**Applications** 

IF,WB,IHC,ELISA



# SDF-1 Rabbit pAb

CatalogNo: YT4225 Orthogonal Validated 💽

## **Key Features**

Host Species Reactivity

Rabbit
 Human, Mouse, Rat

MW Isotype
• 10-20kD, (Observed) • IgG

# Recommended Dilution Ratios

IF 1:50-200

WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:40000

Not yet tested in other applications

#### Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

#### **Basic Information**

**Clonality** Polyclonal

# Immunogen Information

**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.

## **Target Information**

Gene name

CXCL12

**Protein Name** 

Stromal cell-derived factor 1

Organism	Gene ID	UniProt ID
Human	<u>6387</u> ;	<u>P48061</u> ;
Mouse	<u>20315</u> ;	<u>P40224;</u>

#### Cellular Localization

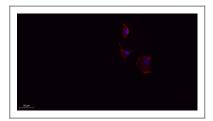
Secreted.

**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.

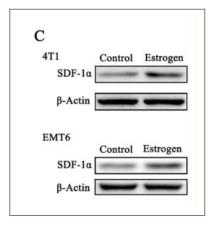
**Function** 

Function: Chemoattractant active on T-lymphocytes, monocytes, but not neutrophils. SDF-1beta(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-1beta(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 processsed 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.,

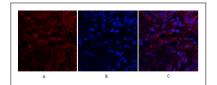
### Validation Data



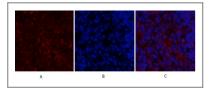
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.



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



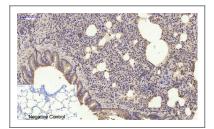
Immunofluorescence analysis of human-lung tissue. 1,SDF-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



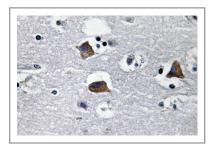
Immunofluorescence analysis of rat-spleen tissue. 1,SDF-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



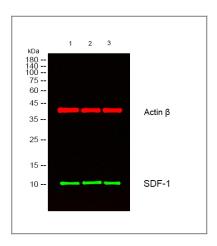
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,SDF-1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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

#### | Contact information

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Please scan the QR code to access additional product information: **SDF-1 Rabbit pAb** 

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