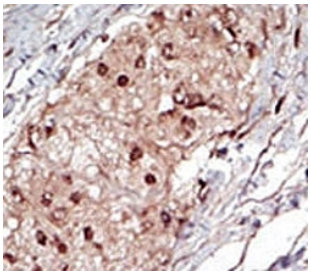
SPHK1 Antibody (F50217)

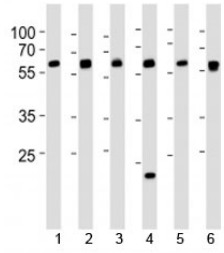
Catalog No.	Formulation	Size
F50217-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F50217-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

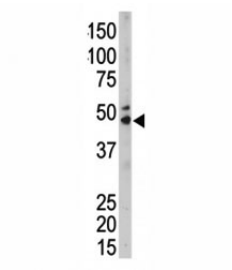
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Primate
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9NYA1
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100
Limitations	This SPHK1 antibody is available for research use only.



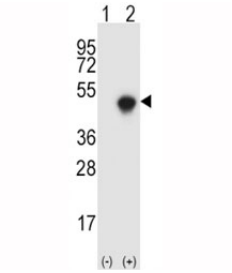
IHC analysis of FFPE human hepatocarcinoma tissue stained with the SPHK1 antibody



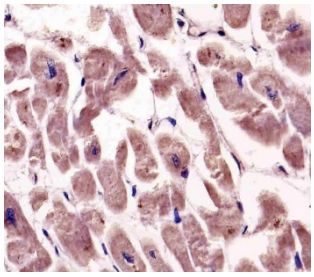
Western blot analysis of lysate from 1) 293, 2) HepG2, 3) HUVEC, 4) Raji, 5) rat C6 and 6) mouse C2C12 cell line using SPHK1 antibody at 1:1000. Predicted molecular weight: ~43/51/44kDa (isoforms 1/2/3).



The SPHK1 antibody used in western blot to detect SPHK1 in mouse kidney tissue lysate. Predicted molecular weight: ~43/51/44kDa (isoforms 1/2/3).



Western blot analysis of SPHK1 antibody and 293 cell lysate either nontransfected (Lane 1) or transiently transfected (2) with the SPHK1 gene. Predicted molecular weight: ~43/51/44kDa (isoforms 1/2/3).



IHC analysis of FFPE human heart tissue stained with the SPHK1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.

Description

Sphingosine Kinase (SphK) catalyzes the phosphorylation of the lipid sphingosine, creating the bioactive lipid sphingosine-1-phosphate (S1P). S1P subsequently signals through cell surface G protein-coupled receptors, as well as intracellularly, to modulate cell proliferation, survival, motility and differentiation. SphK is an important signaling enzyme which is activated by diverse agents, including growth factors that signal through receptor tyrosine kinases, agents activating G protein-coupled receptors, and immunoglobulin receptors. Two SphK isotypes, SphK-1 and SphK-2, have been cloned, and both isotypes are ubiquitously expressed. SphK-1 has been shown to mediate cell growth, prevention of apoptosis, and cellular transformation, and is upregulated in a variety of human tumors. In contrast, SphK-2 increases apoptosis, and may be responsible for phosphorylating and activating the immunosuppressive drug FTY720.

Application Notes

Titration of the SPHK1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 286-315 from the human protein was used as the immunogen for this SPHK1 antibody.

Storage

Aliquot the SPHK1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.