

Recombinant Feline SDF-1 β / CXCL12 (Stromal Cell-Derived Factor-1 beta (CXCL12))

Catalog Number: RP400-01

Accession Number: O62657-2

Specifications and Uses:

Alternate Names: CXCL12, PBSF

Description:

Stromal cell Derived Growth Factor-1 beta (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-coupled receptor, CXCR4, to recruit activated leukocytes. Human SDF-1 β shares 100% identity to feline SDF-1 β . Recombinant feline SDF-1 β is a non-glycosylated protein, containing 72 amino acids, with a molecular weight of 8.5 kDa.

Source: *E.coli*

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

Formulation and Stability:

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

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 (typically $\geq 97\%$) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein.

Biological Activity:

The activity is determined by its ability to chemoattract human T cells at 10 - 75 ng/mL.

AA Sequence:

KPVLSLYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNKRF KM

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