Datasheet for ABIN3137299

SMPD3 Protein (AA 1-655) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SMPD3
Protein Characteristics:	AA 1-655
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMPD3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MVLYTTPFPN SCLSALHAVS WALIFPCYWL VDRLLASFIP TTYEKRQRAD DPCCLQLFCT VLFTPVYLAL LVAALPFAFL GFIFWSPLQS ARRPYSYSRL EDKNPAGGAA LLSEWKGTGA GKSFCFATAN VCLLPDSLAR LNNVFNTQAR AKEIGQRIRN GAARPQIKIY IDSPTNTSIS AASFSSLVSP QGGDGSRAVP GSIKRTASVE YKGDGGRHPS DEAANGPASG EQADGSLEDS CIVRIGGEEG GRPQEADDPA AGSQARNGAG GTPKGQTPNH NQRDGDSGSL GSPSASRESL VKARAGQDSG GSGEPGANSK LLYKTSVVKK AAARRRRHPD EAFDHEVSAF FPANLDFLCL QEVFDKRAAA KLKEQLHGYF EYILYDVGVY GCHGCCNFKC LNSGLFFASR YPVMDVAYHC YPNGCSFDAL ASKGALFLKV QVGSTPQDQR IVGYIACTHL HAPPEDSAVR CEQLDLLQDW LADFRKSTSS TSTANPEELV VFDVICGDLN FDNCSSDDKL EQQHSLFTRY KDPCRLGPGE EKPWAIGTLL DTNGLYDEDV CTPDNLQKVL ESEEGRREYL AFPTSKSPGA GQKGRKDLLK GNGRRIDYML HAEEGLCPDW KAEVEEFSFI TQLSGLTDHL PVAMRLMVSA GEEEA

Product Details

	Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits: • Made in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • 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. 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. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Product Details

Grade:	custom-made

Target Details

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:15051724, PubMed:15764706, PubMed:15929065, PubMed:16025116). Binds to anionic phospholipids (APLs) such as phosphatidylserine (PS) and phosphatidic acid (PA) that modulate enzymatic activity and subcellular location (PubMed:21550973). May be 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:0000269|PubMed:15051724, ECO:0000269|PubMed:15764706, ECO:0000269|PubMed:15929065, ECO:0000269|PubMed:16025116, ECO:0000269|PubMed:21550973}.
Molecular Weight:	71.2 kDa
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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for

Application Details

	protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months