



# SPHK1 Monoclonal Antibody

<b>Catalog No</b>	BYmab-04918
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB
<b>Gene Name</b>	SPHK1 SPHK SPK
<b>Protein Name</b>	Sphingosine kinase 1 (SK 1) (SPK 1) (EC 2.7.1.91)
<b>Immunogen</b>	Synthesized peptide derived from human protein . at AA range: 160-240
<b>Specificity</b>	SPHK1 Monoclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	42kD
<b>Cell Pathway</b>	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). .
<b>Tissue Specificity</b>	Widely expressed with highest levels in adult liver, kidney, heart and skeletal muscle. Expressed in brain cortex (at protein level) (PubMed:29662056).
<b>Function</b>	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,

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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],

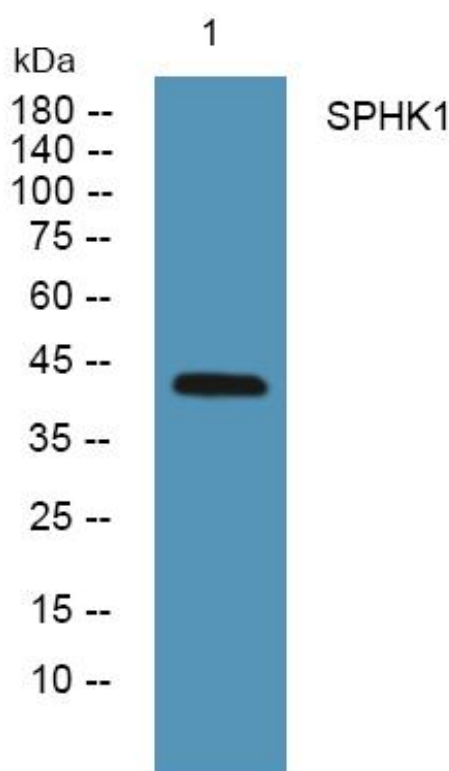
## matters needing attention

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