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## SDF1/CXCL12 Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

<b>Applications:</b> W	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Recombinant protein	<b>MW (kDa):</b> 9	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P48061	<b>Entrez-Gene Id:</b> 6387
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity/Sensitivity</b>	SDF1/CXCL12 Antibody detects recombinant SDF1/CXCL12 protein and is expected to recognize both SDF1/CXCL12α and SDF1/CXCL12β isoforms.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln80 of human SDF1/CXCL12. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	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/CXCL12α and SDF1/CXCL12β) that have different properties and biological activities (7). Additional isoforms of SDF1/CXCL12 have been reported (8,9).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Maekawa, T. and Ishii, T. (2000) <i>Intern Med</i> 39, 90-100.</li> <li>2. Ray, N. and Doms, R.W. (2006) <i>Curr Top Microbiol Immunol</i> 303, 97-120.</li> <li>3. Sugiyama, T. et al. (2006) <i>Immunity</i> 25, 977-88.</li> <li>4. Ara, T. et al. (2003) <i>Immunity</i> 19, 257-67.</li> <li>5. Kucia, M. et al. (2004) <i>J Mol Histol</i> 35, 233-45.</li> <li>6. Ratajczak, M.Z. et al. (2006) <i>Leukemia</i> 20, 1915-24.</li> <li>7. De La Luz Sierra, M. et al. (2004) <i>Blood</i> 103, 2452-9.</li> <li>8. Gleichmann, M. et al. (2000) <i>Eur J Neurosci</i> 12, 1857-66.</li> <li>9. Yu, L. et al. (2006) <i>Gene</i> 374, 174-9.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>W:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat
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