

**SDF1/CXCL12 (D32F9) Rabbit mAb**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Recombinant protein	9	Rabbit IgG	#P48061	6387

**Product Usage Information**

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

SDF1/CXCL12 (D32F9) Rabbit mAb detects recombinant SDF1/CXCL12 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to carboxy-terminal residues of human SDF1/CXCL12.

**Background**

The stromal cell derived factor 1 (SDF1/CXCL12) is a small, pro-inflammatory chemoattractant cytokine that regulates leukocyte trafficking through interactions with its cognate 7-transmembrane G protein-coupled receptors (1). The SDF1/CXCL12 receptor, CXCR4, also serves as a coreceptor for the entry of human immunodeficiency virus into target cells (2). SDF1/CXCL12 may regulate homing and maintenance of CXCR4-expressing stem or progenitor cells, including embryonic and many somatic stem cells (3,4). Many cancer cells express CXCR4, suggesting that SDF1/CXCL12 plays a role in cancer metastasis (5,6). Alternative splicing and differential processing during maturation produce a pair of SDF1/CXCL12 isoforms (SDF1/CXCL12 $\alpha$  and SDF1/CXCL12 $\beta$ ) that have different properties and biological activities (7). Additional isoforms of SDF1/CXCL12 have been reported (8,9).

**Background References**

1. Maekawa, T. and Ishii, T. (2000) *Intern Med* 39, 90-100.
2. Ray, N. and Doms, R.W. (2006) *Curr Top Microbiol Immunol* 303, 97-120.
3. Sugiyama, T. et al. (2006) *Immunity* 25, 977-88.
4. Ara, T. et al. (2003) *Immunity* 19, 257-67.
5. Kucia, M. et al. (2004) *J Mol Histol* 35, 233-45.
6. Ratajczak, M.Z. et al. (2006) *Leukemia* 20, 1915-24.
7. De La Luz Sierra, M. et al. (2004) *Blood* 103, 2452-9.
8. Gleichmann, M. et al. (2000) *Eur J Neurosci* 12, 1857-66.
9. Yu, L. et al. (2006) *Gene* 374, 174-9.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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