Datasheet for ABIN3107643

ZDHHC3 Protein (AA 1-299) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	ZDHHC3
Protein Characteristics:	AA 1-299
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZDHHC3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MMLIPTHHFR NIERKPEYLQ PEKCVPPPYP GPVGTMWFIR DGCGIACAIV TWFLVLYAEF VVLFVMLIPS RDYVYSIING IVFNLLAFLA LASHCRAMLT DPGAVPKGNA TKEFIESLQL KPGQVVYKCP KCCSIKPDRA HHCSVCKRCI RKMDHHCPWV NNCVGENNQK YFVLFTMYIA LISLHALIMV GFHFLHCFEE DWTKCSSFSP PTTVILLILL CFEGLLFLIF TSVMFGTQVH SICTDETGIE QLKKEERRWA KKTKWMNMKA VFGHPFSLGW ASPFATPDQG KADPYQYVV

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 by multi-step, protein-specific process to ensure correct folding and modification.

- 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 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.

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Product Details

Grade:	Crystallography grade

Target Details

Target:	ZDHHC3
Alternative Name:	ZDHHC3 (ZDHHC3 Products)
Background:	Palmitoyltransferase ZDHHC3 (EC 2.3.1.225) (Acyltransferase ZDHHC3) (EC 2.3.1.-) (Protein DHHC1) (Zinc finger DHHC domain-containing protein 3) (DHHC-3),FUNCTION: Golgi-localized palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates (PubMed:19001095, PubMed:21926431, PubMed:22240897, PubMed:23034182, PubMed:22314500). Has no stringent fatty acid selectivity and in addition to palmitate can also transfer onto target proteins myristate from tetradecanoyl-CoA and stearate from octadecanoyl-CoA (By similarity). Plays an important role in G protein-coupled receptor signaling pathways involving GNAQ and potentially other heterotrimeric G proteins by regulating their dynamic association with the plasma membrane (PubMed:19001095). Palmitoylates ITGA6 and ITGB4, thereby regulating the alpha-6/beta-4 integrin localization, expression and function in cell adhesion to laminin (PubMed:22314500). Plays a role in the TRAIL-activated apoptotic signaling pathway most probably through the palmitoylation and localization to the plasma membrane of TNFRSF10A (PubMed:22240897). In the brain, by palmitoylating the gamma subunit GABRG2 of GABA(A) receptors and regulating their postsynaptic accumulation, plays a role in synaptic GABAergic inhibitory function and GABAergic innervation (By similarity). Palmitoylates the neuronal protein GAP43 which is also involved in the formation of GABAergic synapses (By similarity). Palmitoylates NCDN thereby regulating its association with endosome membranes (By similarity). Probably palmitoylates PRCD and is involved in its proper localization within the photoreceptor (By similarity). Could mediate the palmitoylation of NCAM1 and regulate neurite outgrowth (By similarity). Could palmitoylate DNAJC5 and regulate its localization to Golgi membranes (By similarity). Also constitutively palmitoylates DLG4 (By similarity). May also palmitoylate SNAP25 (By similarity). Could palmitoylate the glutamate receptors GRIA1 and GRIA2 but this has not been confirmed in vivo (By similarity). Could also palmitoylate the D(2) dopamine receptor DRD2 (PubMed:26535572). May also palmitoylate LAMTOR1, promoting its localization to lysosomal membranes (PubMed:35893977). {ECO:0000250|UniProtKB:Q8R173, ECO:0000269|PubMed:19001095, ECO:0000269|PubMed:21926431, ECO:0000269|PubMed:22240897, ECO:0000269|PubMed:22314500, ECO:0000269|PubMed:23034182, ECO:0000269|PubMed:26535572, ECO:0000269|PubMed:35893977}., FUNCTION: May also function as a calcium transporter. {ECO:0000250|UniProtKB:Q8R173}.

Target Details

Molecular Weight:	34.2 kDa
UniProt:	Q9NYG2

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 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. If you have a special request, please contact us.
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

