SDF-1α/SDF-1β/CXCL12 (22-89), Human, Recombinant

Cat. No. : PCK123

General Information

Synonyms	Stromal Cell-Derived Factor 1;SDF-1;hSDF-1;C-X-C Motif Chemokine 12;Intercrine Reduced in Hepatomas;IRH;hIRH;Pre-B Cell Growth-Stimulating Factor;PBSF;CXCL12;SDF1;SDF1A; SDF1B
Species	Human
Expression host	E.coli
Sequence	Lys22-Lys89
Accession	P48061
Mol mass	8 kDa
Expiration date	12 months
Bio activity	Loaded Recombinant Human CXCR4 (N-Fc) on Pro-A Biosensor, can bind Recombinant Human CXCL12 (C121) with an affinity constant of 8.4 μM as determined in BLI assay.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Stromal Cell-Derived Factor-1 (SDF-1) is a Chemokine member of the intercrine family. SDF1 is expressed as five isoforms that differ only in the C terminal tail. SDF1α and SDF1β are identical except for the four residues present in the C-terminus of SDF1β but absent from SDF1α. SDF1 isoforms interact with CXCR4 and CXCR7 Receptors on the cell surface, and can also bind syndecan4. SDF1 is known to influence lymphopoiesis, regulate patterning and cell number of neural progenitors, and promote angiogenesis. It also enhances the survival of myeloid progenitor cells.