



SPHK1 Polyclonal Antibody

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| Catalog No | YP-Ab-04918 |
| Isotype | IgG |
| Reactivity | Human;Rat;Mouse; |
| Applications | WB;ELISA |
| Gene Name | SPHK1 SPHK SPK |
| Protein Name | Sphingosine kinase 1 (SK 1) (SPK 1) (EC 2.7.1.91) |
| Immunogen | Synthesized peptide derived from human protein . at AA range: 160-240 |
| Specificity | SPHK1 Polyclonal Antibody detects endogenous levels of protein. |
| Formulation | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide. |
| Source | Polyclonal, Rabbit,IgG |
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Dilution | WB 1:500-2000 ELISA 1:5000-20000 |
| Concentration | 1 mg/ml |
| Purity | ≥90% |
| Storage Stability | -20°C/1 year |
| Synonyms | |
| Observed Band | 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**

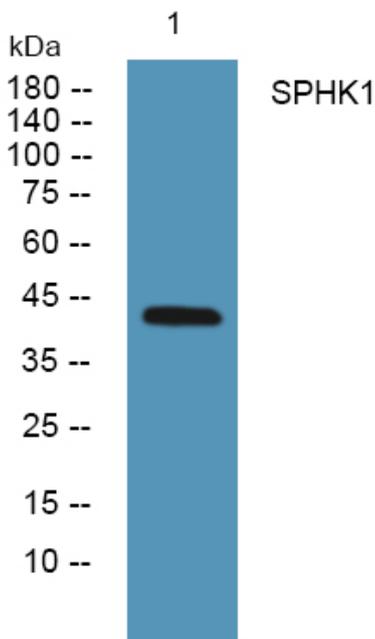
The protein encoded by this gene catalyzes the phosphorylation of sphingosine to form sphingosine-1-phosphate (S1P), a lipid mediator with both intra- and extracellular functions. Intracellularly, S1P regulates proliferation and survival, and extracellularly, it is a ligand for cell surface G protein-coupled 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 lysates from HCT116 cells, primary antibody was diluted at 1:1000, 4° over night