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

SMPD4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5904a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NXE4
Other Accession	NP_060221.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24190
Calculated MW	97810
Antigen Region	80-108

Additional Information

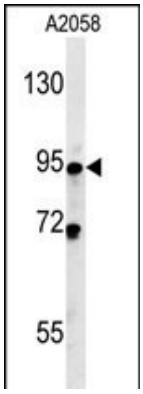
Gene ID	55627
Other Names	Sphingomyelin phosphodiesterase 4, Neutral sphingomyelinase 3, nSMase-3, nSMase3, Neutral sphingomyelinase III, SMPD4, KIAA1418
Target/Specificity	This SMPD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 80-108 amino acids from the N-terminal region of human SMPD4.
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	SMPD4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

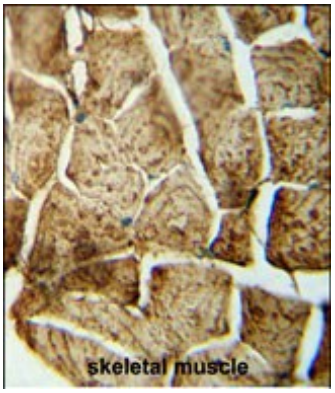
Name	SMPD4 (HGNC:32949)
Synonyms	KIAA1418, SKNY

Function	Catalyzes the hydrolysis of membrane sphingomyelin to form phosphorylcholine and ceramide (PubMed:16517606, PubMed:25180167). It has a relevant role in the homeostasis of membrane sphingolipids, thereby influencing membrane integrity, and endoplasmic reticulum organization and function (PubMed:31495489). May sensitize cells to DNA damage-induced apoptosis (PubMed:18505924). In skeletal muscle, mediates TNF-stimulated oxidant production (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein. Golgi apparatus membrane; Single-pass membrane protein. Nucleus envelope. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q6ZPR5}
Tissue Location	Widely expressed, with highest levels in heart and skeletal muscle. [Isoform 2]: Expressed in skeletal muscle but a lower levels than isoform 1 (at protein level)

Images



SMPD4 Antibody (N-term) (Cat. #AP5904a) western blot analysis in A2058 cell line lysates (35ug/lane).This demonstrates the SMPD4 antibody detected the SMPD4 protein (arrow).



SMPD4 antibody (N-term) (Cat. #AP5904a) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SMPD4 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- High expression of SMPD4 promotes liver cancer and is associated with poor prognosis.

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