For Research Use Only

SMPD1,ASM Polyclonal antibody

Catalog Number:30197-1-AP



Purification Method:

WB 1:1000-1:4000 IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

Basic Information

 Catalog Number:
 GenBank Accession Number:

 30197-1-AP
 BC041164

 Size:
 GeneID (NCBI):

 1000 ug/ml
 6609

 Source:
 UNIPROT ID:

 Pabbit
 P17/05

Rabbit P17405
Isotype: Full Name:

IgG sphingomyelin phosphodiesterase 1,
Immunogen Catalog Number acid lysosomal

Immunogen Catalog Number: acid lysosomal
AG32479 Calculated MW:
70 kDa

Observed MW: 68-70 kDa

Applications

Tested Applications: WB, IF/ICC, ELISA Species Specificity:

human, mouse

Positive Controls:

WB: human placenta tissue,
IF/ICC: NIH/3T3 cells,

Background Information

SMPD1(Sphingomyelin phosphodiesterase) is also named as ASM and belongs to the acid sphingomyelinase family. It is an important enzyme in sphingolipid metabolism and plays key roles in apoptosis, immunity, development, and cancer. The deficient activity of this enzyme results in Types A and B Niemann-Pick disease (NPD). This protein has 4 isoforms produced by alternative splicing. SMPD1 can produce a 60 kDa peptide with its signal peptide missing. As a catalytically inactive 75kDa procursor, after signal peptide cleavage, it was processed into smaller non-glycosylated and rapidly degraded 57kDa form in ER-Golgi complex. And 70kDa mature form with major catalytic activity located in lysosomes, which is further processed into 52kDa form (PMID:25853898, PMID:26499107).

Storage

Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

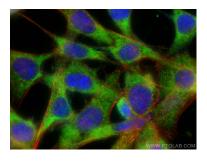
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30197-1-AP (SMPD1,ASM antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using SMPD1,ASM antibody (30197-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).