

# 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 Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB24190 Calculated MW 97810 80-108 **Antigen Region** 

## **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).

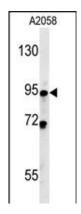
**Cellular Location** 

Endoplasmic reticulum membrane; Single-pass membrane protein. Golgi apparatus membrane; Single-pass membrane protein. Nucleus envelope. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q6ZPR5}

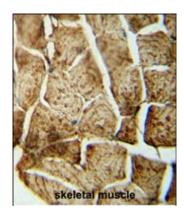
**Tissue Location** 

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.

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