



Human SMPD3 peptide (DAG-P1846)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen Description | 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 2 cellular events independently. Also hydrolyzes sphingosylphosphocholine. Regulates the cell cycle by acting as a growth suppressor in confluent cells. Probably acts as a regulator of postnatal development and participates in bone and dentin mineralization. |
| Specificity | Predominantly expressed in brain. |
| Purity | 70 - 90% by HPLC. |
| Conjugate | Unconjugated |
| Sequence Similarities | Belongs to the neutral sphingomyelinase family. |
| Format | Liquid |
| Preservative | None |
| Storage | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

GENE INFORMATION

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| Gene Name | SMPD3 sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II) [Homo sapiens (human)] |
| Official Symbol | SMPD3 |
| Synonyms | SMPD3; sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II); NSMASE2; sphingomyelin phosphodiesterase 3; nSMase-2; neutral sphingomyelinase 2; neutral sphingomyelinase II; |

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| Entrez Gene ID | 55512 |
| mRNA Refseq | NM_018667.3 |
| Protein Refseq | NP_061137.1 |
| UniProt ID | A8K0T6 |
| Chromosome Location | 16q22.1 |
| Pathway | Ceramide signaling pathway, organism-specific biosystem; Glycosphingolipid metabolism, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Sphingolipid metabolism, organism-specific biosystem; Sphingolipid metabolism, organism-specific biosystem; Sphingolipid metabolism, conserved biosystem; sphingomyelin metabolism/ceramide salvage, organism-specific biosystem; |
| Function | metal ion binding; sphingomyelin phosphodiesterase activity; |