

# Recombinant Human Stromal Cell-Dreived Factor 1α

Human, Recombinant (CXCL12)

Expressed in *E. coli*

Cat. No. CRP0858

Lot. No. (See product label)

## PRODUCT INFORMATION

**Description:** SDF-1α, a member of the chemokine α subfamily, chemottracts with T-lymphocytes, monocytes, pro-and pre-B cells, but not neutrophils. It is highly conserved between species with one amino acid substitution between human and mouse. Recombinant stromal cell-dreived factor 1α is expressed in *E. coli*.

**M. W. :** 8,000 Da

**Recombinant:** Expressed in *E. coli*

**Purity:** >95% as determined by HPLC.

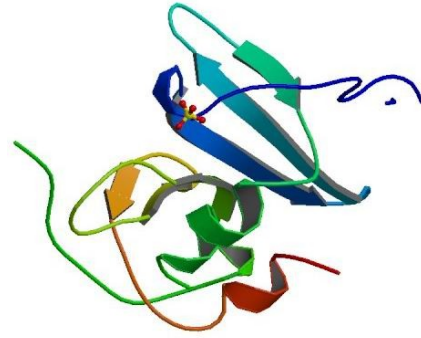
**Activity:** Measured by its ability to chemoattract cultured human macrovascular endothelial cells.

**Storage buffer:** Liquid. In PBS Buffer.

## REFERENCES

1. De La Luz Sierra et al. Differential processing of stromal-derived factor-1alpha and beta explains functional diversity. *Blood*. 2004; 103:2452-2459.
2. Bleul et al. A highly efficacious lymphocyte chemoattractant, stromal cell-derived factor 1 (SDF-1). *J. Exp. Med.* 1996; 184: 1101-1109.
3. Ara et al. Impaired colonization of the gonads by primordial germ cells in mice lacking a chemokine, stromal cell-derived factor-1 (SDF-1). *Proc. Nat. Acad. Sci.* 2003; 100: 5319-5323.
4. Askari et al. Effect of stromal-cell-derived factor 1 on stem-cell homing and tissue regeneration in ischaemic cardiomyopathy. *Lancet*. 2003; 362: 697-703.

**FOR RESEARCH USE ONLY**



[PDB](#) rendering based on 1a15.

## GENE INFORMATION

**Gene Name:** [CXCL12](#)

**Synonyms:** PBSF; SCYB12; SDF-1a; SDF-1b; SDF1; SDF-1; SDF1A; SDF1B; TLSF; TLSF-a; TLSF-b; TPAR1; C-X-C motif chemokine 12; Pre-B cell growth-stimulating factor; Stromal cell-derived factor 1 precursor; chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1); stromal cell-derived factor 1; stromal cell-derived factor 1 delta; stromal cell-derived factor 1 gamma; stromal cell-derived factor 1a; CXCL12

**mRNA Refseq:** [NM\\_199168](#)

**Protein Refseq:** [NP\\_954637](#)

**MIM:** [600835](#)

**GeneID:** [6387](#)

**Uniprot ID:** [P48061](#)

**Chromosome Location:** 10q11

**Pathway:** Axon guidance, Cytokine-cytokine receptor interaction, Leukocyte transendothelial migration

**Function:** chemokine activity, chemokine activity, growth factor activity, signal transducer activity

**Process:** G-protein coupled receptor protein signaling pathway, blood circulation, cell adhesion, cellular calcium ion homeostasis, chemotaxis, immune response, response to virus, signal transduction

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45-16 Ramsey Road Shirley, NY 11967, USA  
Technical Support: T: 631-871-5806 · F: 631-207-8356  
E-mail: [info@creative-biolabs.com](mailto:info@creative-biolabs.com)  
[www.creative-biolabs.com](http://www.creative-biolabs.com)