



Recombinant Protein Technical Manual  
Recombinant Human CXCL12/SDF Protein (aa22-93)  
RPES1312

### Product Data:

**Product SKU:** RPES1312

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P48061

### Protein Information:

**Molecular Mass:** 8.5 kDa

**AP Molecular Mass:** 8 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Stromal Cell-Derived Factor 1; SDF; hSDF; C-X-C Motif Chemokine 12; Intercrine Reduced in Hepatomas; IRH; hIRH; Pre-B Cell Growth-Stimulating Factor; PBSF; CXCL12; SDF1; SDF1A; SDF1B

## Immunogen Information:

**Sequence:** Lys22-Met93

## Background:

Stromal Cell-Derived Factor (SDF) is a chemokine member of the intercrine family. SDF1 is expressed as five isoforms that differ only in the C terminal tail. SDF1 $\alpha$  and SDF1 $\beta$  are identical except for the four residues present in the C-terminus of SDF1 $\beta$  but absent from SDF1 $\alpha$ . 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.