

**Recombinant Human Stromal-Cell Derived
Factor-1 alpha/CXCL12 α
(rHuSDF-1 α /CXCL12 α)
PrimeGene Technical Data Sheet**

Catalog Number:	201-12A
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 8.0 kDa, a single non-glycosylated polypeptide chain containing 68 amino acids.
Quantity:	2 μ g/10 μ g/1000 μ g
AA Sequence:	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using PHA and rHuIL-2 activated human peripheral blood T-lymphocytes is in a concentration range of 20-80 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB pH 7.0, 130 mM NaCl.
Endotoxin:	Less than 1 EU/ μ g of rHuSDF-1 α /CXCL12 α as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Stromal-Cell Derived Factor-1 alpha/CXCL12 α

CXCL12 also known as SDF-1 is belonging to the CXC chemokine family. It is encoded by the CXCL12 gene. In recently study, Human CXCL12 is expressed as six isoforms that differ only in the C-terminal tail. And all SDF-1 isoforms undergo proteolytic processing of the first two N-terminal amino acids. Contrast to the canonical sequence SDF-1 β , SDF-1 α is shorter by four amino acids at the C-terminal tail. On the cell surface, the receptor for this chemokine is CXCR4 and syndecan4. CXCL12 is strongly chemotactic for T-lymphocytes, monocytes, but not neutrophils. CXCL12 is a very important factor in carcinogenesis and the neovascularisation linked to tumor progression.