CELL APPLICATIONS, INC.

RECOMBINANT PROTEINS

Human Stromal Cell-Derived Factor-1 beta

SIZE	CAT. NO.
10 ug	RP1159-10
100 ug	RP1159-100
1000 ug	RP1159-1000

BACKGROUND

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

Recombinant human SDF-1β 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:
KPVSLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA
RLKNNNRQVC IDPKLKWIQE YLEKALNKRF KM

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
Recombinant human SDF-1β is lyophilized with no additives.

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.

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 its ability to chemoattract human peripheral T cells activated with PHA and IL-2 at 10 - 75 ng/mL.