SDF-1 β
Catalog # PVGS1480

Specification

SDF-1 β - Product Information

Sequence
Lys^{22}-Met^{93} (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 PBS.**

Reconstitution
Reconstituted in ddH$_2$O or PBS at 100 μg/ml.

SDF-1 β - Additional Information

Target Background
SDF-1 α and **SDF-1 β**, members of the chemokine α 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 α and SDF-1 β cDNAs encode precursor proteins of 89 and 93 amino acid residues, respectively. Both SDF-1 α and SDF-1 β 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 β and absent from SDF-1 α. 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.
Recombinant **Mouse SDF-1 β/CXCL12** produced in *CHO* cells is a polypeptide chain containing 78 amino acids. A fully biologically active molecule, rm SDF-1β/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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytomety](#)
- [Cell Culture](#)

SDF-1 β - Images