

Stromal Cell-Derived Factor-1 Alpha Mouse Recombinant (CXCL12)

Item Number	rAP-0264
Synonyms	SDF-1, CXCL12, Pre-B cell growth-stimulating factor, PBSF, hIRH, chemokine (C-X-C motif) ligand 12, SDF1, SDF1A, TPAR1, SCYB12, SDF-1a, TLSF-a, 12-O-tetradecanoylphorbol 13-acetate repressed protein 1, Thymic lymphoma cell-stimulating factor, TLSF.
Description	Stromal Cell-Derived Factor-1 alpha Mouse Recombinant produced in E.Coli is a non-glycosylated, Poly-peptide chain containing 68 amino acids and having a molecular mass of 7921 Dalton. The SDF-1a is purified by proprietary chromatographic techniques.
Uniprot Accesion Number	P40224
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Lys-Pro-Val-Ser-Leu.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized SDF-1a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL12 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.
Formulation and Purity	The CXCL12 protein was lyophilized from a concentrated (1 mg/ml) sterile solution containing 10mM acetic acid (AcOH). Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized Stromal Cell-Derived Factor-1a in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	The specific activity as determined by its ability to chemoattract human peripheral blood monocytes at 50-100ng/ml corresponding to a Specific Activity of 10,000-20,000IU/mg.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**