

Product: **Recombinant Mouse SDF-1 α (CXCL12)**
Cat #: 300-349P
Powder

Description	Stromal Cell Derived Factor-1 alpha (SDF-1 α), also called CXCL12, is one of two splice variants made by a wide variety of cells when stimulated by inflammatory cytokines such as, TNF, IL-1 or LPS. SDF-1 α signals through the G protein-couple receptor, CXCR4, to recruit activated leukocytes. Human and mouse SDF-1 α share 99% sequence identity. Alternate names: CXCL12, PBSF
MW	Non-glycosylated protein, containing 68 amino acids, with a molecular weight of 7.9 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant mouse SDF-1 α is lyophilized from a concentrated (1mg/mL) sterile solution containing 10 mM acetic acid (AcOH).
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity as determined by its ability to chemoattract human T cells at 50-100 ng/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically \leq 1 EU/ μ g protein.
AA Sequence	KPVLSYRCP CRFFESHAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK

Purity greater than 98% determined by Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!