10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPNS2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17856a

Product Information

Application	IHC-P, WB, FC, E
Primary Accession	Q8IVW8
Other Accession	NP_001118230.1
Reactivity	Human, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38003
Calculated MW	58044
Antigen Region	68-94

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	IHC-P~~1:100 WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration.
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.

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:21084291, PubMed:23180825). 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

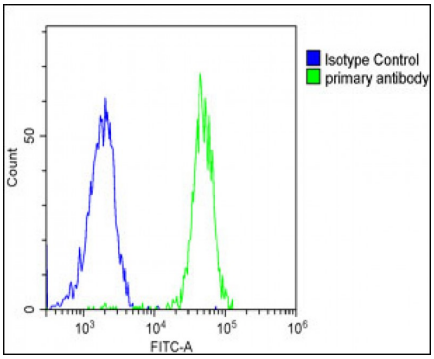
Background

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.

References

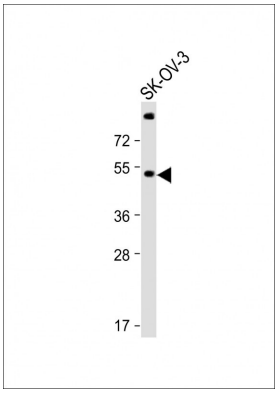
Kawahara, A., et al. Science 323(5913):524-527(2009)
Yanagisawa, H., et al. Cell Death Differ. 10(7):798-807(2003)

Images



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 icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. 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 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-SPNS2 Antibody (N-term) at 1:2000 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.



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