

# SDF-1 $\alpha$ /CXCL2, rat recombinant

<b>CATALOG #:</b>	7199-10	10 $\mu$ g
	7199-50	50 $\mu$ g
<b>ALTERNATE NAMES:</b>	Stromal-Cell Derived Factor-1, CXCL12, PBSF	
<b>SOURCE:</b>	E coli	
<b>PURITY:</b>	$\geq$ 98% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	7.9 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/ $\mu$ g of protein (<1EU/ $\mu$ g).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized with no additives	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:**

SDF-1 alpha and beta are stromal derived CXC chemokines, and signal through the CXCR4 receptor. SDF-1alpha and beta chemoattract B and T cells, and have been shown to induce migration of CD34+ stem cells. Additionally, the SDF-1 proteins exert HIV suppressive activity in cells expressing the CXCR4 receptor. Recombinant rat SDF-1 $\alpha$  is a 7.9 kDa protein containing 68 amino acid residues.

**AMINO ACID SEQUENCE:**

KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC  
IDPKLKWIQE YLDKALNK

**BIOLOGICAL ACTIVITY:**

Determined by its ability to chemoattract human peripheral blood monocytes using a concentration range of 50.0-100.0 ng/ml.

**RELATED PRODUCTS:**

- SDF-1 $\beta$ , rat recombinant (**Cat # 7200-10, -50**)
- SDF-1 beta/CXCL12, feline recombinant (**Cat # 4389-10, -100, -1000**)
- SDF-1alpha (CXCL12), human recombinant (**Cat # 4387-10, -100, -1000**)
- SDF-1alpha (CXCL12), murine recombinant (**Cat # 4388-10, -100, -1000**)
- SDF-1beta (CXCL12), human recombinant (**Cat # 4390-10, -100, -1000**)
- SDF-1beta (CXCL12), murine recombinant (**Cat # 4391-10, -100, -1000**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**