

## Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody Catalog # AN1970

### Specification

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#### Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody - Product Information

Primary Accession	<a href="#">O9NYA1</a>
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	42518

#### Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody - Additional Information

Gene ID	8877
<b>Other Names</b>	
SK1, SPHK1, SPK1	

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Shipping

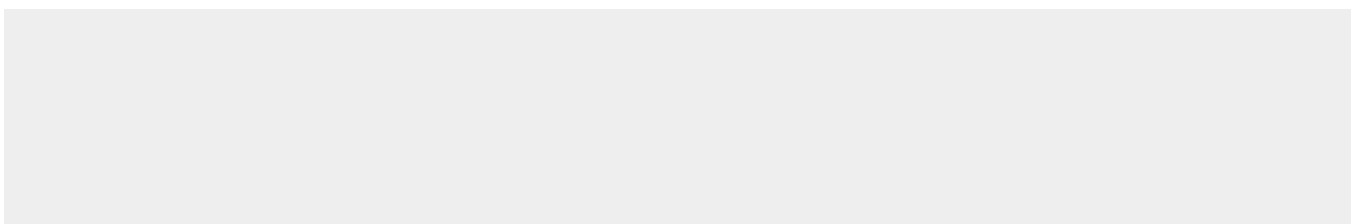
Blue Ice

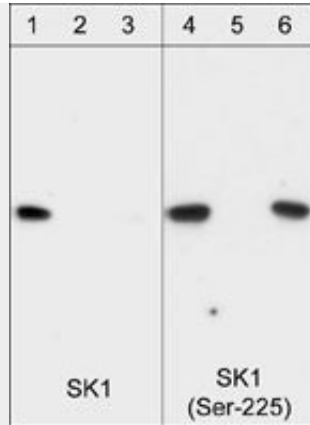
#### Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

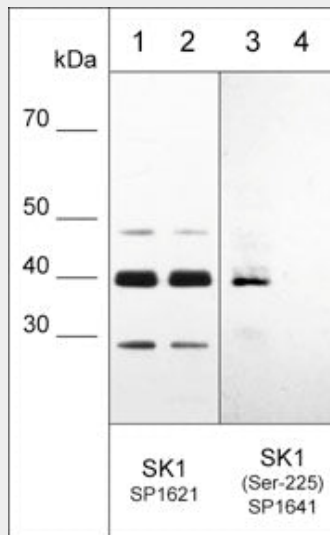
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody - Images





Western blot image of recombinant his-tagged human SK1 protein that was phosphorylated with ERK-2. Blots were probed with anti-SK1 (Central Region) (SP1621; lanes 1-3) and anti-SK1 (Ser-225) (SP1641; lanes 4-6). Both antibodies were used in the presence of no peptide (lanes 1 & 4), phospho-SK1 (Ser-225) peptide (SX1645; lanes 2 & 5), or unphosphorylated SK1 (Ser-225) peptide (SX1625; lanes 3 & 6).



Western blot of HeLa stimulated with calyculin A (lanes 1-4). The blots were untreated (lane 1 & 3) or treated with lambda phosphatase (lane 2 & 4), then probed with anti-SK1 (Central region) SP1621 (lanes 1 & 2) or anti-SK1 (Ser-225) SP1641 (lanes 3 & 4).

### Anti-Sphingosine Kinase 1 (Ser-225), Phosphospecific Antibody - 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. SK1 has been shown to mediate cell growth, prevention of apoptosis, and cellular transformation, and is upregulated in a variety of human tumors. Regulation of SK1 may occur through ERK mediated phosphorylation of Ser-225. This phosphorylation leads to increased activity and translocation to the plasma membrane.