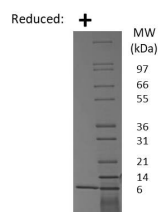


## CXCL12

### Recombinant Human CXCL12 / SDF-1 alpha

|                                 |  |                  |                                   |
|---------------------------------|--|------------------|-----------------------------------|
| <b>Catalog No.</b>              | CRS000A<br>CRS000B<br>CRS000C<br>CRS000D   | <b>Quantity:</b> | 2 µg<br>10 µg<br>1.0 mg<br>500 µg |
| <b>Alternate Names:</b>         | C-X-C motif chemokine 12, Stromal cell-derived factor 1, SDF-1   |                  |                                   |
| <b>Description:</b>             | CXCL12/ SDF-1 alpha is an antimicrobial stromal cell-derived alpha chemokine member of the intercrine family. The protein functions as the ligand for the G-protein coupled receptor CXCR4 and plays a role in many diverse cellular functions, including embryogenesis, immune surveillance, inflammation response, tissue homeostasis, and tumor growth and metastasis. CXCL12 is a chemoattractant for T-lymphocytes, monocytes, pro- and pre- B cells, but not neutrophils. Human and mouse SDF-1 α share 99% sequence identity. |                  |                                   |
| <b>Gene ID:</b>                 | 6387   |                  |                                   |
| <b>UniProt ID:</b>              | P48061   |                  |                                   |
| <b>Source:</b>                  | <i>E. coli</i>   |                  |                                   |
| <b>Molecular Weight:</b>        | 8.0 kDa (68 aa) monomer  |                  |                                   |
| <b>Formulation:</b>             | Lyophilized from a sterile-filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA).   |                  |                                   |
| <b>Purity:</b>                  | ≥ 95% by reducing and non-reducing SDS-PAGE  |                  |                                   |
| <b>Endotoxin Level:</b>         | ≤ 1 EU/µg of protein by kinetic LAL analysis.  |                  |                                   |
| <b>Biological Activity:</b>     | This product demonstrates primary human T cell chemotaxis at a starting concentration of 5-20 ng/ml.   |                  |                                   |
| <b>Amino Acid Sequence:</b>     | KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC<br>IDPKLKWIQE YLEKALNK   |                  |                                   |
| <b>Reconstitution:</b>          | <b>Centrifuge vial prior to opening.</b> Add sterile distilled water to a concentration of 0.1 mg/ml. <b>DO NOT VORTEX.</b> Allow several minutes for complete reconstitution. Further dilutions should be made in appropriate buffered solutions.   |                  |                                   |
| <b>Storage &amp; Stability:</b> | Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.<br><b>Avoid repeated freeze-thaw cycles.</b>   |                  |                                   |





**Human SDF-1 alpha / CXCL12 Gel**

Figure: 1 ug run under (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human SDF-1 alpha / CXCL12 is predicted to have a MW of 8 kDa.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



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