

Datasheet for ABIN7566361

CXCL12 Protein (AA 22-89) (Fc Tag)



Overview

Quantity:	50 μg
Target:	CXCL12
Protein Characteristics:	AA 22-89
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CXCL12 protein is labelled with Fc Tag.

Product Details

Purpose:	SDF-1alpha [CXCL12] (human):Fc (human) (rec.)
Cross-Reactivity:	Human
Characteristics:	The extracellular domain of human SDF-1alpha (aa 22-89) is fused to the N-terminus of the Fc region of human IgG1.
Purity:	>95 % (SDS-PAGE)
Sterility:	Sterile filtered
Endotoxin Level:	<5EU/mg protein (LAL test, Lonza).

Target Details

Target:	CXCL12
Alternative Name:	SDF-1alpha [CXCL12] (CXCL12 Products)

Background:

CXCL12, C-X-C Motif Chemokine 12, PBSF, SCYB12, TLSF, TPAR1

The human stromal cell-derived factor-1 (SDF1), also known as CXCL12, is a small (8 kDa) cytokine that belongs to the CXC chemokine subfamily. SDF1 is widely expressed in various organs including heart, liver, brain, kidney, skeletal muscle, and lymphoid organs, and is highly conserved between species. SDF1 is expressed in two isoforms from a single gene that encodes two splice variants, SDF1alpha and SDF1beta, which are identical except for the four residues present in the C-terminus of SDF1beta but absent from SDF1alpha. As a highly efficacious lymphocyte chemoattractant, SDF1 activates and directs the migration of leukocytes in response to proinflammatory stimuli such as LPS, TNF, or interleukins. It has been demonstrated that SDF1 promotes tumor growth and malignancy, enhances tumor angiogenesis, participates in tumor metastasis, and thus plays an important role in carcinoma pathogenesis. In addition, SDF1 is identified as the biological ligand for CXC-chemokine receptor 4 (CXCR4), which is widely expressed in leukocytes and acts as the cofactor for HIV-1 entry, and inhibits the HIV-1 infection. Furthermore, SDF1 is rapidly inactivated via N-terminal processing by cathepsin G associated with the membrane of B-cells, NK cells and to a lesser extent, T-cells.

Molecular Weight:

~35kDa (SDS-PAGE)

NCBI Accession:

NP_954637

Pathways:

Regulation of Cell Size, CXCR4-mediated Signaling Events, Negative Regulation of intrinsic apoptotic Signaling

Use & Stability: Stable for at least 1 year after receipt when stored at -20°C. Working aliquots

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from 0.2µm-filtered solution in PBS.
Handling Advice:	Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C
	Long Term Storage: -20°C

are stable for up to 3 months when stored at -20°C.