

SGPL1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12736a

Product Information

Application WB, IHC-P, E **Primary Accession** <u>095470</u> **Other Accession** NP 003892.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB32402 **Calculated MW** 63524 72-101 **Antigen Region**

Additional Information

Gene ID 8879

Other Names Sphingosine-1-phosphate lyase 1, S1PL, SP-lyase 1, SPL 1, hSPL,

Sphingosine-1-phosphate aldolase, SGPL1, KIAA1252

Target/Specificity This SGPL1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 72-101 amino acids from the

N-terminal region of human SGPL1.

Dilution WB~~1:1000 IHC-P~~1:100~500 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 SGPL1 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name SGPL1 (HGNC:10817)

Function Cleaves phosphorylated sphingoid bases (PSBs), such as

sphingosine-1-phosphate, into fatty aldehydes and phosphoethanolamine.

Elevates stress-induced ceramide production and apoptosis

(PubMed: 11018465, PubMed: 14570870, PubMed: 24809814, PubMed: 28165339). Required for global lipid homeostasis in liver and cholesterol homeostasis in fibroblasts. Involved in the regulation of proinflammatory response and neutrophil trafficking. Modulates neuronal autophagy via phosphoethanolamine production which regulates accumulation of aggregate-prone proteins such as APP (By similarity). Seems to play a role in establishing neuronal contact sites and axonal maintenance (By similarity).

Cellular Location Endoplasmic reticulum membrane; Single-pass type III membrane protein;

Cytoplasmic side {ECO:0000250|UniProtKB:Q8R0X7}

Tissue Location Ubiquitously expressed (PubMed:11018465, PubMed:28165343). Expressed in

fetal and adult adrenal gland (at protein level) (PubMed:28165343).

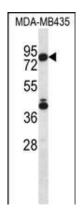
Background

SGPL1 cleaves phosphorylated sphingoid bases (PSBs), such as sphingosine-1-phosphate, into fatty aldehydes and phosphoethanolamine. Elevates stress-induced ceramide production and apoptosis.

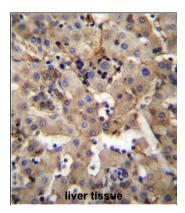
References

Seo, Y.J., et al. J. Virol. 84(16):8124-8131(2010) Vogel, P., et al. PLoS ONE 4 (1), E4112 (2009): Peest, U., et al. J. Cell. Biochem. 104(3):756-772(2008) Morgan, A.R., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 144B (6), 762-770 (2007): Oskouian, B., et al. Proc. Natl. Acad. Sci. U.S.A. 103(46):17384-17389(2006)

Images



SGPL1 Antibody (N-term) (Cat. #AP12736a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the SGPL1 antibody detected the SGPL1 protein (arrow).



SGPL1 Antibody (N-term) (Cat. #AP12736a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SGPL1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.