



SDF-1 Polyclonal Antibody

Catalog No	YP-Ab-15962
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IF;WB;IHC;ELISA
Gene Name	CXCL12
Protein Name	Stromal cell-derived factor 1
Immunogen	The antiserum was produced against synthesized peptide derived from human SDF-1. AA range:44-93
Specificity	SDF-1 Polyclonal Antibody detects endogenous levels of SDF-1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CXCL12; SDF1; SDF1A; SDF1B; Stromal cell-derived factor 1; SDF-1; hSDF-1; C-X-C motif chemokine 12; Interocrine reduced in hepatomas; IRH; hIRH; Pre-B cell growth-stimulating factor; PBSF
Observed Band	10-20kD,
Cell Pathway	Secreted.
Tissue Specificity	Isoform Alpha and isoform Beta are ubiquitously expressed, with highest levels detected in liver, pancreas and spleen. Isoform Gamma is mainly expressed in heart, with weak expression detected in several other tissues. Isoform Delta, isoform Epsilon and isoform Theta have highest expression levels in pancreas, with lower levels detected in heart, kidney, liver and spleen.
Function	function:Chemoattractant active on T-lymphocytes, monocytes, but not neutrophils. 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.,online information:SDF-1 entry,PTM:Processed forms SDF-1-beta(3-72) and SDF-1-alpha(3-67) are produced after secretion by proteolytic cleavage of isoforms Beta and Alpha, respectively. The N-terminal processing is probably achieved by DPP4. Isoform Alpha is first cleaved at the C-terminus to yield a SDF-1-alpha(1-67) intermediate before being processed at the N-terminus. The



C-terminal processing of isoform Alpha is reduced by binding to heparin and, probably, cell surface proteoglycans.,similarity:Belongs to the intercrine alpha (chemokine CxC) family.,

Background

C-X-C motif chemokine ligand 12(CXCL12) Homo sapiens This antimicrobial gene encodes a stromal cell-derived alpha chemokine member of the intercrine family. The encoded protein functions as the ligand for the G-protein coupled receptor, chemokine (C-X-C motif) receptor 4, and plays a role in many diverse cellular functions, including embryogenesis, immune surveillance, inflammation response, tissue homeostasis, and tumor growth and metastasis. Mutations in this gene are associated with resistance to human immunodeficiency virus type 1 infections. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2014],

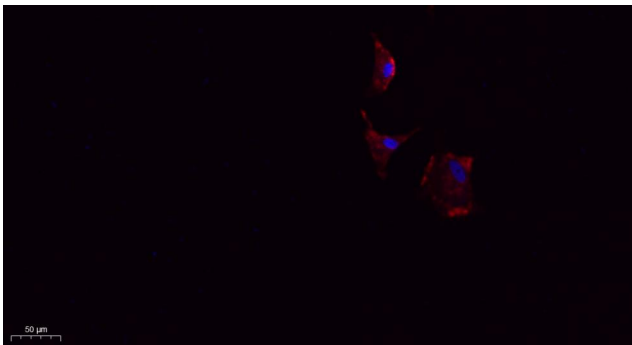
matters needing attention

Avoid repeated freezing and thawing!

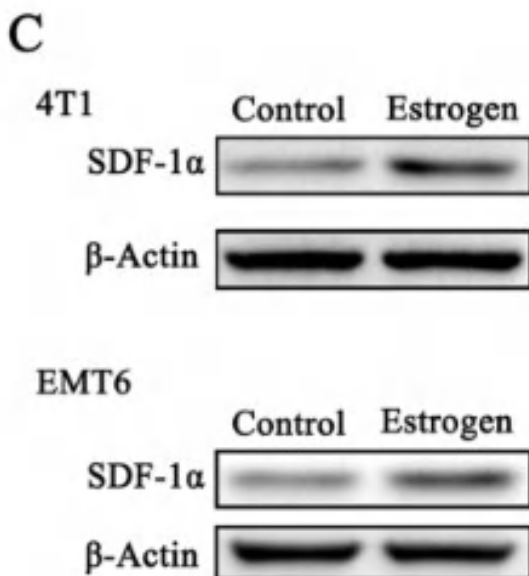
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

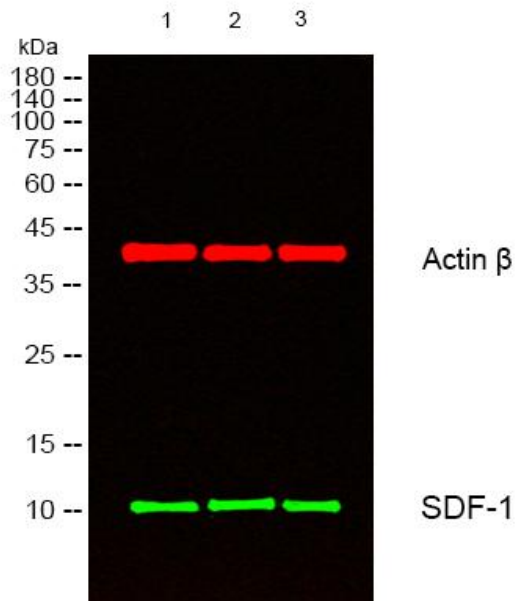
Products Images



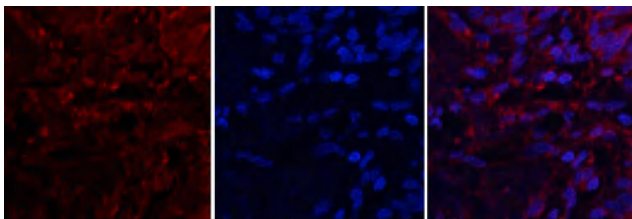
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



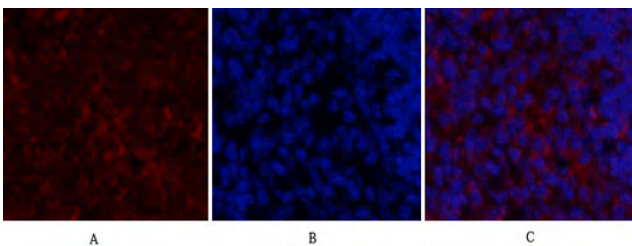
Ouyang, Liquan, et al. "Estrogen-induced SDF-1α production promotes the progression of ER-negative breast cancer via the accumulation of MDSCs in the tumor microenvironment." Scientific reports 6 (2016): 39541.



Western blot analysis of lysates from 1) KB, 2) HeLa ,3) MCF-7 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody(5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.



Immunofluorescence analysis of human-lung tissue. 1,SDF-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-spleen tissue. 1,SDF-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B