

SGPL1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12736a

Product Information

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

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 (<u>HGNC:10817</u>)
Function	Cleaves phosphorylated sphingoid bases (PSBs), such as sphingosine-1-phosphate, into fatty aldehydes and phosphoethanolamine. Elevates stress-induced ceramide production and apoptosis

	(PubMed: <u>11018465</u> , PubMed: <u>14570870</u> , PubMed: <u>24809814</u> , PubMed: <u>28165339</u>). Required for global lipid homeostasis in liver and cholesterol homeostasis in fibroblasts. Involved in the regulation of pro- inflammatory 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).

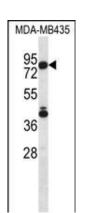
Background

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

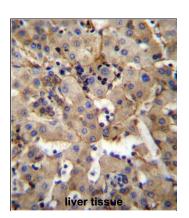
References

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'.