

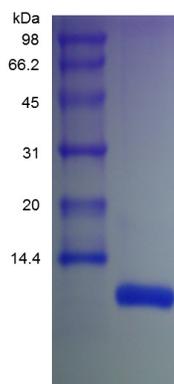
## CXCL12

### Recombinant Human SDF-1 beta

<b>Catalog No.</b>	CRS002A CRS002B CRS002C	<b>Quantity:</b>	2 µg 10 µg 1.0 mg
<b>Alternate Names:</b>	IRH, PBSF, SCYB12, SDF-1, SDF-1-beta, TLSF, TLSF-alpha, TLSF-beta, TPAR1		
<b>Description:</b>	<p>Recombinant Human SDF-1 beta is a single non-glycosylated polypeptide chain containing 72 amino acid residues.</p> <p>Background: Stromal-Cell Derived Factor-1 beta (SDF-1beta), also known as SCYB12, PBSF and CXCL12, is an 8.3 kDa, heparin-binding member of the CXC (or alpha) family of chemokines and signal through the CXCR4 receptor. SDF-1alpha and beta are reported to be monomers at neutral pH and physiologic ionic strength. On the cell surface, this may well facilitate SDF-1 interaction with its two receptors, CXCR4 and syndecan4. Heparin sulfate is known to protect SDF-1 from proteolysis, and CXCR4 exists constitutively as a dimer. Among its many functions, CXCL12 is known to influence lymphopoiesis, regulate patterning and cell number of neural progenitors, and promote angiogenesis (12, 13). It also enhances the survival of myeloid progenitor cells.</p>		
<b>GeneID:</b>	6387		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	8.5 kDa		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
<b>Purity:</b>	>95% by SDS-PAGE and HPLC analyses.		
<b>Endotoxin Level:</b>	Less than 1 EU/µg of Recombinant Human SDF-1 beta as determined by LAL method.		
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The biological activity as determined by a chemotaxis bioassay using PHA and recombinant human IL-2 activated human peripheral blood T-lymphocytes is in a concentration range of 20-80 ng/ml.		
<b>Amino Acid Sequence:</b>	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNKRF KM		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.		
<b>Storage &amp; Stability:</b>	The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application. <b>Avoid repeated freeze/thaw cycles.</b>		



## SDS-PAGE



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**Cell Sciences**<sup>®</sup>  
65 Parker Street  
Unit 11  
Newburyport, MA 01950

Toll Free: 888-769-1246  
Phone: 978-572-1070  
Fax: 978-992-0298

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)