

Datasheet for ABIN3118599
ZDHHC7 Protein (AA 1-308) (Strep Tag)



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ZDHHC7
Protein Characteristics:	AA 1-308
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZDHHC7 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MQPSGHRLRD VEHHPLLAEN DNYDSSSSSS SEADVADRVW FIRDGCGMIC AVMTWLLVAY
ADVVVTFVML LPSKDFWYSV VNGVIFNCLA VLALSSHLRT MLTDPGAVPK GNATKEYMES
LQLKPGEVIY KCPKCCCIKP ERAHHC SICK RCIRKMDHHC PWVNNCVGEK NQRFFVLFTM
YIALSSVHAL ILCGFQFISC VRGQWTECSD FSPPITVILL IFLCLEGLLF FTFTA VMFGT
QIHSICNDET EIERLKSEKP TWERRLRWEG MKSVFGGPPS LLWMNPFVGF RFRRLPTRPR
KGGPEFSV

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.

Product Details

Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade: Crystallography grade

Target Details

Target: ZDHHC7

Alternative Name: ZDHHC7 ([ZDHHC7 Products](#))

Background: Palmitoyltransferase ZDHHC7 (EC 2.3.1.225) (Acyltransferase ZDHHC7) (EC 2.3.1.-) (Zinc finger DHHC domain-containing protein 7) (DHHC-7),FUNCTION: Golgi-localized palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and therefore functions in several unrelated biological processes (PubMed:22031296, PubMed:27380321, PubMed:28196865). 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). Palmitoylates sex steroid hormone receptors, including ESR1, PGR and AR, thereby regulating their targeting to the plasma membrane and their function in rapid intracellular signaling upon binding of sex hormones (PubMed:22031296). Palmitoylates GNAQ, a heterotrimeric G protein, regulating its dynamic localization at the plasma membrane and is thereby involved in GNAQ-dependent G protein-coupled receptor signaling pathways (PubMed:19001095). Functions also in ligand-induced cell death by regulating the FAS signaling pathway through the palmitoylation and stabilization of the receptor at the plasma membrane (PubMed:25301068). In epithelial cells, palmitoylates SCRIB and regulates its localization to the plasma membrane, regulating indirectly cell polarity and differentiation (PubMed:27380321). Also palmitoylates JAM3 and promotes its expression at tight junctions and regulates its function in cell migration (PubMed:28196865). Palmitoylates the glucose transporter GLUT4/SLC2A4 and controls the insulin-dependent translocation of GLUT4 to the plasma membrane (By similarity). In brain, could also palmitoylate SNAP25 and DLG4/PSD95 (By similarity). Could also palmitoylate DNAJC5 and regulate its localization to the Golgi membrane (By similarity). Could also palmitoylate NCDN (By similarity). May play a role in follicle stimulation hormone (FSH) activation of testicular Sertoli cells (By similarity). {ECO:0000250|UniProtKB:Q91WU6, ECO:0000250|UniProtKB:Q923G5, ECO:0000269|PubMed:19001095, ECO:0000269|PubMed:22031296, ECO:0000269|PubMed:25301068, ECO:0000269|PubMed:27380321, ECO:0000269|PubMed:28196865}.

Molecular Weight: 35.1 kDa

UniProt: [Q9NXF8](#)

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