

Recombinant Human CXCL12 (68AA)

Catalog No.: RP0043

Basic Information

Information

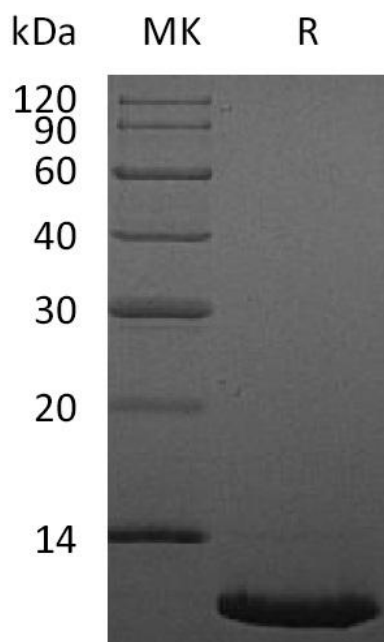
Source	<i>E.coli</i>
Description	Recombinant Human C-X-C Motif Chemokine 12 is produced by our E.coli expression system and the target gene encoding Lys22-Lys89 is expressed.
Accession	P48061
Known As	Stromal Cell-Derived Factor 1; SDF-1; hSDF-1; C-X-C Motif Chemokine 12; Intercrine Reduced in Hepatomas; IRH; hIRH; Pre-B Cell Growth-Stimulating Factor; PBSF; CXCL12; SDF1; SDF1A; SDF1B
Predicted Mol Mass	8 KDa
Apparent Mol Mass	10 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Storage	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
Endotoxin	< 0.01 EU/ μ g as determined by LAL test.
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 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

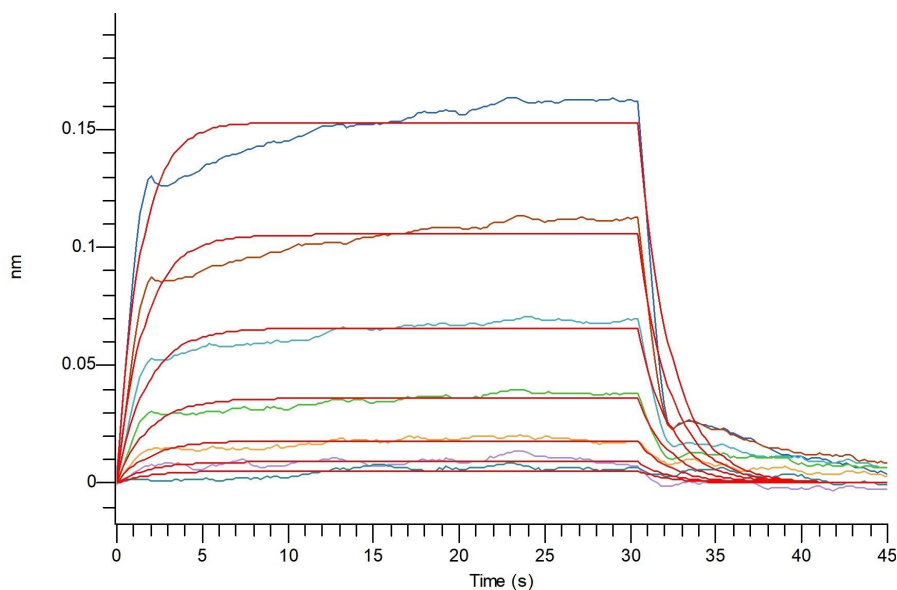
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-BLI



Loaded Recombinant Human CXCR4 (N-Fc) on Pro-A Biosensor, can bind Recombinant Human CXCL12 with an affinity constant of 8.4 μ M as determined in BLI assay. (Regularly tested)

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.