

Datasheet for ABIN7554809  
**SMPD3 Protein (AA 1-655) (His tag)**



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## Overview

Quantity:	1 mg
Target:	SMPD3
Protein Characteristics:	AA 1-655
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMPD3 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant SMPD3 Protein expressed in mammalian cells.
Sequence:	<p>MVLYTTFPFN SCLSALHCVS WALIFPCYWL VDRLAASFIP TTYEKRQRAD DPCCLQLLCT ALFTPIYLAL LVASLPFAFL GFLFWSPLQS ARRPYIYSRL EDKGLAGGAA LLSEWKGTGP GKSFCFATAN VCLLPDSLAR VNNLFNTQAR AKEIGQRIRN GAARPQIKIY IDSPTNTSIS AASFSSLVSP QGGDGVARAV PGSIKRTASV EYKGDGGRHP GDEAANGPAS GDPVDSSSPE DACIVRIGGE EGGRPPEADD PVPGGQARNG AGGGPRGQTP NHNQDGDGSG SLGSPSASRE SLVKGRAGPD TSASGEPGAN SKLLYKASVW KAAAARRRRH PDEAFDHEVS AFFPANLDFL CLQEVFDKRA ATKLKEQLHG YFEYILYDVG VYGCQGCCSF KCLNSGLLFA SRYPIMDVAY HCYPNKCND ALASKALFL KVQVGSTPQD QRIVGYIACT HLHAPQEDSA IRCGQLDLLQ DWLADFRKST SSSSAANPEE LVAFDVWCGD FNFDNCSSDD KLEQQHSLFT HYRDPCLRGP GEEKPWAIGT LLDTNGLYDE DVCTPDNLQK VLESEEGRRE YLAFPTSKSS GQKGRKELLK GNRRIDYML HAE EGLCPDW KAEVEEFSFI TQLSGLTDHL PVAMRLMVSS GEEEA <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression</b></p>

## Product Details

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**system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

## Target Details

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Target: SMPD3

Alternative Name: SMPD3 ([SMPD3 Products](#))

Background: Sphingomyelin phosphodiesterase 3 (EC 3.1.4.12) (Neutral sphingomyelinase 2) (nSMase-2) (nSMase2) (Neutral sphingomyelinase II),FUNCTION: 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 (PubMed:10823942, PubMed:14741383, PubMed:15051724). Binds to anionic phospholipids (APLs) such as phosphatidylserine (PS) and phosphatidic acid (PA) that modulate enzymatic activity and subcellular location. May be

## Target Details

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involved in IL-1-beta-induced JNK activation in hepatocytes (By similarity). May act as a mediator in transcriptional regulation of NOS2/iNOS via the NF-kappa-B activation under inflammatory conditions (By similarity). {ECO:0000250|UniProtKB:O35049, ECO:0000250|UniProtKB:Q9JJY3, ECO:0000269|PubMed:10823942, ECO:0000269|PubMed:14741383, ECO:0000269|PubMed:15051724}.

Molecular Weight: 71.1 kDa

UniProt: [Q9NY59](#)

Pathways: [Hormone Transport](#)

## Application Details

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Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months