

BACKGROUND

Stromal Derived Growth Factor-1 β (SDF-1 β), 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 β signals through the G protein-couple receptor, CXCR4, to recruit activated leukocytes. Human SDF-1 β shares 100% identity to feline SDF-1 β .

Recombinant mouse SDF-1 β is a non-glycosylated protein, comprised of 72 amino acids with a molecular weight of 8.5 kDa.

Alternative Names:

CXCL12, PBSF

Amino Acid Sequence:

KPVLSYRCP CRFFESHIAR ANVKHLKILN TPNCALQIVA
RLKNNNRQVC IDPKLKWIQE YLEKALNKRL KM

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant mouse SDF-1 β is lyophilized with no additives.

Stability:

Lyophilized mouse SDF-1 β should be stored desiccated below -18°C. Upon reconstitution the product should be aliquoted and stored at below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

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.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the ability to chemoattract human peripheral T cells stimulated with IL-2 and PHA at 10-75 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

