

SPHK1 Rabbit mAb

Catalog No: #49581

Package Size: #49581-1 50ul #49581-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

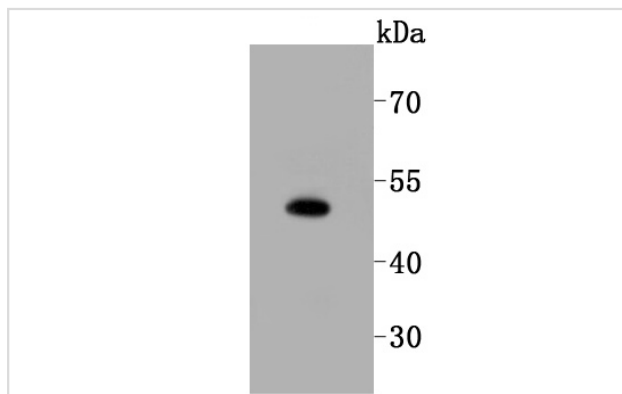
Description

Product Name	SPHK1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JA31-14
Purification	ProA affinity purified
Applications	WB, IHC, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	SK 1 antibody SK1 antibody Sphingosine kinase 1 antibody SPHK 1 antibody SPHK antibody Sphk1 antibody SPHK1_HUMAN antibody SPK antibody SPK 1 antibody
Accession No.	Swiss-Prot#:Q9NYA1
Uniprot	Q9NYA1
GeneID	8877;
Calculated MW	51 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

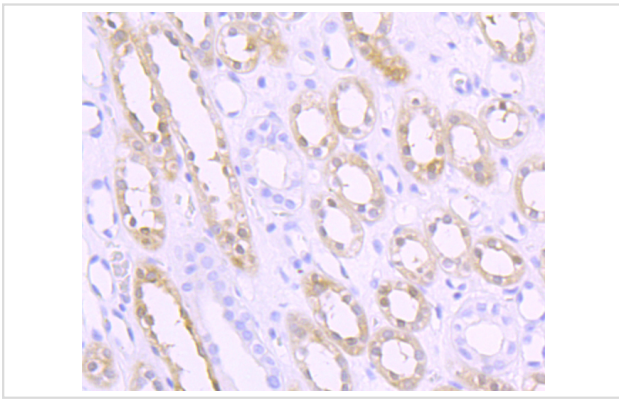
Application Details

WB: 1:500-1:1,000 IHC: 1:50-1:200 FC: 1:50

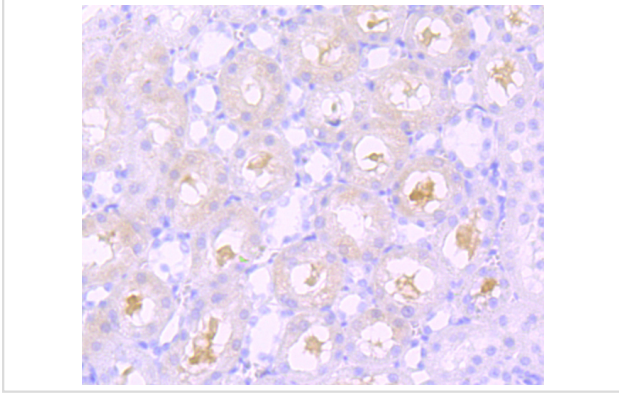
Images



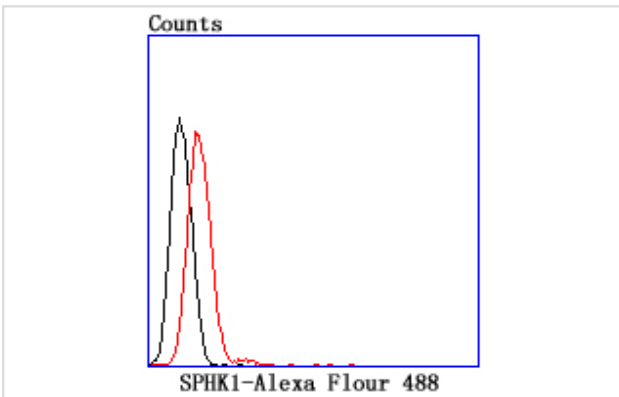
Western blot analysis of SPHK1 on C2C12 lysates using anti-SPHK1 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-SPHK1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-SPHK1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of Raji cells with SPHK1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Background

Sphingosine kinase (SphK or SphK1) is a key enzyme catalyzing the phosphorylation of sphingosine to form sphingosine 1-phosphate (SPP or S1P). Competitive inhibitors of SphK1 block formation of SPP and selectively inhibit cellular proliferation induced by a variety of factors. One potent inhibitor of SphK1 activity is DMS (N,N-dimethylsphingosine). SPP/SphK1 has been implicated as a signaling pathway that regulates diverse cellular functions, including cell growth, proliferation and survival. Specifically, SphK1 is involved in the signaling pathway(s) that protects human hepatocytes from the apoptotic action of TNF α . Furthermore, SPP/SphK1 may play an important role in neuronal survival by regulating activation of SAPKs and caspases. SphK1 is widely expressed with highest levels in adult liver, kidney, heart and skeletal muscle; however, activation of SphK1 disengages cells from their liver-specific phenotype.

References

Note: This product is for in vitro research use only