

# Immunotag™ SDF 1 Antibody

Antibody Specification	
Catalog No.	ITA1339
Product Description	Immunotag™ SDF 1 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SDF 1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human SDF 1
Specificity	SDF 1 Antibody detects endogenous levels of total SDF 1
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	CXCL12
Accession No.	P48061

## Antibody Specification

Alternate Names	12-O-tetradecanoylphorbol 13-acetate repressed protein 1; AI174028; C-X-C motif chemokine 12; Chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1); Chemokine (C-X-C motif) ligand 12; Chemokine CXC motif ligand 12; cxcl12; hIRH; hSDF-1; Intercrine reduced in hepatomas; IRH; OTTHUMP00000019491; PBSF; Pre-B cell growth-stimulating factor; SCYB12; SDF 1; SDF-1; SDF-1-alpha(3-67); SDF-1a; SDF-1b; SDF1_HUMAN; SDF1A; SDF1B; Stromal cell-derived factor 1; Stromal cell-derived factor 1 delta; Stromal cell-derived factor 1 gamma; Stromal cell-derived factor 1a; Stromal cell-derived factor-1 alpha; Thymic lymphoma cell-stimulating factor; Tlsf; TLSF-a; TLSF-b; Tlsfa; Tlsfb; TPAR1;
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 ITGAV: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).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	10 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.