Revision 1

Store at -20C

#3297

SPHK1 Antibody

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	45	Rabbit	#Q9NYA1	8877

Product Usage Information

Application	Dilution
Western Blotting	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

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

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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

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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