

Bioactive

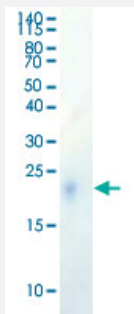
Full-Length

IL4 (Human) Recombinant Protein

Catalog # P5823

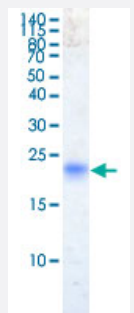
Size 100 ug, 50 ug, 10 ug

Applications



Western Blot (Recombinant protein)

Western blot analysis of IL4 (Human) Recombinant Protein (Cat # P5823) using protein specific antibody.



Result of activity analysis

Result of activity analysis

Specification

Product Description

Human IL4 (130 a.a.) full-length recombinant protein with His tag expressed in Barley grain (*Hordeum vulgare*).

Host	Plants
Theoretical MW (kDa)	17.2
Form	Lyophilized
Preparation Method	Barley grain (<i>Hordeum vulgare</i>) expression system
Purification	Chromatography
Concentration	100 ug/mL
Purity	> 95% 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 is determined by the cell proliferation assay for IL4 for dose-dependent cell proliferation of human TF-1 cells. The ED ₅₀ value for this effect is typically < 0.3 ng/mL, corresponding to a specific activity > 3.3 x 10 ⁶ units/mg. Optimal concentration should be determined for specific applications and cell lines.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	Lyophilized from PBS, pH7.2.
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 IL4 (Human) Recombinant Protein (Cat # P5823) using protein specific antibody.

- Functional Study
- SDS-PAGE

Gene Info — IL4

Entrez GeneID	3565
Protein Accession#	NP_000580
Gene Name	IL4
Gene Alias	BCGF-1, BCGF1, BSF1, IL-4, MGC79402
Gene Description	interleukin 4
Omim ID	147780
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq]
Other Designations	B cell growth factor 1 B_cell stimulatory factor 1 lymphocyte stimulatory factor 1

Pathway

- [Allograft rejection](#)
- [Asthma](#)
- [Autoimmune thyroid disease](#)
- [Cytokine-cytokine receptor interaction](#)
- [Fc epsilon RI signaling pathway](#)
- [Hematopoietic cell lineage](#)
- [Jak-STAT signaling pathway](#)
- [T cell receptor signaling pathway](#)

Disease

- [Abortion](#)

- [Acquired Immunodeficiency Syndrome](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Aggressive Periodontitis](#)
- [AIDS Dementia Complex](#)
- [Albuminuria](#)
- [Alcoholism](#)
- [Alveolar Bone Loss](#)
- [Alveolitis](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Bacteremia](#)
- [Biliary Tract Neoplasms](#)
- [Bone Diseases](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Bronchopulmonary Dysplasia](#)
- [Brucellosis](#)
- [Cadaver](#)

- [Calcinosis](#)
- [Candidiasis](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Central Nervous System Neoplasms](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Chagas Disease](#)
- [Chlamydia Infections](#)
- [Cholecystolithiasis](#)
- [Choledocholithiasis](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Common Variable Immunodeficiency](#)
- [Communicable Diseases](#)
- [Conjunctivitis](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)

- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Cystitis](#)
- [Dengue](#)
- [Dental Plaque](#)
- [Dermatitis](#)
- [Dermatomyositis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Endometriosis](#)
- [Enterocolitis](#)
- [Epidermal Necrolysis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Esophagitis](#)
- [Fatigue Syndrome](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Fibromyalgia](#)

- [Food Hypersensitivity](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Gingival Hemorrhage](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glomerulonephritis](#)
- [Gout](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Graves Ophthalmopathy](#)
- [Hashimoto Disease](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hemophilia A](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Herpesviridae Infections](#)
- [Histiocytosis](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hyperglycemia](#)
- [Hyperparathyroidism](#)
- [Hypersensitivity](#)
- [Hypertension](#)

- [Idiopathic Pulmonary Fibrosis](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Intervertebral Disk Displacement](#)
- [Inversion](#)
- [Irritable Bowel Syndrome](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leiomyoma](#)
- [Leishmaniasis](#)
- [Leptospirosis](#)
- [Leukemia](#)
- [Lichen Planus](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Neoplasms](#)
- [Lung Diseases](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malaria](#)

- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningococcal Infections](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Migraine Disorders](#)
- [Mitral Valve Prolapse](#)
- [Mouth Neoplasms](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)
- [Multiple Organ Failure](#)
- [Multiple Sclerosis](#)
- [Multiple Trauma](#)
- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Myocardial Ischemia](#)
- [Myositis](#)
- [Nasal Polyps](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Nephrosis](#)
- [Nephrotic Syndrome](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Obstetric Labor](#)

- [Occupational Diseases](#)
- [Osteoarthritis](#)
- [Osteolysis](#)
- [Osteomyelitis](#)
- [Osteoporosis](#)
- [Otitis Media](#)
- [Pain](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Paracoccidioidomycosis](#)
- [Parasitemia](#)
- [Parasitic Diseases](#)
- [Parkinson disease](#)
- [Pemphigoid](#)
- [Pemphigus](#)
- [Peptic Ulcer](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Placenta Diseases](#)
- [Polymyositis](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)

- [Prenatal Exposure Delayed Effects](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Prosthesis Failure](#)
- [Psoriasis](#)
- [Psychiatric Status Rating Scales](#)
- [Pulmonary Disease](#)
- [Pulmonary Fibrosis](#)
- [Purpura](#)
- [Q Fever](#)
- [Radiation Injuries](#)
- [Radiation Pneumonitis](#)
- [Recurrence](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Sounds](#)
- [Respiratory Syncytial Virus Infections](#)
- [Retinal Vein Occlusion](#)
- [Rheumatic Heart Disease](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Sarcoma](#)
- [Schistosomiasis japonica](#)
- [Schistosomiasis mansoni](#)
- [Schizophrenia](#)

- [Sciatica](#)
- [Scleroderma](#)
- [Seizures](#)
- [Sepsis](#)
- [Severe Acute Respiratory Syndrome](#)
- [Shock](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Skin Ulcer](#)
- [Spondylitis](#)
- [Staphylococcal Infections](#)
- [Stevens-Johnson Syndrome](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Subacute Sclerosing Panencephalitis](#)
- [Sudden Infant Death](#)
- [Temporal Arteritis](#)
- [Thoracic Neoplasms](#)
- [Trachoma](#)
- [Trypanosomiasis](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urticaria](#)
- [Uterine Neoplasms](#)
- [Vaginitis](#)
- [Viremia](#)

- [Vitiligo](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)