

Bioactive

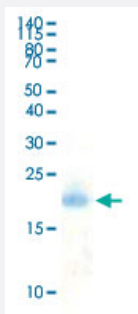
Full-Length

IL2 (Human) Recombinant Protein

Catalog # P5822

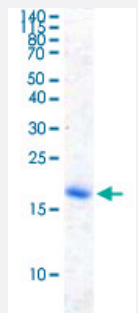
Size 100 ug, 50 ug, 10 ug

Applications



Western Blot (Recombinant protein)

Western blot analysis of IL2 (Human) Recombinant Protein (Cat # P5822) using protein specific antibody.



Result of activity analysis

Result of activity analysis

Specification

Product Description

Human IL2 (133 a.a.) full-length recombinant protein with His tag expressed in Barley grain (*Hordeum vulgare*).

Host	Plants
Theoretical MW (kDa)	22
Form	Lyophilized
Preparation Method	Barley grain (<i>Hordeum vulgare</i>) expression system
Purification	Chromatography
Concentration	100 ug/mL
Purity	> 98% by SDS-PAGE
Endotoxin Level	Endotoxin level is less than 0.005ng per ug protein (0.05EU/ug) as measured by turbidimetric kinetic assay
Activity	The bioactivity of recombinant human IL2 is determined by measuring the dose dependent effect on the proliferation of CTLL-2 cells. The ED ₅₀ for this effect is typically < 0.25 ng/mL, which corresponds to a specific activity > 4 x10 ⁶ U/mg.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	Lyophilized from PBS, pH 7.2
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterile water to a concentration of no less than 100 ug/mL, store at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Western Blot (Recombinant protein)

Western blot analysis of IL2 (Human) Recombinant Protein (Cat # P5822) using protein specific antibody.

- Functional Study
- SDS-PAGE

Gene Info — IL2

Entrez GeneID [3558](#)

Protein Accession#	A14844
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

Publication Reference

- [Coupling programmed cell death 1-positive tumor-infiltrating T cells with anti-programmed cell death 1 antibody improves the efficacy of adoptive T-cell therapy.](#)

Jiacheng Chu, Chenya Wang, Qingle Ma, Huaxing Dai, Jialu Xu, Edikan A Ogunnaike, Fei Peng, Xiaolin Shi, Chao Wang. Cytotherapy 2022 Mar; 24(3):291.

Application: Func, Mouse, Mouse dendritic cells, Mouse splenocytes, Mouse tumor-infiltrating lymphocytes

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](#)