

# Recombinant Mouse SDF-1a/CXCL12a Protein

## **Product Information**

Product Name	Cat#	Size
	90929ES10	10 µg
Recombinant Mouse SDF-1a/CXCL12a Protein	90929ES60	100 µg
	90929ES76	500 µg

#### **Product Description**

CXCL12 is belonging to the CXC chemokine family. SDF-1 alpha and SDF-1 beta cDNAs encode precursor proteins of 89 and 93 amino acid residues, respectively. SDF-1 is highly conserved between species, mouse CXCL12 $\alpha$  shares approximately 93% amino acid sequence identity with human CXCL12 $\alpha$ . CXCL12 is strongly chemotactic for T-lymphocytes, monocytes, but not neutrophils. Contrast to SDF-1 $\beta$ , SDF-1 $\alpha$  is shorter by four amino acids at the C-terminal tail.

#### **Product Properties**

Synonyms	CXCL12 chemokine (C-X-C motif) ligand 12, CXCL12/SDF-1 alpha, IRH, PBSF, SCYB12, SDF1 alpha,	
	SDF1, SDF1a, SDF1B, TLSF, TPAR1	
Accession	P40224	
GeneID	20315	
Source	E.coli-derived mouse SDF-1a/CXCL12a protein, Lys22-Lys89.	
Molecular Weight	Approximately 8.0 kDa.	
AA Sequence	KPVSLSYRCP CRFFESHIAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE	
	YLEKALNK	
Tag	None	
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Purity	>97% by SDS-PAGE and HPLC analyses.	
<b>Biological Activity</b>	The biological activity determined by a chemotaxis bioassay using human peripheral blood monocytes is in	
	a concentration range of 50-100 ng/mL. Fully biologically active when compared to standard.	
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.	
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.	
	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0	
	mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20°C. Further	
	dilutions should be made in appropriate buffered solutions.	

### **Shipping and Storage**

The products are shipped with ice pack and can be stored at -20°C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

#### Cautions



- 1. Avoid repeated freeze-thaw cycles.
- 2. For your safety and health, please wear lab coats and disposable gloves for operation.
- 3. For research use only!