

SPNS2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17856a

Specification

SPNS2 Antibody (N-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	Q8IVW8
Other Accession	NP_001118230.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	68-94

SPNS2 Antibody (N-term) - Additional Information

Gene ID 124976

Other Names

Protein spinster homolog 2, SPNS2

Target/Specificity

This SPNS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-94 amino acids from the N-terminal region of human SPNS2.

Dilution

WB~~1:1000
IHC-P~~1:100
FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

SPNS2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPNS2 Antibody (N-term) - Protein Information

Name SPNS2 {ECO:0000303|PubMed:19074308, ECO:0000312|HGNC:HGNC:26992}

Function Lipid transporter that specifically mediates export of sphingosine-1-phosphate

(sphing-4-enine 1-phosphate, S1P) and sphinganine-1-phosphate in the lymph, thereby playing a role in lymphocyte trafficking (PubMed:[19074308](#), PubMed:[23180825](#), PubMed:[21084291](#)). S1P is a bioactive signaling molecule that regulates many physiological processes important for the development and for the immune system (PubMed:[19074308](#), PubMed:[23180825](#)). Regulates levels of S1P and the S1P gradient that exists between the high circulating concentrations of S1P and low tissue levels that control lymphocyte trafficking (PubMed:[19074308](#), PubMed:[23180825](#)). Required for the egress of T-cells from lymph nodes during an immune response by mediating S1P secretion, which generates a gradient that enables activated T-cells to access lymph (By similarity). Also required for the egress of immature B-cells from the bone marrow (By similarity). In contrast, not involved in S1P release from red blood cells (By similarity). Involved in auditory function (PubMed:[30973865](#)). S1P release in the inner ear is required for maintenance of the endocochlear potential in the cochlea (By similarity). In addition to export, also able to mediate S1P import (By similarity).

Cellular Location

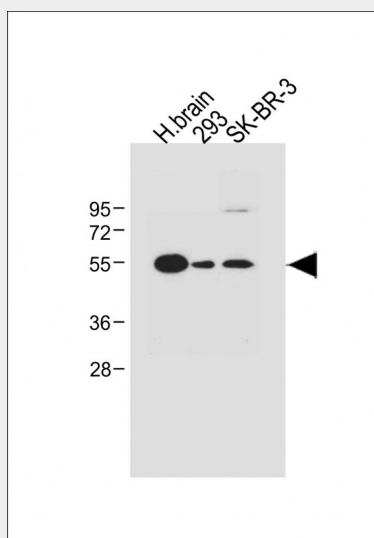
Cell membrane {ECO:0000250|UniProtKB:A2SWM2}; Multi-pass membrane protein. Endosome membrane {ECO:0000250|UniProtKB:A2SWM2}; Multi-pass membrane protein

SPNS2 Antibody (N-term) - Protocols

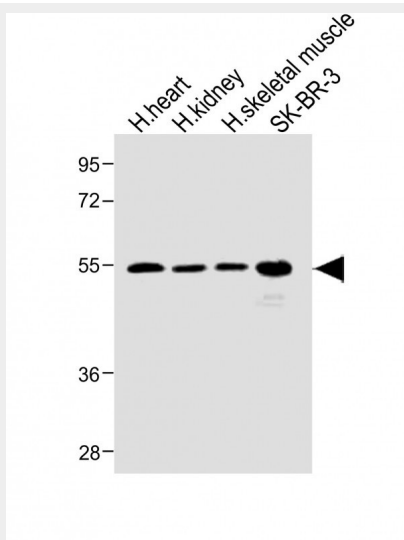
Provided below are standard protocols that you may find useful for product applications.

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

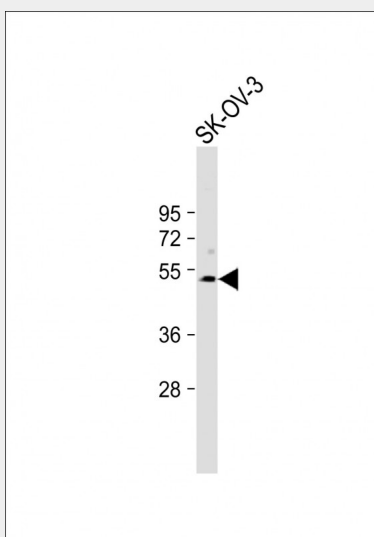
SPNS2 Antibody (N-term) - Images



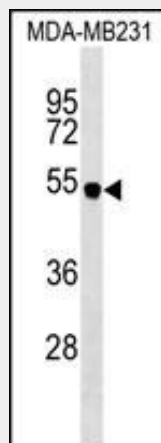
All lanes : Anti-SPNS2 Antibody (N-term) at 1:1000 dilution Lane 1: human brain tissue lysate Lane 2: 293 whole cell lysate Lane 3: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



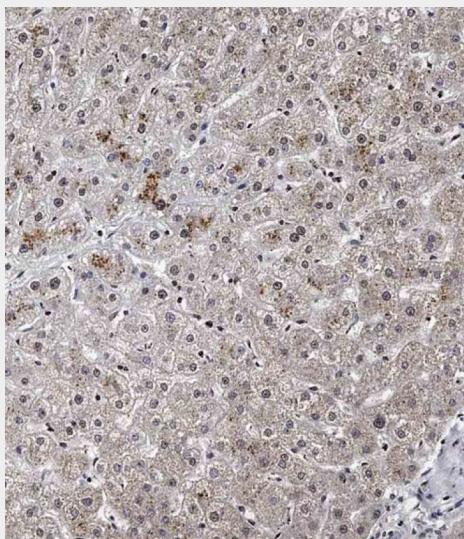
All lanes : Anti-SPNS2 Antibody (N-term) at 1:1000 dilution Lane 1: Human heart lysate Lane 2: Human kidney lysate Lane 3: Human skeletal muscle lysate Lane 4: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



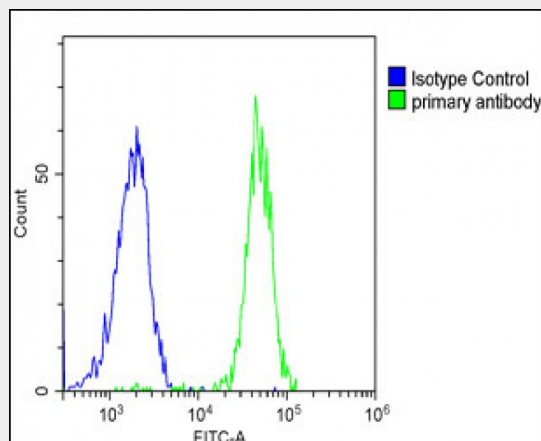
Anti-SPNS2 Antibody (N-term) at 1:1000 dilution + SK-OV-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



SPNS2 Antibody (N-term) (Cat. #AP17856a) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the SPNS2 antibody detected the SPNS2 protein (arrow).



Immunohistochemical analysis of AP17856A on paraffin-embedded Human liver tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9.0). Samples were incubated with primary antibody (1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing SK-OV-3 cells stained with AP17856A (green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

SPNS2 Antibody (N-term) - Background

Sphingolipid transporter required for migration of myocardial precursors. Transports sphingosine 1-phosphate (S1P), a secreted lipid mediator that plays critical roles in cardiovascular, immunological, and neural development and function. Mediates the export of S1P from cells in the extraembryonic yolk syncytial layer (YSL), thereby regulating myocardial precursor migration.

SPNS2 Antibody (N-term) - References

Kawahara, A., et al. Science 323(5913):524-527(2009)
Yanagisawa, H., et al. Cell Death Differ. 10(7):798-807(2003)