

Datasheet for ABIN3108093
ZDHHC2 Protein (AA 1-367) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	ZDHHC2
Protein Characteristics:	AA 1-367
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZDHHC2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MAPSGPGSSA RRRRCRRVLYW IPVVFITLLL GWSYYAYAIQ LCIVSMENGT EQVVCLMAYH
LLFAMFVWSY WKTIFTLPMN PSKEFHLSYA EKDLLEREPR GEAHQEVLRR AAKDLPIYTR
TMSGAIRYCD RCQLIKPDRG HHCSVCDKCI LKMDHHCPCWV NNCVGFNSYK FLLFLAYSL
LYCLFIAATD LQYFIKFTN GLPDTQAKFH IMFLFFAAAM FSVSLSSLFG YHCWLVSXNK
STLEAFRSPV FRHGTDKNGF SLGFSKNMRQ VFGDEKKYWL LPIFSSLGDG CSFPTCLVNG
DPEQASTPAG LNSTAKNLEN HQFPAKPLRE SQSHLLTDSQ SWTESSINPG KCKAGMSNPA
LTMENET

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.

Product Details

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)
Grade:	Crystallography grade

Target Details

Target:	ZDHHC2
Alternative Name:	ZDHHC2 (ZDHHC2 Products)
Background:	<p>Palmitoyltransferase ZDHHC2 (EC 2.3.1.225) (Acyltransferase ZDHHC2) (EC 2.3.1.-) (Reduced expression associated with metastasis protein) (Ream) (Reduced expression in cancer protein) (Rec) (Zinc finger DHHC domain-containing protein 2) (DHHC-2) (Zinc finger protein 372),FUNCTION: Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and is involved in a variety of cellular processes (PubMed:18508921, PubMed:18296695, PubMed:19144824, PubMed:21343290, PubMed:22034844, PubMed:23793055). 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). In the nervous system, plays a role in long term synaptic potentiation by palmitoylating AKAP5 through which it regulates protein trafficking from the dendritic recycling endosomes to the plasma membrane and controls both structural and functional plasticity at excitatory synapses (By similarity). In dendrites, mediates the palmitoylation of DLG4 when synaptic activity decreases and induces synaptic clustering of DLG4 and associated AMPA-type glutamate receptors (By similarity). Also mediates the de novo and turnover palmitoylation of RGS7BP, a shuttle for Gi/o-specific GTPase-activating proteins/GAPs, promoting its localization to the plasma membrane in response to the activation of G protein-coupled receptors. Through the localization of these GTPase-activating proteins/GAPs, it also probably plays a role in G protein-coupled receptors signaling in neurons (By similarity). Also probably plays a role in cell adhesion by palmitoylating CD9 and CD151 to regulate their expression and function (PubMed:18508921). Palmitoylates the endoplasmic reticulum protein CKAP4 and regulates its localization to the plasma membrane (PubMed:18296695, PubMed:19144824). Could also palmitoylate LCK and regulate its localization to the plasma membrane (PubMed:22034844). {ECO:0000250 UniProtKB:P59267, ECO:0000250 UniProtKB:Q9JKR5, ECO:0000269 PubMed:18296695, ECO:0000269 PubMed:18508921, ECO:0000269 PubMed:19144824, ECO:0000269 PubMed:21343290, ECO:0000269 PubMed:22034844, ECO:0000269 PubMed:23793055}., FUNCTION: (Microbial infection) Promotes Chikungunya</p>

Target Details

virus (CHIKV) replication by mediating viral nsp1 palmitoylation.
{ECO:0000269|PubMed:30404808}.

Molecular Weight: 42.0 kDa

UniProt: [Q9UIJ5](#)

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.

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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