

SDF-1 B

Catalog # PVGS1480

# **Specification**

### SDF-1 β - Product Information

Seauence

Lys<sup>22</sup>-Met<sup>93</sup> (accession #: P40224)

**Purity** 

> 95% as analyzed by SDS-PAGE.

**Endotoxin Level** 

< 0.2 EU/ µg, determined by LAL method.

Formulation

Lyophilized after extensive dialysis against pre

Reconstitution

Reconstituted in ddH<sub>2</sub>0 or PBS at 100 μg/ml.

# SDF-1 β - Additional Information

## **Target Background**

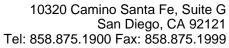
SDF-1  $\alpha$  and <br/>
b>SDF-1  $\beta$ </b>, members of the chemokine  $\alpha$  subfamily that lack the ELR domain, were initially identified using the signal sequence trap cloning strategy from a mouse bone-marrow stromal cell line. SDF-1  $\alpha$  and SDF-1  $\beta$  cDNAs encode precursor proteins of 89 and 93 amino acid residues, respectively. Both SDF-1  $\alpha$  and SDF-1  $\beta$  are encoded by a single gene and arise by alternative splicing. The two proteins are identical except for the four amino acid residues that are present in the carboxy-terminus of SDF-1  $\beta$  and absent from SDF-1  $\alpha$ . SDF-1/PBSF is highly conserved between species, with only one amino acid substitution between the mature human and mouse proteins. SDF-1/PBSF acts via the chemokine receptor CXCR4 and has been shown to be a chemoattractant for T-lymphocytes, monocytes, pro- and pre-B cells, but not neutrophils. Mice lacking SDF-1 or CXCR4 have been found to have impaired B-lymphopoiesis, myelopoiesis, vascular development, cardiogenesis and abnormal neuronal cell migration and patterning in the central nervous system.<br/>
b>Recombinant <br/>
ch>Mouse SDF-1  $\beta$ /CXCL12<br/>
b> produced in <i>CHO</i> cells is a polypeptide chain containing 78 amino acids. A fully biologically active molecule, rm SDF-1 $\beta$ /CXCL12 has a molecular mass of 8.5 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at .

### SDF-1 β - Protein Information

#### SDF-1 β - Protocols

Provided below are standard protocols that you may find useful for product applications.

Western Blot





- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SDF-1 β - Images