## Recombinant Human CXCL12/SDF-1 Protein (aa19-93)

Catalog Number:PKSH032294



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	Stromal Cell-Derived Factor 1;SDF-1;hSDF-1;C-X-C Motif Chemokine 12;Intercrine Reduced in Hepatomas;IRH;hIRH;Pre-B Cell Growth-Stimulating Factor;PBSF;CXCL12;SDF1;SDF1A;SDF1B
Species	Human
Expression Host	E.coli
Sequence	Ser19-Met93
Accession	P48061
Calculated Molecular Weight	8.8 kDa
Observed molecular weight	12 kDa
Tag	None
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
kDa MK 120 960 40 30 20	R

> 95 % as determined by reducing SDS-PAGE.

14

## Background

Stromal Cell-Derived Factor-1 (SDF-1) is a chemokine member of the intercrine family. SDF1 is expressed as five isoforms that differ only in the C terminal tail. SDF1 $\alpha$  and SDF1 $\beta$  are identical except for the four residues present in the C-terminus of SDF1 $\beta$  but absent from SDF1 $\alpha$ . SDF1 isoforms interact with CXCR4 and CXCR7 receptors on the cell surface; and can also bind syndecan4. SDF1 is known to influence lymphopoiesis; regulate patterning and cell number of neural progenitors; and promote angiogenesis. It also enhances the survival of myeloid progenitor cells.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine