

## Stromal Cell-Derived Factor-1 Alpha Human Recombinant (CXCL12)

<b>Item Number</b>	rAP-0262
<b>Synonyms</b>	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.
<b>Description</b>	Stromal Cell-Derived Factor-1 alpha Human Recombinant produced in E.Coli is a non-glycosylated, Polypeptide chain containing 68 amino acids and having a molecular mass of 8004 Dalton. The SDF-1a is purified by proprietary chromatographic techniques.
<b>Uniprot Accession Number</b>	P48061
<b>Amino Acid Sequence</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Lys-Pro-Val-Ser-Leu.
<b>Source</b>	Escherichia Coli.
<b>Physical Appearance and Stability</b>	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.
<b>Formulation and Purity</b>	The protein was lyophilized from a concentrated (1 mg/ml) sterile solution containing no additives. Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Application</b>	
<b>Solubility</b>	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.
<b>Biological Activity</b>	The specific activity as determined by its ability to chemoattract human peripheral T cells activated with PHA and IL-2 using a concentration of 20-80 ng/ml corresponding to a Specific Activity of 12,500-50,000IU/mg.
<b>Shipping Format and Condition</b>	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**