

Rabbit Acid Sphingomyelinase Polyclonal Antibody | anti-SMPD1 antibody

Acid Sphingomyelinase Antibody

CATALOG # AAA289658	HOST Rabbit	REACTIVITY Human, mouse, rat	APPLICATIONS ELISA, Western Blot
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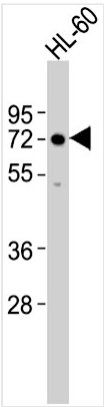
PRODUCT SYNONYMS

Acid Sphingomyelinase; Polyclonal Antibody; Acid Sphingomyelinase Antibody; Sphingomyelin phosphodiesterase; Acid sphingomyelinase; aSMase; SMPD1; ASM; anti-SMPD1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse, rat
Clonality	Polyclonal
Specificity	KLH conjugated synthetic peptide derived from human Acid Sphingomyelinase
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Sequence Positions	421-480
Sequence Length	628
Applicable Applications for anti-SMPD1 antibody	ELISA, WB (Western Blot)
Function	Converts sphingomyelin to ceramide (PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed:). Exists as two enzymatic forms that arise from alternative trafficking of a single protein precursor, one that is targeted to the endolysosomal compartment, whereas the other is released extracellularly (PubMed:21098024, PubMed:9660788, PubMed:20807762). However, in response to various forms of stress, lysosomal exocytosis may represent a major source of the secretory form (PubMed: , PubMed: , PubMed: , PubMed: , PubMed:).
Cellular Location	Lysosome. Lipid droplet. Secreted. Note=The secreted form is induced in a time- and dose-dependent by IL1B and TNF as well as stress and viral infection. This increase of the secreted form seems to be due to exocytosis of the lysosomal form and is Ca(2+)-dependent (PubMed:20807762, PubMed:22573858, PubMed:20530211). Secretion is dependent of phosphorylation at Ser-510 (PubMed:17303575). Secretion is induced by inflammatory mediators such as IL1B, IFNG or TNF as well as infection with bacteria and viruses (PubMed:12563314, PubMed:20807762)
Preparation and Storage	Store at -20 °C. Stable for 12 months from date of receipt

IMAGES



WB (Western Blot)
Anti-Acid Sphingomyelinase Antibody at 1:1000 dilution + HL-60 whole cell lysates
Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 70 kDa
Blocking/Dilution buffer: 5% NFDm/TBST.

ADDITIONAL INFORMATION

Related Product Information for anti-SMPD1 antibody	Converts sphingomyelin to ceramide. Also has phospholipase C activities toward 1,2-diacylglycerolphosphocholine and 1,2-diacylglycerolphosphoglycerol. Isoform 2 and isoform 3 have lost catalytic activity.
Product Categories/Family for anti-SMPD1 antibody	Cell Biology; Metabolism; Signal transduction
References	Schuchman E.H.,et al.J. Biol. Chem. 266:8531-8539(1991). Newrzella D.,et al.Biol. Chem. Hoppe-Seyler 373:1233-1238(1992). Schuchman E.H.,et al.Genomics 12:197-205(1992). Ida H.,et al.J. Biochem. 114:15-20(1993). Ota T.,et al.Nat. Genet. 36:40-45(2004).

NCBI AND UNIPROT INFORMATION

NCBI GI #	56117840
NCBI GeneID	6609
NCBI Accession #	NP_000534.3
NCBI GenBank Nucleotide #	NM_000543.4
UniProt Accession #	P17405; P17406; Q13811; Q16837; Q16841; A8K8M3; E9PKS3
Molecular Weight	70 kDa
NCBI Official Full Name	sphingomyelin phosphodiesterase isoform 1
NCBI Official Synonym Full Names	sphingomyelin phosphodiesterase 1, acid lysosomal
NCBI Official Symbol	SMPD1
NCBI Official Synonym Symbols	ASM; NPD; ASMASE
NCBI Protein Information	sphingomyelin phosphodiesterase
UniProt Protein Name	Sphingomyelin phosphodiesterase
UniProt Gene Name	SMPD1
UniProt Synonym Gene Names	ASM; aSMase
UniProt Entry Name	ASM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/acid-sphingomyelinase-antibody-western-blot-elisa/289658>