



SPHK1 Monoclonal Antibody

Catalog No	YP-mAb-04918
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SPHK1 SPHK SPK
Immunogen	Synthesized peptide derived from human protein . at AA range: 160-240
Specificity	SPHK1 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Acetyltransferase SPHK1;EC:2.3.1.-;EC:2.7.1.91;SK1;Sphingosine kinase 1; SPHK1;SPHK1 SPHK SPK;Sphingosine kinase 1 (SK 1) (SPK 1) (EC 2.7.1.91)
Observed Band	42kD
Calculated Molecular Weight	42kD
Cell Pathway	Cytoplasm . Nucleus . Cell membrane . Endosome membrane ; Peripheral membrane protein . Membrane, clathrin-coated pit . Cell junction, synapse . Translocated from the cytoplasm to the plasma membrane in a CIB1-dependent manner (PubMed:19854831). Binds to membranes containing negatively charged lipids but not neutral lipids (PubMed:24929359). Recruited to endocytic membranes by sphingosine where promotes membrane fusion (By similarity). .
Tissue Specificity	Widely expressed with highest levels in adult liver, kidney, heart and skeletal muscle. Expressed in brain cortex (at protein level) (PubMed:29662056).
Function	catalytic activity:ATP + sphinganine = ADP + sphinganine 1-phosphate.,catalytic activity:ATP + sphingosine = ADP + sphingosine 1-phosphate., cofactor:Magnesium.,function:Catalyzes the phosphorylation of sphingosine to form sphingosine 1-phosphate (SPP), a lipid mediator with both intra-and extracellular functions. Also acts on D-erythro-sphingosine and to a lesser extent sphinganine, but not other lipids, such as D,L-threo-dihydrosphingosine, N,N-



dimethylsphingosine, diacylglycerol, ceramide, or phosphatidylinositol., similarity:Contains 1 DAGKc domain.,subunit:Interacts with ACY1 (By similarity). Binds to calmodulin. Interacts with SPHKAP.,tissue specificity:Widely expressed with highest levels in adult liver, kidney, heart and skeletal muscle.,

Background

The protein encoded by this gene catalyzes the phosphorylation of sphingosine to form sphingosine-1-phosphate (S1P), a lipid mediator with both intra- and extracellular functions. Intracellularly, S1P regulates proliferation and survival, and extracellularly, it is a ligand for cell surface G protein-coupled receptors. This protein, and its product S1P, play a key role in TNF-alpha signaling and the NF-kappa-B activation pathway important in inflammatory, antiapoptotic, and immune processes. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011],

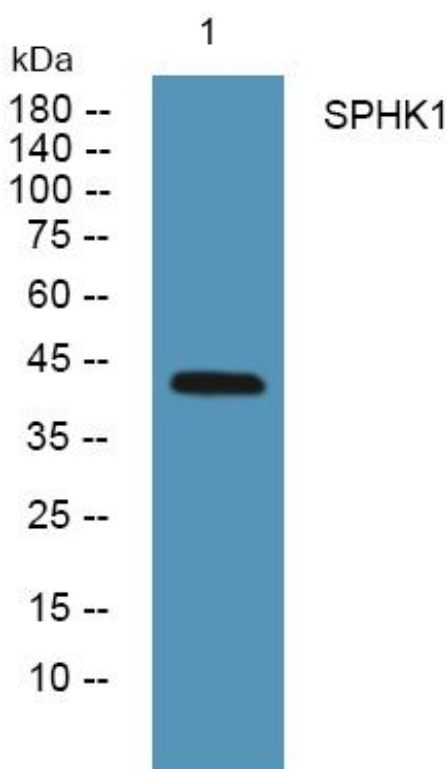
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using SPHK1 Monoclonal Antibody