

Datasheet for ABIN988229 **CXCL12 Protein**



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Overview

Quantity:	10 µg
Target:	CXCL12
Origin:	Rat
Source:	Escherichia coli (E. coli)
Biological Activity:	Active

Product Details

Sequence:	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC IDPKLKWIQE YLDKALN
Characteristics:	Fully biologically active when compared to standard. The ED50 determined by a chemotaxis bioassay using human peripheral blood monocytes is less than 100 ng/ml, corresponding to a specific activity of $>, 1.0 \times 10^4$ IU/mg.
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Endotoxin Level:	Level Less than 1EU/µg of rRtSDF-1 ^a /CXCL12 as determined by LAL method

Target Details

Target:	CXCL12
Alternative Name:	SDF-1 alpha/cxcl12 (CXCL12 Products)
Background:	SDF-1 ^a and SDF-1beta, members of the chemokine ^a subfamily that lack the ELR domain, were initially identified using the signal sequence trap cloning strategy from a mouse bone-marrow stromal cell line. These proteins were subsequently also cloned from a human stromal cell line

Target Details

as cytokines that supported the proliferation of a stromal cell-dependent pre-B-cell line. SDF-1^α and SDF-1β cDNAs encode precursor proteins of 89 and 93 amino acid residues, respectively. Both SDF-1^α and SDF-1β are encoded by a single gene and arise by alternative splicing. The two proteins are identical except for the four amino acid residues that are present in the carboxy-terminus of SDF-1β and absent from SDF-1^α. SDF-1/PBSF is highly conserved between species, with only one amino acid substitution between the mature human and mouse proteins. SDF-1/PBSF acts via the chemokine receptor CXCR4 and has been shown to be a chemoattractant for T-lymphocytes, monocytes, pro- and pre- B cells, but not neutrophils. Synonym: SDF-1 alpha/CXCL12, Rat. Formulation: Lyophilized from a 0.2μm filtered concentrated solution in 20mM PB, pH 7.4, 150mM NaCl.

Molecular Weight: 7.9 kDa, a single non-glycosylated polypeptide chain containing 68 amino acids.

Pathways: [Regulation of Cell Size](#), [CXCR4-mediated Signaling Events](#), [Negative Regulation of intrinsic apoptotic Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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 apportioned into working aliquots and stored at < -20 °C. Further dilutions should be made in appropriate buffered solutions.

Storage: 4 °C