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SMPD4 Rabbit pAb

Catalog # AP96869

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9NXE4
Other Accession	Q9NXE4
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	97810
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SMPD4
Epitope Specificity	201-300/827
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SMN family. Contains 1 Tudor domain.
SUBUNIT	Associates with spliceosomes. Associates with U4/U5/U6 tri-snRNP and with U2 snRNP.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Sphingomyelinases (EC 3.1.4.12), such as SMPD4, catalyze the hydrolysis of membrane sphingomyelin to form phosphorylcholine and ceramide (Krut et al., 2006 [PubMed 16517606]).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID	55627
Other Names	NEDMABA; NEDMEBA; NET13; NSMASE-3; NSMASE3; SKNY; 4122402O22Rik; RGD1310674; NSMA3_HUMAN; SMPD4; Neutral sphingomyelinase 3 (nSMase-3 | nSMase3); Neutral sphingomyelinase III; 3.1.4.12; KIAA1418; NSMA3_MOUSE; sphingomyelin phosphodiesterase 4; sphingomyelin phosphodiesterase 4, neutral membrane (neutral sphingomyelinase-3); neutral sphingomyelinase-3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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)

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