Datasheet for ABIN6699688

CXCL12 Protein

2 Images

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Overview

Quantity:	100 µg
Target:	CXCL12
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Mouse Stromal Cell-Derived Factor-1 alpha (CXCL12) Recombinant Protein
Purification:	Stromal Cell-Derived Factor-1 alpha (CXCL12) purity was determined to be greater than 98% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity as determined by its ability to chemoattract human T cells at 50-100 ng/mL.

Target Details

Target:	CXCL12
Alternative Name:	Cxcl12 (CXCL12 Products)
Background:	Synonyms: 12-O-tetradecanoylphorbol 13-acetate repressed protein 1 (TPAR1), C-X-C motif chemokine 12, Pre-B cell growth-stimulating factor (PBSF), Thymic lymphoma cell-stimulating

Target Details

	factor (TLSF) Background: Stromal Cell Derived Factor-1 alpha (SDF-1α), also called CXCL12, is one of two splice variants made by a wide variety of cells when stimulated by inflammatory cytokines such as, TNF, IL-1 or LPS. SDF-1α signals through the G protein-couple receptor, CXCR4, to recruit activated leukocytes. Human and mouse SDF-1α share 99 % sequence identity. Recombinant mouse SDF-1α is a non-glycosylated protein, containing 68 amino acids, with a molecular weight of 7.9 kDa.
UniProt:	Q4FJL5
Pathways:	Regulation of Cell Size, CXCR4-mediated Signaling Events, Negative Regulation of intrinsic apoptotic Signaling

Application Details

Application Notes:	Other: User Optimized Application_Note: Stromal Cell-Derived Factor-1 alpha Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Stromal Cell-Derived Factor-1 alpha in immunological assays.
Comment:	Suggested_Applications: Cellular Assay Other_Performance_Data:
Restrictions:	For Research Use only

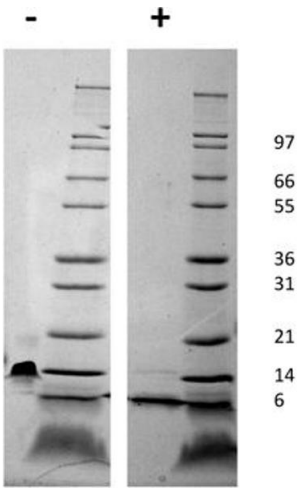
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Concentration:	0.1 mg/mL
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier

Handling

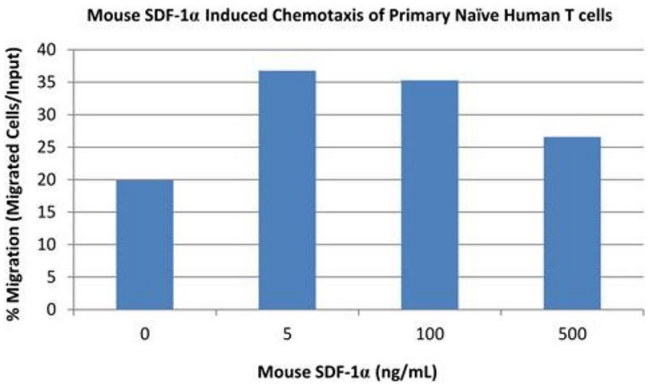
	protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Mouse Stromal Cell-Derived Factor-1 alpha (CXCL12) Recombinant Protein SDS-PAGE of Mouse Stromal Cell-Derived Factor-1 alpha (CXCL12) Recombinant Protein. Lane 1: 1 µg Mouse SDF-1 alpha in non-reducing conditions . Lane 2: Molecular weight marker. Lane 3: 1 µg Mouse SDF-1 alpha in reducing conditions (+). Lane 4: Molecular weight marker. Mouse SDF-1 alpha has a predicted MW of 7.9 kDa.



SDS-PAGE

Image 2. SDS-PAGE of Mouse Stromal Cell-Derived Factor-1 alpha (CXCL12) Recombinant Protein Bioactivity of Mouse Stromal Cell-Derived Factor-1 alpha (CXCL12) Recombinant Protein. Samples of primary naïve human CD3+ T cells were allowed to migrate to Mouse SDF-1α/CXCL12 (0, 5, 100, and 500 ng/mL). After 4 hours, cells that migrated were counted using a fluorescent substrate and displayed on the bar graph above. Increased levels of migration over basal were seen in response to Mouse SDF-1α/CXCL12 starting at 5 ng/mL. This result is comparable to the expected range of 10 ng/mL.