

Anti-Sphingosine Kinase 1 (C-terminal region) Antibody

Catalog # AN1968

Specification

Anti-Sphingosine Kinase 1 (C-terminal region) Antibody - Product Information

Application WB
Primary Accession O8CI15
Reactivity Bovine
Host Rat

Clonality Rat Monoclonal

Isotype N.T. Calculated MW 42443

Anti-Sphingosine Kinase 1 (C-terminal region) Antibody - Additional Information

Gene ID 20698

Other Names SK1, SPHK1, SPK1

Dilution WB~~1:1000

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 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

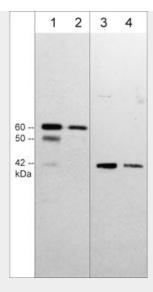
Anti-Sphingosine Kinase 1 (C-terminal region) Antibody - Protocols

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

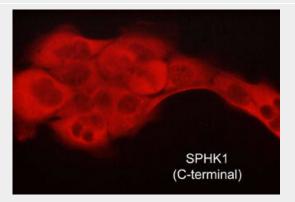
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Sphingosine Kinase 1 (C-terminal region) Antibody - Images





Western blot image of human Hela cells (lanes 1 & 2) and recombinant his-tagged human SK1 protein (lanes 3 & 4). The blots were probed with rat monoclonal anti-SK1 (C-terminal Region) at 1:250 (lanes 1 & 3) and 1:1000 (lanes 2 & 4).



Immunocytochemical labeling of sphingosine kinase 1 (SPHK1) in paraformaldehyde fixed and NP-40 permeabilized A431 cells. The cells were labeled with rat monoclonal anti-SPHK1 (SM5401). The antibody was detected using goat anti-rat DyLight® 594.

Anti-Sphingosine Kinase 1 (C-terminal region) 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.