Recombinant Rat SDF-1 a (rRt SDF-1a/CXCL12)

Catalog No: #841121

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Recombinant Rat SDF-1 a (rRt SDF-1a/CXCL12)
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	> 97 % by SDS-PAGE and HPLC analyses.
Species Reactivity	Rt
Target Name	rr SDF-1a CXCL12
Accession No.	accession:Q9QZD1 GeneID:24772
Uniprot	Q9QZD1
GeneID	24772;
Calculated MW	Approximately 7.9 kDa, a singl
SDS-PAGE MW	Sterile Filtered White lyophil
Target Sequence	KPVSLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC IDPKLKWIQE YLDKALNK
Formulation	Lyophilized from a 0.2 oΩ½oΩ½m filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Storage	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon 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 -70 °C. Avoid repeated freeze thaw cycles.

Background

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-1β, SDF-1α 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 CXCL12α shares approximately 96% amino acid sequence identity with human CXCL12α.

References

1. Shirozu M, Nakano T, Inazawa J, et al. 1995. Genomics. 28:495-500.
2. De La Luz Sierra M, Yang F, Narazaki M, et al. 2004. Blood. 103:2452-9.
3. Charnaux N, Brule S, Hamon M, et al. 2005. FEBS J. 272:1937-51.
4. Bleul CC, Fuhlbrigge RC, Casasnovas JM, et al. 1996. J Exp Med. 184:1101-9.
5. Ara T, Nakamura Y, Egawa T, et al. 2003. Proc Natl Acad Sci U S A. 100:5319-23.
6. Askari AT, Unzek S, Popovic ZB, et al. 2003. Lancet. 362:697-703.
7. Ma Q, Jones D, Borghesani PR, et al. 1998. Proc Natl Acad Sci U S A. 95:9448-53.

Note: This product is for in vitro research use only