

Bioactive

CXCL12 (Human) Recombinant Protein

Catalog # P9579

Size 2 x 10 ug

Specification

Product Description	Human CXCL12 (P48061, 21 a.a. - 119 a.a.) partial recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	GKPVSLSYRCPCRFFESHVARANVKHLKILNTPNCALQIVARLKNNNRQVCIDPKLKWIQEYLEKA LNKGRREEKVGKKEKIGKKKRQKKRKAQKRKN
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	11.6
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 96.0% by SDS-PAGE
Activity	The Biological activity is 30 - 100 ng/mL, was determined by a chemotaxis bioassay using PHA and rHuL-2 activated human peripheral blood T-lymphocytes.
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is 0.5 mg/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — CXCL12

Entrez GeneID	6387
Protein Accession#	P48061
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

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](#)