

Datasheet for ABIN6952225

CXCL12 Protein (AA 24-89) (Biotin)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	CXCL12
Protein Characteristics:	AA 24-89
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CXCL12 protein is labelled with Biotin.
Application:	Flow Cytometry (FACS), Cell Migration Assay (CMA)

Product Details

Sequence:	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK
Characteristics:	Biotinylated Recombinant Human CXCL12 (SDF-1α)
Purity:	> 97 % by SDS PAGE
Endotoxin Level:	<0.01 EU per 1µg of the protein by the LAL method
Biological Activity Comment:	EC50 = 0.5-0.9 nM determined by Calcium Flux with human CXCR4 in U937 cells Migration confirmed with U937 cells expressing CXCR4

Target Details

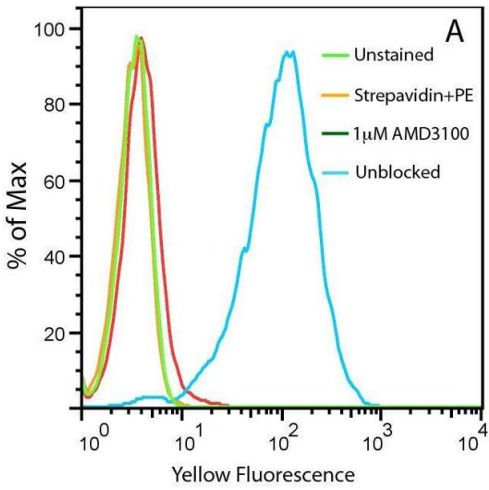
Target:	CXCL12
Alternative Name:	CXCL12/SDF-1alpha (CXCL12 Products)
Background:	Stromal-Cell Derived Factor-1alpha (SDF-1alpha) (CXCL12) attracts lymphocytes and plays important roles in embryogenesis and angiogenesis with implications in tumor metastasis. By binding to CXCR4, one of the co-receptors for HIV viral entry, SDF-1alpha can suppress HIV. Besides CXCR4, SDF-1alpha also binds to the "decoy" receptor CXCR7, and activates the downstream beta-arrestin- rather than G protein-mediated signaling pathway.
Molecular Weight:	10.381 kDa
UniProt:	P48061
Pathways:	Regulation of Cell Size , CXCR4-mediated Signaling Events , Negative Regulation of intrinsic apoptotic Signaling

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Spin tube prior to resuspending. Recommended at 100 µg/mL in sterile water
Storage:	-20 °C, -80 °C
Storage Comment:	12 months from date of receipt, -20 to -70 °C as supplied. Suggest to use immediately after reconstitution 1 month at -20 to -70 °C under sterile conditions after reconstitution.
Expiry Date:	12 months



Flow Cytometry

Image 1. Uptake of 20nM CXCL12-biotin by U937 cells in the presence (red trace) and absence (cyan) of a CXCR4 inhibitor, AMD 3100. U937 cells are not stained by streptavidin-PE in the absence of CXCL12-biotin (orange).