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SDF-1 β

Catalog # PVGS1480

Product Information

Sequence	Lys^{22}-Met^{93} (accession #: P40224)
Purity	> 95% as analyzed by SDS-PAGE.
Endotoxin Level	
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH_2O or PBS at 100 □g/ml.

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 .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.