

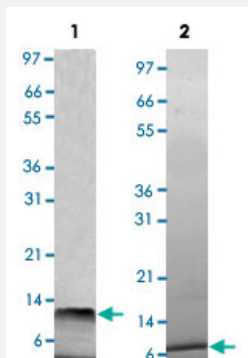
Bioactive

CXCL12 (Beta) (Human) Recombinant Protein

Catalog # P4566

Size 10 ug

Applications



Lane 1: non-reducing conditions

Lane 2: reducing conditions

Specification

Product Description	Human CXCL12 (beta) (P48061-1) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	KPVLSYRCP CRFFESHVARANVKHLKILNTPNCALQIVARLKNNNRQVCIDPKLKWIQEYLEKAL NKRFKM
Host	Escherichia coli
Theoretical MW (kDa)	8.5
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the ability to chemoattract human peripheral T cells and is detectable starting at 5 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	No additive

Storage Instruction

Store at -20°C on dry atmosphere.
After reconstitution with sterilized water, store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — CXCL12

Entrez GeneID [6387](#)

Protein Accession# [P48061-1](#)

Gene Name CXCL12

Gene Alias PBSF, SCYB12, SDF-1a, SDF-1b, SDF1, SDF1A, SDF1B, TLSF-a, TLSF-b, TPAR1

Gene Description chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)

Omim ID [600835 609423](#)

Gene Ontology [Hyperlink](#)

Gene Summary For background information on chemokines, see CXCL1 (MIM 155730). Stromal cell-derived factors 1-alpha and 1-beta are small cytokines that belong to the intercrine family, members of which activate leukocytes and are often induced by proinflammatory stimuli such as lipopolysaccharide, TNF (see MIM 191160), or IL1 (see MIM 147760). The intercrines are characterized by the presence of 4 conserved cysteines which form 2 disulfide bonds. They can be classified into 2 subfamilies. In the CC subfamily, which includes beta chemokine, the cysteine residues are adjacent to each other. In the CXC subfamily, which includes alpha chemokine, they are separated by an intervening amino acid. The SDF1 proteins belong to the latter group.[supplied by OMIM]

Other Designations OTTHUMP00000019491|stromal cell-derived factor 1 delta|stromal cell-derived factor 1 gamma|stromal cell-derived factor 1a

Publication Reference

- [Transforming Growth Factor- \$\beta\$ 3 Regulates Adipocyte Number in Subcutaneous White Adipose Tissue.](#)

Petrus P, Mejhert N, Corrales P, Lecoutre S, Li Q, Maldonado E, Kulyté A, Lopez Y, Campbell M, Acosta JR, Laurencikienė J, Douagi I, Gao H, Martínez-Álvarez C, Hedén P, Spalding KL, Vidal-Puig A, Medina-Gomez G, Arner P, Rydén M.

Cell Reports 2018 Oct; 25(3):551.

Application: Func, Human, Human adipose-derived stem cells

Pathway

- [Axon guidance](#)
- [Chemokine signaling pathway](#)
- [Cytokine-cytokine receptor interaction](#)
- [Leukocyte transendothelial migration](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Acute Disease](#)
- [AIDS Dementia Complex](#)
- [Alzheimer disease](#)
- [Anthropology](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Blast Crisis](#)
- [Blindness](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)

- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Carotid Stenosis](#)
- [Central Nervous System Diseases](#)
- [Central Nervous System Neoplasms](#)
- [Cerebral Hemorrhage](#)
- [Chlamydia Infections](#)
- [Cognition Disorders](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Diabetes Mellitus](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Flaviviridae Infections](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Hematologic Neoplasms](#)
- [Hemophilia A](#)
- [Hepatitis](#)
- [Hepatitis B](#)

- [Hepatitis C](#)
- [HIV Infections](#)
- [HIV Seropositivity](#)
- [Hodgkin Disease](#)
- [HTLV-I Infections](#)
- [Hyperlipidemias](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Inflammation](#)
- [Intracranial Hemorrhages](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Migraine Disorders](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Myocardial Infarction](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neuropsychological Tests](#)

- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Pregnancy Complications](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Retinal Diseases](#)
- [Salivary Gland Neoplasms](#)
- [Scleroderma](#)
- [Sexually Transmitted Diseases](#)
- [Skin Ulcer](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Substance Abuse](#)
- [Thyroid Diseases](#)
- [Trachoma](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Viremia](#)
- [Waldenstrom Macroglobulinemia](#)