

Bioactive

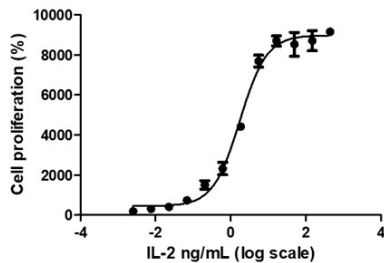
GMP Grade

IL2 (Human) Recombinant Protein

Catalog # P6993

Size 100 ug

Applications



Functional Study

The ED₅₀ for this effect is <0.2 ng/mL, measured by the induction of proliferation in CTLL-2 cells.

75 -
63 -
48 -
35 -
25 -
17 -
11 -



Specification

Product Description	Human IL2 recombinant protein with His tag expressed in <i>Escherichia coli</i> .
Host	Escherichia coli
Theoretical MW (kDa)	Calculated MW: 16.4
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 < 3 ng/mL, measured by the induction of proliferation in CTLL-2 cells. The specific activity of recombinant human IL-2 is > 5 x 10 ⁶ IU/mg, which is calibrated against the human IL-2 WHO International Standard (NIBSC code: 86/500).
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 NaPi buffer, 0.018% SDS, pH 7.5. 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 <0.2 ng/mL, measured by the induction of proliferation in CTLL-2 cells.

- SDS-PAGE

Gene Info — IL2

Entrez GeneID [3558](#)

Gene Name IL2

Gene Alias IL-2, TCGF, lymphokine

Gene Description interleukin 2

Omim ID [147680](#)

Gene Ontology [Hyperlink](#)

Gene Summary The protein encoded by this gene is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli. [provided by RefSeq]

Other Designations T cell growth factor|aldesleukin|interleukin-2|involved in regulation of T-cell clonal expansion

Pathway

- [Allograft rejection](#)
- [Autoimmune thyroid disease](#)
- [Cytokine-cytokine receptor interaction](#)
- [Graft-versus-host disease](#)
- [Jak-STAT signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [Type I diabetes mellitus](#)

Disease

- [Abscess](#)
- [Acquired Immunodeficiency Syndrome](#)

- [Acute Disease](#)
- [Addison Disease](#)
- [Adenocarcinoma](#)
- [Aggressive Periodontitis](#)
- [Alopecia Areata](#)
- [Alveolar Bone Loss](#)
- [Alveolitis](#)
- [Alzheimer disease](#)
- [Arthralgia](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Barrett Esophagus](#)
- [Berylliosis](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Brucellosis](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Chagas Disease](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)

- [Colitis](#)
- [Common Cold](#)
- [Common Variable Immunodeficiency](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Cystic fibrosis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Duodenal Ulcer](#)
- [Edema](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Esophagitis](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Gastritis](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Gonorrhea](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Hashimoto Disease](#)
- [Helicobacter Infections](#)

- [Hematologic Diseases](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hernia](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hyperglycemia](#)
- [Hyperparathyroidism](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Idiopathic Pulmonary Fibrosis](#)
- [Immune System Diseases](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Intervertebral Disk Displacement](#)
- [Irritable Bowel Syndrome](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Leiomyoma](#)
- [Leprosy](#)
- [Leptospirosis](#)
- [Leukemia](#)
- [Lichen Planus](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)

- [Lung Diseases](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Neuroendocrine Tumors](#)
- [Neuropsychological Tests](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Osteolysis](#)
- [Osteoporosis](#)
- [Pain](#)
- [Pancreatic Neoplasms](#)
- [Parasitic Diseases](#)
- [Parkinson disease](#)

- [Pemphigus](#)
- [Peptic Ulcer](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Postoperative Complications](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Prosthesis Failure](#)
- [Psoriasis](#)
- [Psychiatric Status Rating Scales](#)
- [Pulmonary Disease](#)
- [Pulmonary Fibrosis](#)
- [Purpura](#)
- [Radiation Injuries](#)
- [Radiation Pneumonitis](#)
- [Renal Artery Obstruction](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Syncytial Virus Infections](#)
- [Respiratory Tract Infections](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Schizophrenia](#)

- [Sciatica](#)
- [Scleroderma](#)
- [Sepsis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Skin Ulcer](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Subacute Sclerosing Panencephalitis](#)
- [Thoracic Neoplasms](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Vaginitis](#)
- [Vascular Diseases](#)
- [Vulvar Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)