

SMPD2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2822a

Product Information

Application	WB, FC, E
Primary Accession	O60906
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17400
Calculated MW	47646
Antigen Region	9-35

Additional Information

Gene ID	6610
Other Names	Sphingomyelin phosphodiesterase 2, Lyso-platelet-activating factor-phospholipase C, Lyso-PAF-PLC, Neutral sphingomyelinase, N-SMase, nSMase, SMPD2
Target/Specificity	This SMPD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-35 amino acids from the N-terminal region of human SMPD2.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	SMPD2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SMPD2 (HGNC:11121)
Function	Catalyzes, at least in vitro, the hydrolysis of sphingomyelin to form ceramide and phosphocholine (PubMed: 10608884). Also hydrolyzes 1-O-alkyl-2-lyso-sn-glycero-3-phosphocholine (lyso-platelet-activating factor)

in vivo (PubMed:[10608884](#)). Also acts on 1-acyl-2-lyso-sn-glycero-3-phosphocholine (lyso-PC) and sphingosylphosphocholine (PubMed:[10608884](#), PubMed:[14741383](#)).

Cellular Location

Cell membrane {ECO:0000250 | UniProtKB:O70572}; Multi-pass membrane protein

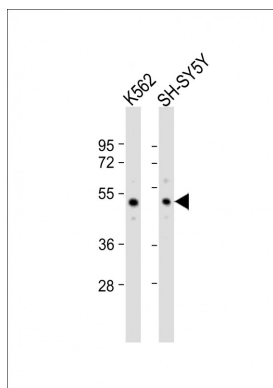
Background

SMPD2 converts sphingomyelin to ceramide and hydrolyzes 1-acyl-2-lyso-sn-glycero-3-phosphocholine (lyso-PC) and 1-O-alkyl-2-lyso-sn-glycero-3-phosphocholine (lyso-platelet-activating factor). The physiological substrate seems to be Lyso-PAF.

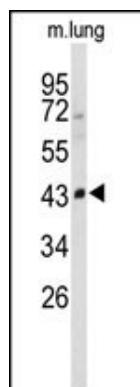
References

Kim,H.T., J. Dermatol. Sci. 46 (2), 143-146 (2007)
Tani,M., J. Biol. Chem. 282 (13), 10047-10056 (2007)
Marchesini,N.,J. Biol. Chem. 279 (24), 25101-25111 (2004)

Images

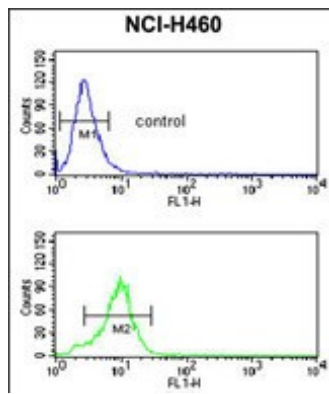


All lanes : Anti-SMPD2 Antibody (N-term) at 1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of SMPD2 Antibody (N-term) (Cat. #AP2822a) in mouse lung tissue lysates (35ug/lane). SMPD2 (arrow) was detected using the purified Pab.

SMPD2 Antibody (N-term) (Cat. #AP2822a) flow cytometric analysis of NCI-H460 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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