion](#)
- [Acute Lung Injury](#)
- [Adenocarcinoma](#)
- [Aggressive Periodontitis](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Autoimmune Diseases](#)
- [Behcet Syndrome](#)
- [Brain Ischemia](#)

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Chorioamnionitis](#)
- [Choriocarcinoma](#)
- [Choroidal Neovascularization](#)
- [Chronic Periodontitis](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Death](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Duodenal Ulcer](#)
- [Dyspepsia](#)
- [Edema](#)

- [Endometriosis](#)
- [Endotoxemia](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Giant Cell Arteritis](#)
- [Gingivitis](#)
- [Glomerulonephritis](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Graves Ophthalmopathy](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hemophilia A](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [HIV-Associated Lipodystrophy Syndrome](#)
- [Hodgkin Disease](#)
- [Hydatidiform Mole](#)
- [Hypersensitivity](#)

- [Hypertension](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Intracranial Arteriosclerosis](#)
- [Kidney Calculi](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Latex Hypersensitivity](#)
- [Leiomyoma](#)
- [Lichen Planus](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphadenitis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Macular Degeneration](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Mouth Neoplasms](#)
- [Mucocutaneous Lymph Node Syndrome](#)

- [Multiple Myeloma](#)
- [Musculoskeletal Diseases](#)
- [Mycobacterium Infections](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasms](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pain](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Periodontitis](#)
- [Pneumoconiosis](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteinuria](#)
- [Pulmonary Disease](#)

- [Purpura](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Retinal Vein Occlusion](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Schistosomiasis mansoni](#)
- [Schizophrenia](#)
- [Skin Diseases](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Stroke](#)
- [Substance Abuse](#)
- [Thyroid Diseases](#)
- [Tuberculosis](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Uveitis](#)
- [Vasculitis](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)
- [Wounds and Injuries](#)