

Datasheet for ABIN6264954

anti-CXCL12 antibody (C-Term)[Go to Product page](#)**2** Images**1** Publication

Overview

Quantity:	100 µL
Target:	CXCL12
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CXCL12 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	A synthesized peptide derived from human SDF 1, corresponding to a region within C-terminal amino acids.
Isotype:	IgG
Specificity:	SDF 1 Antibody detects endogenous levels of total SDF 1.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Dog,Chicken,Xenopus
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	CXCL12
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Target Details

Alternative Name: CXCL12 ([CXCL12 Products](#))

Background: Description: Chemoattractant active on T-lymphocytes and monocytes but not neutrophils. Activates the C-X-C chemokine receptor CXCR4 to induce a rapid and transient rise in the level of intracellular calcium ions and chemotaxis. SDF-1-beta(3-72) and SDF-1-alpha(3-67) show a reduced chemotactic activity. Binding to cell surface proteoglycans seems to inhibit formation of SDF-1-alpha(3-67) and thus to preserve activity on local sites. Also binds to atypical chemokine receptor ACKR3, which activates the beta-arrestin pathway and acts as a scavenger receptor for SDF-1. Binds to the allosteric site (site 2) of integrins and activates integrins ITGA5:ITGB3, ITGA4:ITGB1 and ITGA5:ITGB1 in a CXCR4-independent manner (PubMed:29301984). Acts as a positive regulator of monocyte migration and a negative regulator of monocyte adhesion via the LYN kinase. Stimulates migration of monocytes and T-lymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. SDF1A/CXCR4 signaling axis inhibits beta-2 integrin LFA-1 mediated adhesion of monocytes to ICAM-1 through LYN kinase. Inhibits CXCR4-mediated infection by T-cell line-adapted HIV-1. Plays a protective role after myocardial infarction. Induces down-regulation and internalization of ACKR3 expressed in various cells. Has several critical functions during embryonic development, required for B-cell lymphopoiesis, myelopoiesis in bone marrow and heart ventricular septum formation. Stimulates the proliferation of bone marrow-derived B-cell progenitors in the presence of IL7 as well as growth of stromal cell-dependent pre-B-cells (By similarity).

Gene: CXCL12

Molecular Weight: 10 kDa

Gene ID: 6387

UniProt: [P48061](#)

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

Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

Format: Liquid

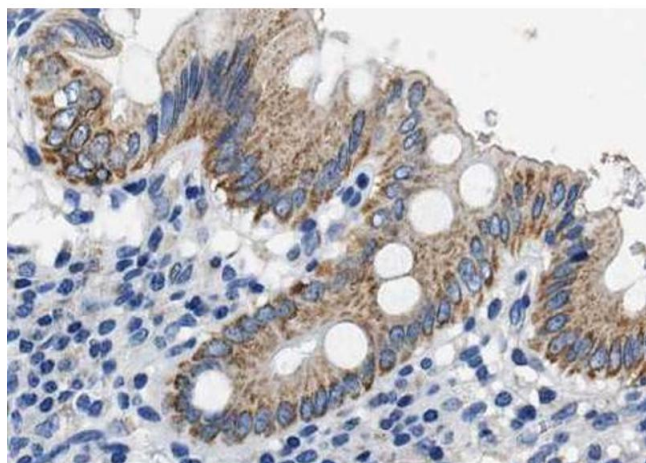
Handling

Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Publications

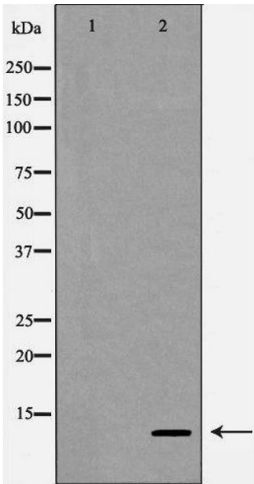
Product cited in:	Wang, Wang, Gao, Zhang, Lou, Jin, Chen, Lei, Xu, Mao: "Highly efficient local delivery of endothelial progenitor cells significantly potentiates angiogenesis and full-thickness wound healing." in: Acta biomaterialia , Vol. 69, pp. 156-169, (2018) (PubMed).
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Images



Immunohistochemistry

Image 1. ABIN6268714 at 1/100 staining human colon tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 2. Western blot analysis of SDF 1 expression in HepG2 cells, The lane on the left is treated with the antigen-specific peptide.