Product Datasheet

Recombinant Human Stromal-Cell Derived Factor-1beta/CXCL12 (rHuSDF-1b/CXCL12) (orb1495021)

Description	Stromal-Cell Derived Factor-1 beta (SDF1β), also known as SCYB12, PBSF and CXCL12, is an 8.3 kDa, heparin-binding member of the CXC (or alpha) family of chemokines and signal through the CXCR4 receptor. SDF1α and β are reported to be monomers at neutral pH and physiologic ionic strength, On the cell surface, this may well facilitate SDF1 interaction with its two receptors, CXCR4 and syndecan4. Heparin sulfate is known to protect SDF1 from proteolysis, and CXCR4 exists constitutively as a dimer. Among its many functions, CXCL12 is known to influence lymphopoiesis, regulate patterning and cell number of neural progenitors, and promote angiogenesis (12, 13). It also enhances the survival of myeloid progenitor cells.
Endotoxins	Less than 1EU/µg of rHuSDF-1b/CXCL12 as determined by LAL method.
Preservatives	Sterile Filtered White lyophilized (freeze-dried) powder.
Form/Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Storage	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Note	For research use only
Application notes	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at -20°C. Further dilutions should be made in appropriate buffered solutions.
Protein Sequence	Lyophilized from a 0.2□m filtered concentrated solution in PBS, pH 7.4.
Purity	KPVSLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNKRF KM

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Source	Escherichia coli.
MW	Approximately 8.5 kDa, a single non-glycosylated polypeptide chain containing 72 amino acid residues.
Expiration Date	6 months from date of receipt.

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