Datasheet for ABIN3107643

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

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## Overview

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| Quantity: | 250 µg |
| Target: | ZDHHC3 |
| Protein Characteristics: | AA 1-299 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This ZDHHC3 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

## Product Details

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| Brand: | AliCE® |
| 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:<br>• Made in Germany - from design to production - by highly experienced protein experts. |

## Product Details

- 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.

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| 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). |
| Grade: | custom-made |

## Target Details

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| Target: | ZDHHC3 |
| Alternative Name: | ZDHHC3 (ZDHHC3 Products) |

## Target Details

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| 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}. |
| Molecular Weight: | 34.2 kDa |
| UniProt: | Q9NYG2 |

## Application Details

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| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies |

## Application Details

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| | 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.<br>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

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer.<br>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 |