

Product datasheet for **TA389212**

SPHK2 Mouse Antibody [Clone ID: M532]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M532
Applications:	WB
Recommended Dilution:	WB: 1:250
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M532 was generated from a SK2 (N-terminal region) synthetic peptide (coupled to KLH) corresponding to amino acid residues in the N-terminal region of human SK2. This peptide sequence is highly conserved in rat and mouse SK2 proteins, and has no homology to SK1.
Specificity:	The antibody detects 70 kDa* proteins corresponding to the molecular mass of SK2 on SDS-PAGE immunoblots of human recombinant SK2 and endogenous SK2 in human HeLa cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	70
Database Link:	Q9NRA0



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Background:

Sphingolipids are metabolized into bioactive products that include ceramide, sphingosine, and sphingosine-1-phosphate (S1P). Sphingosine Kinase (SK) catalyzes the phosphorylation of the lipid sphingosine, creating S1P. S1P subsequently signals through cell surface G protein-coupled receptors, as well as intracellularly, to modulate cell proliferation, survival, motility and differentiation. Two isoforms of SK have been identified, SK1 and SK2. The mRNA for both of these isoforms is widely expressed with SK1 expression highest in brain, heart, kidney, thymus, spleen and lung, while SK2 is highest in kidney and liver. SKs can be activated through growth factor, G protein-coupled, and immunoglobulin receptor signalling. Regulation of SK1 and SK2 activity may occur through phosphorylation. SK1 is phosphorylated at Ser-225 by ERK leading to increased activity and translocation to the plasma membrane. SK2 is phosphorylated in response to EGF, PKC activators, and phorbol esters. ERK1 can phosphorylate both Ser-351 and Thr-578, and non-phosphorylatable mutants of these sites suppress ERK1-mediated chemotaxis.

Note:

Protein G purified tissue culture supernatant.