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#3740

SDF1/CXCL12 Antibody

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

Applications: W	Reactivity: H M R	Sensitivity: Recombinant protein	MW (kDa): 9	Source/Isotype: Rabbit	UniProt ID: #P48061	Entrez-Gene Id: 6387
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Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	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.	
Specificity/Sensitivity	SDF1/CXCL12 Antibody detects recombinant SDF1/CXCL12 protein and is expected to recognize both SDF1/CXCL12α and SDF1/CXCL12β isoforms.	
Source / Purification	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.	
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/CXCL12α and SDF1/CXCL12β) that have different properties and biological activities (7). Additional isoforms of SDF1/CXCL12 have been reported (8,9).	
Background References	<ol style="list-style-type: none"> 1. Maekawa, T. and Ishii, T. (2000) <i>Intern Med</i> 39, 90-100. 2. Ray, N. and Doms, R.W. (2006) <i>Curr Top Microbiol Immunol</i> 303, 97-120. 3. Sugiyama, T. et al. (2006) <i>Immunity</i> 25, 977-88. 4. Ara, T. et al. (2003) <i>Immunity</i> 19, 257-67. 5. Kucia, M. et al. (2004) <i>J Mol Histol</i> 35, 233-45. 6. Ratajczak, M.Z. et al. (2006) <i>Leukemia</i> 20, 1915-24. 7. De La Luz Sierra, M. et al. (2004) <i>Blood</i> 103, 2452-9. 8. Gleichmann, M. et al. (2000) <i>Eur J Neurosci</i> 12, 1857-66. 9. Yu, L. et al. (2006) <i>Gene</i> 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	
Cross-Reactivity Key	H: Human M: Mouse R: Rat	
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