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Datasheet for ABIN3137299

SMPD3 Protein (AA 1-655) (His tag)

1 Image

Overview

Quantity:	1 mg
Target:	SMPD3
Protein Characteristics:	AA 1-655
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMPD3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: MVLYTTPFPN SCLSALHAVS WALIFPCYWL VDRLLASFIP TTYEKRQRAD DPCCLQLFCT
VLFTPVYLAL LVAALPFAFL GFIFWSPLQS ARRPPYSYSRL EDKNPAGGAA LLSEWKGTGA
GKSFCFATAN VCLLPDSLAR LNNVFNTQAR AKEIGQRIRN GAARPQIKIY IDSPTNTSIS
AASFSSLVSP QGGDGSRAVP GSIKRTASVE YKGDGGRHPS DEAANGPASG EQADGSLEDS
CIVRIGGEEG GRPQEADDDPA AGSQARNGAG GTPKGQTPNH NQRDGDGSGSL GSPSASRESL
VKARAGQDSG GSGEPGANSK LLYKTSVVKK AAARRRRHPD EAFDHEVSAF FPANLDFLCL
QEVFDKRAAA KLKEQLHGYF EYILYDVG VY GCHGCCNFKC LNSGLFFASR YPVMDVAYHC
YPNGCSFDAL ASKGALFLKV QVGSTPQDQR IVGYIACHTL HAPPEDSAVR CEQLDLLQDW
LADFRKSTSS TSTANPEELV VFDVICGDLN FDNCSDDKL EQQHSFLTRY KDPCRLGPGE
EKPWAIGTLL DTNGLYDEDV CTPDNLQKVL ESEEGRREYL AFPTSKSPGA GQKGRKDLLK
GNRRIDYML HAE EGLCPDW KAEVEEFSI TQLSGLTDHL PVAMRLMVSA GEEEA

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a

special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Smpd3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Grade:

Crystallography grade

Target Details

Target:	SMPD3
Alternative Name:	Smpd3 (SMPD3 Products)
Background:	<p>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. Acts as a regulator of postnatal development and participates in bone and dentin mineralization. Overexpression enhances cell death, suggesting that it may be involved in apoptosis control.</p> <p>{ECO:0000269 PubMed:15051724, ECO:0000269 PubMed:15764706, ECO:0000269 PubMed:15929065, ECO:0000269 PubMed:16025116}.</p>
Molecular Weight:	72.2 kDa Including tag.
UniProt:	Q9JJY3
Pathways:	Hormone Transport

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process