

Recombinant Mouse Cxcl12 protein, His-tagged

Cat. No. Cxcl12-42M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse Cxcl12, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	E.coli
Description	Cxcl12 also known as stromal cell-derived factor 1 isoform alpha. This protein acts as a positive regulator of monocyte migration and a negative regulator of monocyte adhesion via the LYN kinase. It stimulates migration of monocytes and T-lymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. This protein inhibits CXCR4-mediated infection by T-cell line-adapted HIV-1. Cxcl12 protein plays a protective role after myocardial infarction. It induces down-regulation and internalization of ACKR3 expressed in various cells.
Form	Liquid. In Phosphate Buffered Saline (pH7.4) containing 10% glycerol
Molecular Mass	10.4kDa (91aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSKPVLSLY RCPCRFFESH IARANVKHLK ILNTPNCALQ IVARLKNNNR QVCIDPKLKW IQEYLEKALN K
Purity	>95% by SDS - PAGE

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

Concentration 0.25 mg/ml (determined by Absorbance at 280nm)

GENE INFORMATION

Gene Name [Cxcl12 chemokine \(C-X-C motif\) ligand 12 \[Mus musculus \]](#)

Official Symbol [Cxcl12](#)

Synonyms CXCL12; chemokine (C-X-C motif) ligand 12; stromal cell-derived factor 1; C-X-C motif chemokine 12; pre-B cell growth-stimulating factor; pre-B-cell growth-stimulating factor; thymic lymphoma cell-stimulating factor; 12-O-tetradecanoylphorbol 13-acetate repressed protein 1; Pbsf; Sdf1; Tlsf; Sdf1a; Sdf1b; Tlsfa; Tlsfb; Tpar1; Scyb12; AI174028;

Gene ID [20315](#)

mRNA Refseq [NM_001012477](#)

Protein Refseq [NP_001012495](#)

MIM

UniProt ID

Pathway Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem; Chemokine receptors bind chemokines, organism-specific biosystem; Chemokine signaling pathway, organism-specific biosystem; Chemokine signaling pathway, conserved biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem;

Function

CXCR chemokine receptor binding; chemokine activity; cytokine activity; growth factor activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA