

Recombinant Mouse Chemokine (C-X-C motif) Ligand 12

Cat. No. Cxcl12-371M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse CXCL12 is a non-glycosylated polypeptide chain containing 72 amino acids.
Species	Mouse
Source	E.coli
Description	Cxcl12 is small cytokine belonging to the chemokine family that is officially designated Chemokine (C-X-C motif) ligand 12 (CXCL12). 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, or IL1. The intercrines are characterized by the presence of 4 conserved cysteines that form 2 disulfide bonds.
Form	Lyophilized from a 0.2 µm filtered concentrated (1.0mg/ml) solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Molecular Weight	8.5 kDa
Purity	>97% by SDS-PAGE and HPLC analyses.
Endotoxin Level	< 0.1 ng/µg of CXCL12.
Biological Activity	Determined by its ability to chemoattract human peripheral blood monocytes using a concentration range of 50.0-100.0 ng/ml.

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Sequence	KPVLSYRCPCRFFESHAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNKRL KM
Reconstitution	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed. Further dilutions should be made in appropriate buffered solutions.
Storage	Stable at 2-8°C, but best kept desiccated -20°C. Upon reconstitution, stable for up to 1 week at 2-8°C. For longer term, store in working aliquots below -20°C. Avoid repeated freeze/thaw cycles.
Official Symbol	Cxcl12
GENE INFORMATION	
Gene Name	Cxcl12 chemokine (C-X-C motif) ligand 12 [<i>Mus musculus</i>]
Synonyms	Cxcl12; chemokine(C-X-C motif) ligand 12; Pbsf; Sdf1; Tlsf; Sdf1a; Sdf1b; Tlsfa; Tlsfb; Tpar1; Scyb12; AI174028; stromal cell-derived factor 1; OTTMUSP00000026112; OTTMUSP00000026113; OTTMUSP00000026114; 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
Gene ID	20315
mRNA Refseq	NM_013655
Protein Refseq	NP_038683

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UniProt ID	P40224
Chromosome Location	6 F1; 6 53.0 cM
Pathway	Axon guidance; Chemokine receptors bind chemokines; Chemokine signaling pathway; Class A/1(Rhodopsin-like receptors); Cytokine-cytokine receptor interaction; G alpha(i) signalling events; GPCR downstream signaling; GPCR ligand binding; Intestinal immune network for IgA production; Leukocyte transendothelial migration; Peptide ligand-binding receptors; Rheumatoid arthritis; Signal Transduction; Signaling by GPCR
Function	CXCR chemokine receptor binding; chemokine activity; cytokine activity; growth factor activity
PDB rendering based on 1a15.	

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