

Recombinant Human CXCL12 (24-88) protein(His Tag)

Catalog Number: PKSH034169

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	E.coli-derived Human CXCL12 protein Val 24-Leu 195, with an C-terminal His
Calculated MW	8.6 kDa
Observed MW	10 kDa
Accession	P48061
Bio-activity	Measure by its ability to chemoattract BaF3 cells transfected with human CXCR4. The ED ₅₀ for this effect is <0.5 ng/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM sodium citrate, 0.1 M NaCl, pH 4.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

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. SDF1 α and SDF1 β are identical except for the four residues present in the C-terminus of SDF1 β but absent from SDF1 α . 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.