

**Rabbit Anti-SDF1/CXCL12 Polyclonal: RC0188**

**Intended Use:** For Research Use Only

**Description:** The C-X-C or  $\alpha$  chemokine family is characterized by a pair of cysteine residues separated by a single amino acid and primarily functions as chemoattractants for 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. The C-X-C family includes IL-8, NAP-2, MSGA and stromal cell-derived factor-1, or SDF-1. SDF-1 was originally described as a pre-B cell stimulatory factor, but has now been shown to function as a potent chemoattractant for T cells and monocytes, but not neutrophils. 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. 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.

**Specifications**

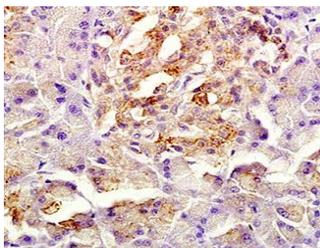
Clone:	Polyclonal
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human, mouse, rat
Localization:	Cytoplasm, secreted
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN <sub>3</sub> )
Storage:	Store at 2°- 8°C
Applications:	IHC, IF
Package:	

Description	Catalog No.	Size
SDF1/CXCL12 Polyclonal Concentrated	RC0188	1 ml

**IHC Procedure**

Positive Control Tissue:	Skin
Concentrated Dilution:	10-50
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	Overnight @ 4°C
Detection:	Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE rat pancreas stained with anti-SDF1 using DAB

**References:**

1. AMD3100 attenuates MMP-3 and MMP-9 expressions and prevents cartilage degradation in a monosodium iodoacetate-induced rat model of temporomandibular osteoarthritis. Wang, XY, et al. Journal of Oral and Maxillofacial Surgery. 2016.
2. Renal Interstitial Infiltration and Tertiary Lymphoid Organ Neogenesis in IgA Nephropathy. Pei, Guangchang, et al. Clinical Journal of the American Society of Nephrology CJN-01150113, 2013.
3. Defective autophagy in vascular smooth muscle cells accelerates senescence and promotes neointima formation and atherogenesis. Grootaert, Mandy OJ, et al. Autophagy. 2015.