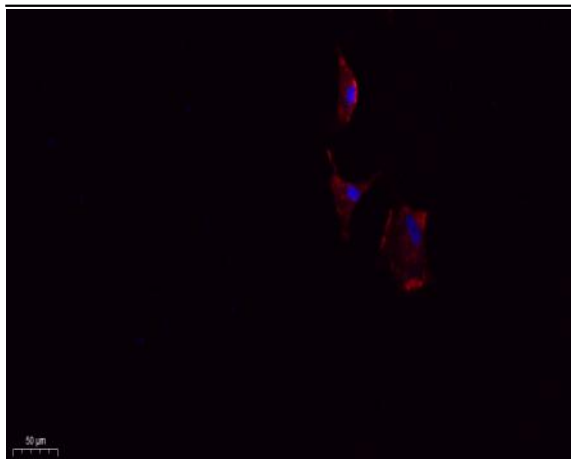


SDF-1 Polyclonal Antibody

Catalog No :	YT4225
Reactivity :	Human;Mouse;Rat
Applications :	IF;WB;IHC;ELISA
Target :	SDF-1
Fields :	>>Cytokine-cytokine receptor interaction;>>Viral protein interaction with cytokine and cytokine receptor;>>Chemokine signaling pathway;>>NF-kappa B signaling pathway;>>Axon guidance;>>Leukocyte transendothelial migration;>>Intestinal immune network for IgA production;>>Regulation of actin cytoskeleton;>>Human cytomegalovirus infection;>>Pathways in cancer;>>Rheumatoid arthritis
Gene Name :	CXCL12
Protein Name :	Stromal cell-derived factor 1
Human Gene Id :	6387
Human Swiss Prot No :	P48061
Mouse Gene Id :	20315
Mouse Swiss Prot No :	P40224
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
Dilution :	IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet tested in other applications.

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	10-20kD,
Cell Pathway :	Cytokine-cytokine receptor interaction;Chemokine;Axon guidance;Leukocyte transendothelial migration;Intestinal immune network for IgA production;
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],
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.,
Subcellular Location :	Secreted.
Expression :	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.

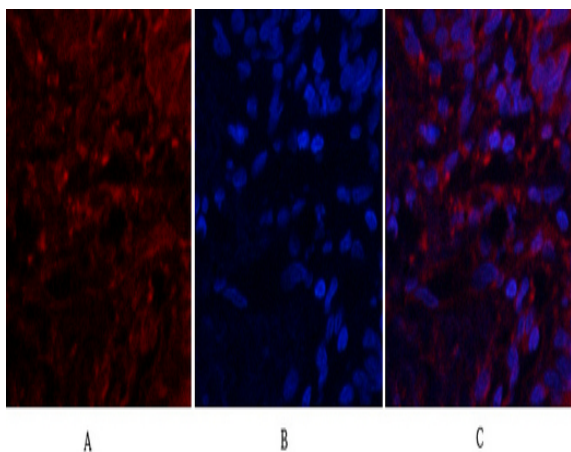
Products Images



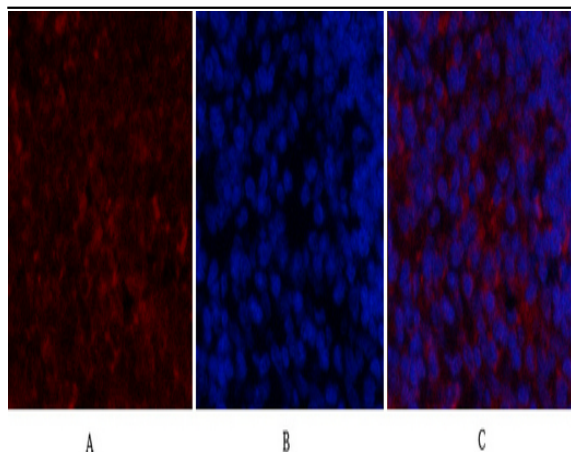
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4 °C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



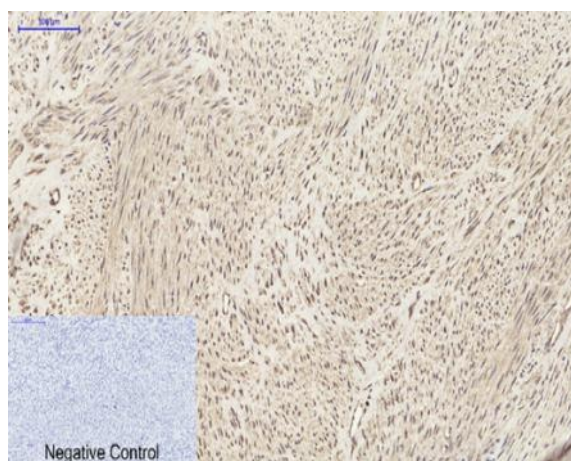
Ouyang, Liqun, et al. "Estrogen-induced SDF-1α production promotes the progression of ER-negative breast cancer via the accumulation of MDSCs in the tumor microenvironment." Scientific reports 6 (2016): 39541.



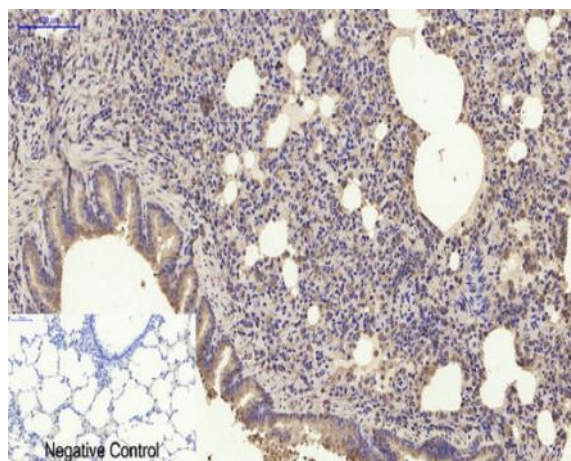
Immunofluorescence analysis of human-lung tissue. 1,SDF-1 Polyclonal Antibody(red) was diluted at 1:200(4 °C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



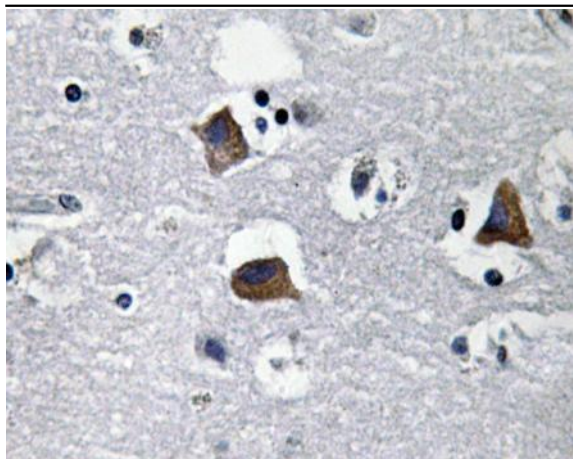
Immunofluorescence analysis of rat-spleen tissue. 1, SDF-1 Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



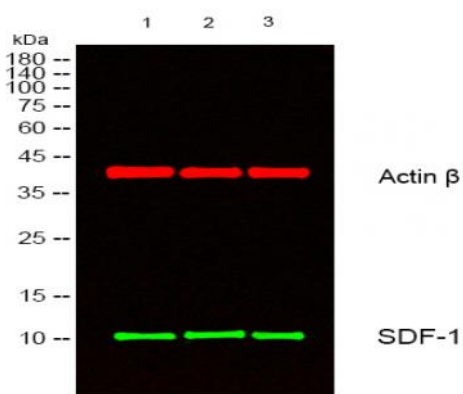
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, SDF-1 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, SDF-1 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



Immunohistochemistry analysis of SDF-1 antibody in paraffin-embedded human brain tissue.



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° 1 hour. (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° 1 hour.