

CXCL12/SDF-1, Mouse, Recombinant

Cat. No. : PCK334

General Information

Synonyms	PB;PBSF/SD;Pbsf;SDF-;Scyb1;Scyb12;Sdf;Sdf1;TLS;TP;Tlsf;Tpar1
Species	Mouse
Expression host	E.coli
Sequence	MGKPVLSYRCPCRFFESHARANVKHLKILNTPNCALQIVARLKNNNRQVCIDPKLKWIQEYLE KALNK with polyhistidine tag at the C-terminus.
Accession	P40224
Tag	His-tag at the C-terminus
Mol mass	8.97 kDa
Expiration date	12 months
Bio activity	Measure by its ability to chemoattract BaF3 cells transfected with human CXCR4. The ED50 for this effect is < 0.5 ng/mL.

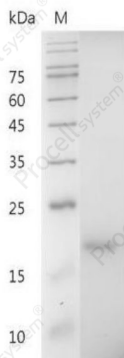
Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

The stromal cell-derived factor 1 (SDF1), also known as C-X-C motif chemokine 12 (CXCL12), is a chemokine protein that in humans is encoded by the CXCL12 gene on chromosome 10. It is ubiquitously expressed in many tissues and cell types. Stromal cell-derived factors 1-alpha and 1-beta are small cytokines that belong to the chemokine family, members of which activate leukocytes and are often induced by proinflammatory stimuli such as lipopolysaccharide, TNF, or IL1. The chemokines are characterized by the presence of 4 conserved cysteines that form 2 disulfide bonds. They can be classified into 2 subfamilies. In the CC subfamily, the cysteine residues are adjacent to each other. In the CXC subfamily, they are separated by an intervening amino acid. The SDF1 proteins belong to the latter group. CXCL12 signaling has been observed in several cancers. The CXCL12 gene also contains one of 27 SNPs associated with increased risk of coronary artery disease.

SDS-PAGE



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