

Stromal Cell-Derived Factor-1 alpha Rat Recombinant (CXCL12)

Item Number	rAP-0267
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 Rat Recombinant produced in E.Coli is a non-glycosylated, Polypeptide chain containing 68 amino acids and having a molecular mass of 7.9 kDa. The SDF-1a is purified by proprietary chromatographic techniques.
Uniprot Accession Number	Q9QZD1
Amino Acid Sequence	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC IDPKLKWIQE YLDKALNK.
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 20mM Phosphate buffer pH-7.4 and 150mM NaCl. Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized SDF-1a in sterile 18MΩ-cm H ₂ O 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**