

# SMPDL3B (N-18): sc-68823

## BACKGROUND

SMPDL3B (sphingomyelin phosphodiesterase, acid-like 3B), also known as ASMLPD or ASML3B (acid sphingomyelinase-like phosphodiesterase 3B), is a 455 amino acid secreted protein belonging to the acid sphingomyelinase family. It is expressed in granulosa cells of the ovarian follicle and is a homolog of ASM (acid sphingomyelinase). ASM is a lysosomal protein that hydrolyzes sphingomyelin to ceramide and phosphocholine playing an important role in apoptosis of germ cell lines. Deficiency of ASM is associated with type A and type B Niemann-Pick disease. Type A is a fatal neurodegenerative disorder seen in infancy and resulting in death by age three, whereas type B is a non-neuropathic disease with a later onset.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SMPDL3B (human) mapping to 1p35.3; Smpdl3b (mouse) mapping to 4 D2.3.

## SOURCE

SMPDL3B (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SMPDL3B of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68823 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SMPDL3B (N-18) is recommended for detection of SMPDL3B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SMPDL3B (N-18) is also recommended for detection of SMPDL3B in additional species, including canine and bovine.

Suitable for use as control antibody for SMPDL3B siRNA (h): sc-76525, SMPDL3B siRNA (m): sc-76526, SMPDL3B shRNA Plasmid (h): sc-76525-SH, SMPDL3B shRNA Plasmid (m): sc-76526-SH, SMPDL3B shRNA (h) Lentiviral Particles: sc-76525-V and SMPDL3B shRNA (m) Lentiviral Particles: sc-76526-V.

Molecular Weight of SMPDL3B: 51 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.