

## Basic Information

Product Name	Anti-SPHK1 Antibody	
Gene Name	SPHK1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human SPHK1 recombinant protein (Position: R16-H267).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	45-50 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

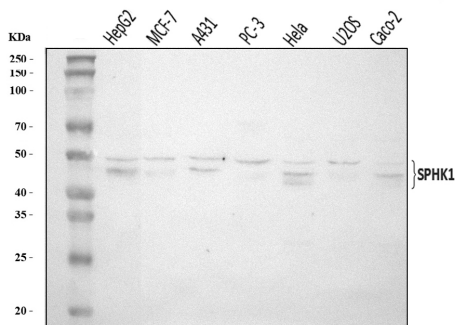
## Background Information

SPHK1(Sphingosine Kinase 1), is an enzyme that in humans is encoded by the SPHK1 gene. Melendez et al.(2000) mapped the SPHK1 gene to chromosome 17q25.2 based on sequence identity with ESTs mapped to this region. Kohama et al.(1998) demonstrated that recombinant mouse Sphk1 can specifically phosphorylate D-erythro-sphingosine and that D, L-threo-dihydrosphingosine and N, N-dimethylsphingosine can act as competitive inhibitors of recombinant Sphk1. Pitson et al.(2000) found that recombinant SPHK1 and endogenous SPHK1 purified from placenta had identical enzymatic characteristics, suggesting posttranslational modification does not effect functional properties.

## Reference

Anti-SPHK1 Antibody被引用在2文献中。

## Selected Validation Data



Western blot analysis of SPHK1 using anti-SPHK1 antibody (A01390-1).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HepG2 whole cell lysates,

Lane 2: MCF-7 pc-12 whole cell lysates,

Lane 3: A431 whole cell lysates,

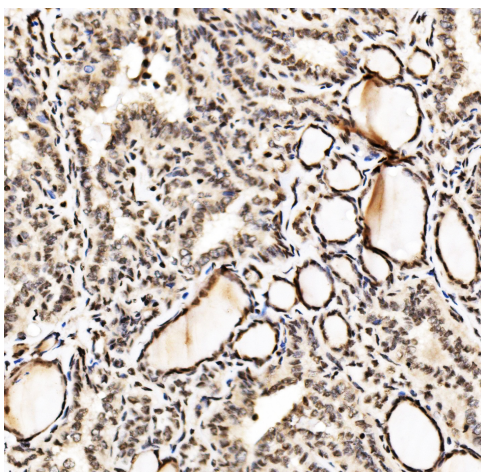
Lane 4: PC-3 whole cell lysates,

Lane 5: Hela whole cell lysates,

Lane 6: U2OS whole cell lysates,

Lane 7: Caco-2 whole cell lysates.

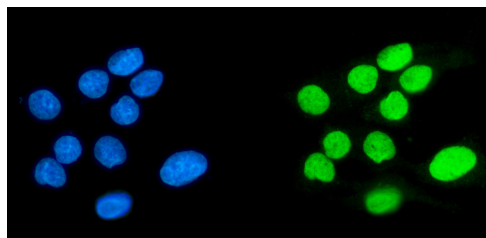
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SPHK1 antigen affinity purified polyclonal antibody (A01390-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SPHK1 at approximately 45-50 kDa. The expected band size for SPHK1 is at 43 kDa.



IHC analysis of SPHK1 using anti-SPHK1 antibody (A01390-1).

SPHK1 was detected in a paraffin-embedded section of human

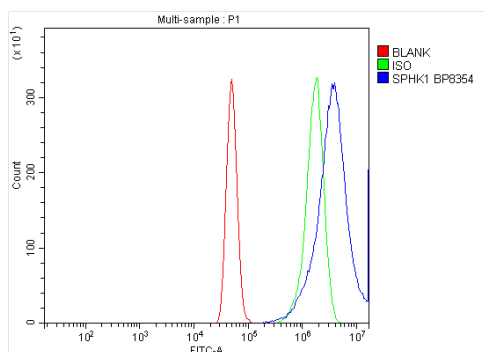
Hashimoto's thyroiditis tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-SPHK1 Antibody (A01390-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of SPHK1 using anti-SPHK1 antibody (A01390-1).

SPHK1 was detected in an immunocytochemical section of HepG2 cells.

The section was incubated with rabbit anti-SPHK1 Antibody (A01390-1) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A431 cells using anti-SPHK1 antibody (A01390-1).

Overlay histogram showing A431 cells stained with A01390-1 (Blue line).

To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SPHK1 Antibody (A01390-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.