

# Recombinant mouse Stromal cell-derived factor 1 protein

Catalog No: #AP72069

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

Package Size: #AP72069-1 20ug #AP72069-2 100ug #AP72069-3 1mg

## Description

Product Name	Recombinant mouse Stromal cell-derived factor 1 protein
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:22-89aaSequence Info:Partial
Other Names	12-O-tetradecanoylphorbol 13-acetate repressed protein 1 ;TPAR1C-X-C motif chemokine 12;Pre-B cell growth-stimulating factor ;PBSFThymic lymphoma cell-stimulating factor ;TLSF
Accession No.	P40224
Uniprot	P40224
GeneID	20315;
Calculated MW	12 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	KPVLSYRCPFRFFESHIANVVKHLKILNTPNCALQIVARLKNNNRQVCIDPKLKWIQEYLEKALNK
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.  Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

## Background

Choattractant active on T-lymphocytes, monocytes, but not neutrophils. Activates the C-X-C chokine receptor CXCR4 to induce a rapid and transient rise in the level of intracellular calcium ions and chotaxis. Also binds to atypical chokine receptor ACKR3, which activates the beta-arrestin pathway and acts as a scavenger receptor for SDF-1. Acts as a positive regulator of monocyte migration and a negative regulator of monocyte adhesion via the LYN kinase. Stimulates migration of monocytes and T-lymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. SDF1A,CXCR4 signaling axis inhibits beta-2 integrin LFA-1 mediated adhesion of monocytes to ICAM-1 through LYN kinase. Plays a protective role after myocardial infarction. Induces down-regulation and internalization of ACKR3 expressed in various cells . Has several critical functions during bryonic development; required for B-cell lymphopoiesis, myelopoiesis in bone marrow and heart ventricular septum formation.Stimulates the proliferation of bone marrow-derived b progenitor cells in the presence of IL-7 as well as growth of the stromal cell-dependent B-cell clone DW34 cells.

## References

Defects of B-cell lymphopoiesis and bone-marrow myelopoiesis in mice lacking the CXC chemokine PBSF,SDF-1.Nagasawa T., Hirota S., Tachibana K., Takakura N., Nishikawa S., Kitamura Y., Yoshida N., Kikutani H., Kishimoto T.Nature 382:635-638(1996)Research Topic:Others

---

Note: This product is for in vitro research use only