

For Research Use Only

# SMPD2 Recombinant antibody

Catalog Number: 83520-3-RR



## Basic Information

<b>Catalog Number:</b> 83520-3-RR	<b>GenBank Accession Number:</b> BC000038	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6610	<b>CloneNo.:</b> 240400B5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O60906	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> sphingomyelin phosphodiesterase 2, neutral membrane (neutral sphingomyelinase)	
<b>Immunogen Catalog Number:</b> AG7367	<b>Calculated MW:</b> 48 kDa	
	<b>Observed MW:</b> 48 kDa	

## Applications

<b>Tested Applications:</b> WB, FC (Intra), ELISA	<b>Positive Controls:</b> WB : HepG2 cells, HEK-293T cells, MOLT-4 cells, SH-SY5Y cells
<b>Species Specificity:</b> human	

## Background Information

SMPD2, Sphingomyelin phosphodiesterase 2, is also named as Lyso-platelet-activating factor-phospholipase C and neutral sphingomyelinase (nSMase). It is involved in the sphingolipid metabolism pathway, which can catalyze the hydrolysis of sphingomyelin to form ceramide and phosphocholine. Smpd2/Smpd3 double-mutant mice were found to have severe retardation of late embryonic and postnatal growth and delayed puberty, belonging to hypothalamus-induced combined pituitary hormone deficiency (PubMed: 15764706).

## Storage

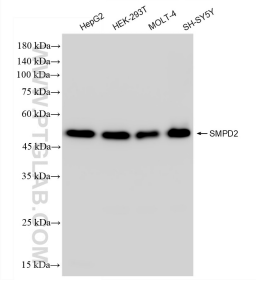
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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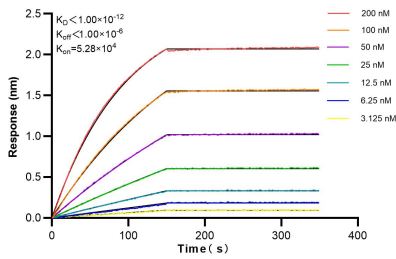
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83520-3-RR (SMPD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

1x10<sup>6</sup> U2OS cells were intracellularly stained with 0.25 ug SMPD2 Recombinant antibody (83520-3-RR, Clone:240400B5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug SMPD2 Recombinant antibody (83520-3-RR, Clone:240400B5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83520-3-RR against Human SMPD2 were performed. The affinity constant is below 1 pM.