

SPHK1 Antibody



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

Applications: W	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 45	Source/Isotype: Rabbit	UniProt ID: #Q9NYA1	Entrez-Gene Id: 8877
Product Usage Information	•	Application Western Blotting			Dilution 1:1000	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		SPHK1 Antibody detects endogenous levels of total SPHK1 protein.				
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human SPHK1. Antibodies are purified by peptide affinity chromatography.				
Background		Sphingosine kinases (SPHKs) catalyze the phosphorylation of sphingosine to form sphingosine-1-phosphate (S1P), a lipid mediator with both intra- and extracellular functions. Together with other sphingolipid metabolizing enzymes, SPHKs regulate the balance of the lipid mediators, ceramide, sphingosine, and S1P (1-4). Two distinct SPHK isoforms, SPHK1 and SPHK2, have been cloned and characterized (5,6). SPHK1 and SPHK2 are highly conserved and diversely expressed (7,8). The SPHKs are activated by G protein-coupled receptors, receptor tyrosine kinases, immunoglobulin receptors, cytokines, and other stimuli (9-12). The molecular mechanisms by which SPHK1 and SPHK2 are specifically regulated are complex and only partially understood.				
Background References		1. Hait, N.C. et al. (2006) <i>Biochim Biophys Acta</i> 1758, 2016-26. 2. Xia, P. et al. (2000) <i>Curr Biol</i> 10, 1527-30. 3. Hannun, Y.A. et al. (2001) <i>Biochemistry</i> 40, 4893-903. 4. Futerman, A.H. and Riezman, H. (2005) <i>Trends Cell Biol</i> 15, 312-8. 5. Kohama, T. et al. (1998) <i>J Biol Chem</i> 273, 23722-8. 6. Liu, H. et al. (2000) <i>J Biol Chem</i> 275, 19513-20. 7. Liu, H. et al. (2002) <i>Prog Nucleic Acid Res Mol Biol</i> 71, 493-511. 8. Spiegel, S. and Milstien, S. (2003) <i>Nat Rev Mol Cell Biol</i> 4, 397-407. 9. Alemany, R. et al. (2007) <i>Naunyn Schmiedebergs Arch Pharmacol</i> 374, 413-28. 10. Saba, J.D. and Hla, T. (2004) <i>Circ Res</i> 94, 724-34. 11. Anliker, B. and Chun, J. (2004) <i>J Biol Chem</i> 279, 20555-8. 12. Wattenberg, B.W. et al. (2006) <i>J Lipid Res</i> 47, 1128-39.				

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 nonfat dry milk, 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 Mk: Monkey

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