

## Product datasheet for **AP05301PU-N**

### NSMase2 (SMPD3) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western blot (1:400 starting dilution). Protein appears to run lower than expected protein molecular weight. However, antibody is specific for the protein and band blocks when blocking peptide used.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide derived from human sphingomyelin phosphodiesterase 3
Specificity:	This antibody detects Sphingomyelin Phosphodiesterase 3, predominantly expressed in the brain.
Formulation:	Phosphate buffered saline with 0.08% sodium azide State: Aff - Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the product (in aliquots) at -20 °C. Can be shipped at 2 - 8 °C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	sphingomyelin phosphodiesterase 3
Database Link:	<a href="#">Entrez Gene 55512 Human Q9NY59</a>



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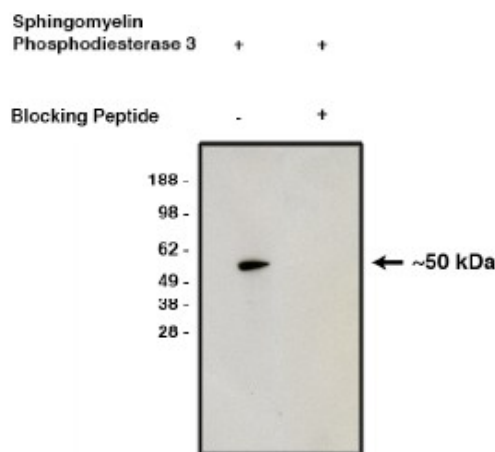
**Background:** Sphingomyelin phosphodiesterase 3 catalyzes the hydrolysis of sphingomyelin to form ceramide and phosphocholine. Ceramide mediates numerous cellular functions, such as apoptosis and growth arrest, and is capable of regulating these two cellular events independently. It also hydrolyzes sphingosylphosphocholine. Sphingomyelin phosphodiesterase 3 regulates the cell cycle by acting as a growth suppressor in confluent cells. It likely acts as a regulator of postnatal development and participates in bone and dentin mineralization. It is activated by unsaturated fatty acids and phosphatidylserine. It is predominantly expressed in the brain.

**Synonyms:** Sphingomyelin phosphodiesterase 3, Neutral sphingomyelinase II, Neutral sphingomyelinase 2

**Protein Families:** Transmembrane

**Protein Pathways:** Metabolic pathways, Sphingolipid metabolism

**Product images:**



Western blot using affinity purified nSMase2 antibody on human brain lysate. Antibody without (lane 1) or with (lane 2) blocking peptide. Visualized using mouse anti-rabbit HRP conjugated at 1:200K dilution.