

Cxcl12

Recombinant Rat CXCL12 α / SDF-1 alpha

Catalog No.	CSI20133A CSI20133B CSI20133C	Quantity:	2 μ g 10 μ g 1.0 mg
Alternate Names:	Stromal cell-derived factor 1 subunit alpha, C-X-C motif chemokine 12, Intercrine reduced in hepatomas, IRH, hIRH, Pre-B cell growth-stimulating factor, PBSF		
Description:	CXCL12 also known as SDF-1 is belonging to the CXC chemokine family. It is encoded by the CXCL12 gene. Rat CXCL12 is expressed as two isoforms that differ only in the C-terminal tail. And both SDF-1 isoforms undergo proteolytic processing of the first two N-terminal amino acids. Contrast to SDF-1 β , SDF-1 α is shorter by four amino acids at the C-terminal tail. On the cell surface, the receptor for this chemokine is CXCR4 and syndecan4. CXCL12 is strongly chemotactic for T-lymphocytes, monocytes, but not neutrophils. SDF-1 is highly conserved between species, rat CXCL12 α shares approximately 96% amino acid sequence identity with human CXCL12 α .		
UniProt ID:	P48061		
Gene ID:	24772		
Source:	<i>E. coli</i>		
Molecular Weight:	~ 7.9 kDa (68 aa)		
Formulation:	Lyophilized from sterile-filtered concentrated solution in 20 mM phosphate buffer, 150 mM NaCl, pH 7.4		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	< 1 EU/ μ g as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood monocytes is in a concentration range of 50-100 ng/ml.		
Amino Acid Sequence:	KPVSLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC IDPKLKWIQE YLDKALNK		
Reconstitution:	Centrifuge vial prior to opening. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be divided into working aliquots and stored at < -20 °C. Further dilution should be made in appropriate buffered solutions.		
Storage & Stability:	Upon receipt store at -20°C to -80°C. Upon reconstitution, the preparation is stable for up to one week at 2-8°C or up to 3 months at -20°C to -80°C. Avoid repeated freeze/thaw cycles.		

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