

Datasheet for ABIN3137385

## EHD3 Protein (AA 1-535) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	EHD3
Protein Characteristics:	AA 1-535
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EHD3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlIcE®
Sequence:	<p>MFSWLGNDNR RKKDPEVFQT VSDGLKKLYK TKLLPLEEYY RFHEFHSPAL EDADFDNKPM</p> <p>VLLVGQYSTG KTTFIRYLLE QDFPGMRIGP EPTTDSFIIV MQGDVEGIIP GNALVVDPKK</p> <p>PFRKLNAFGN AFLNRFVCAQ LPNAVLESIS VIDTPGILSG EKQRISRGYD FAAVLEWFAE</p> <p>RVDRIILLFD AHKLDISDEF SEVIKALKNH EDKMRVVLNK ADQIETQQLM RYVGALMWSL</p> <p>GKIVNTPEVI RYVIGSFWSH PLLIPDNRKL FEAEEQDLFR DIQSLPRNAA LRKLNDLIKR</p> <p>ARLAKVHAYI ISSLKKEMPS VFGKDTKKKE LVNNLAEIYG RIEREHQISP GDFPNLKRMQ</p> <p>DQLQAQDFSK FQPLKSKLLE VVDDMLAHD I AQLMVLVRQE ETQRPVQMVK GGAFEGTLQG</p> <p>PFGHGYGEGA GEGIDDAEWV VARDKPMYDE IFYTLSPVDG KITGANAKKE MVRSKLPNSV</p> <p>LGKIWKLADI DKDGMLDDEE FALANHLIKV KLEGHELPSE LPAHLLPPSK RKVSE</p> <p><b>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</b></p>

### have a special request, please contact us.

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#### 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.

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#### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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#### Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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#### Grade:

custom-made

## Target Details

Target:	EHD3
Alternative Name:	Ehd3 ( <a href="#">EHD3 Products</a> )
Background:	<p>EH domain-containing protein 3,FUNCTION: ATP- and membrane-binding protein that controls membrane reorganization/tubulation upon ATP hydrolysis. In vitro causes tubulation of endocytic membranes (By similarity). Binding to phosphatidic acid induces its membrane tubulation activity (PubMed:26896729). Plays a role in endocytic transport. Involved in early endosome to recycling endosome compartment (ERC), retrograde early endosome to Golgi, and endosome to plasma membrane (rapid recycling) protein transport. Involved in the regulation of Golgi maintenance and morphology (By similarity). Involved in the recycling of internalized D1 dopamine receptor (By similarity). Plays a role in cardiac protein trafficking probably implicating ANK2. Involved in the ventricular membrane targeting of SLC8A1 and CACNA1C and probably the atrial membrane localization of CACNA1GG and CACNA1H implicated in the regulation of atrial myocyte excitability and cardiac conduction (PubMed:20489164, PubMed:24759929, PubMed:25825486). In conjunction with EHD4 may be involved in endocytic trafficking of KDR/VEGFR2 implicated in control of glomerular function (PubMed:21408024). Involved in the rapid recycling of integrin beta-3 implicated in cell adhesion maintenance (By similarity). Involved in the unidirectional retrograde dendritic transport of endocytosed BACE1 and in efficient sorting of BACE1 to axons implicating a function in neuronal APP processing. Plays a role in the formation of the ciliary vesicle, an early step in cilium biogenesis, possibly sharing redundant functions with Ehd1 (PubMed:25686250). {ECO:0000250 UniProtKB:Q9NZN3, ECO:0000269 PubMed:20489164, ECO:0000269 PubMed:21408024, ECO:0000269 PubMed:24373286, ECO:0000269 PubMed:24759929, ECO:0000269 PubMed:25686250, ECO:0000269 PubMed:25825486, ECO:0000269 PubMed:26896729}.</p>
Molecular Weight:	60.8 kDa
UniProt:	<a href="#">Q9QXY6</a>

## 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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Application Details

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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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months