Datasheet for ABIN3137385

EHD3 Protein (AA 1-535) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	EHD3
Protein Characteristics:	AA 1-535
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EHD3 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MFSWLGNDDR RKKDPEVFQT VSDGLKKLYK TKLLPLEEYY RFHEFHSPAL EDADFDNKPM VLLVGQYSTG KTTFIRYLLE QDFPGMRIGP EPTTDSFIAV MQGDVEGIIP GNALVVDPKK PFRKLNAFGN AFLNRFVCAQ LPNAVLESIS VIDTPGILSG EKQRISRGYD FAAVLEWFAE RVDRIILLFD AHKLDISDEF SEVIKALKNH EDKMRVVLNK ADQIETQQLM RVYGALMWSL GKIVNTPEVI RVYIGSFWSH PLLIPDNRKL FEAEEQDLFR DIQSLPRNAA LRKLNDLIKR ARLAKVHAYI ISSLKKEMPS VFGKDTKKKE LVNNLAEIYG RIEREHQISP GDFPNLKRMQ DQLQAQDFSK FQPLKSKLLE VVDDMLAHDI AQLMVLVRQE ETQRPVQMVK GGAFEGTLQG PFGHGYGEGA GEGIDDAEWV VARDKPMYDE IFYTLSPVDG KITGANAKKE MVRSKLPNSV LGKIWKLADI DKDGMLDDEE FALANHLIKV KLEGHELPSE LPAHLLPPSK RKVSE **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Ehd3 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade. • 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. 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. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in bacterial culture: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	EHD3
Alternative Name:	Ehd3 (EHD3 Products)
Background:	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 exitability 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}.
Molecular Weight:	61.8 kDa Including tag.
UniProt:	Q9QXY6

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible

Application Details

	options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

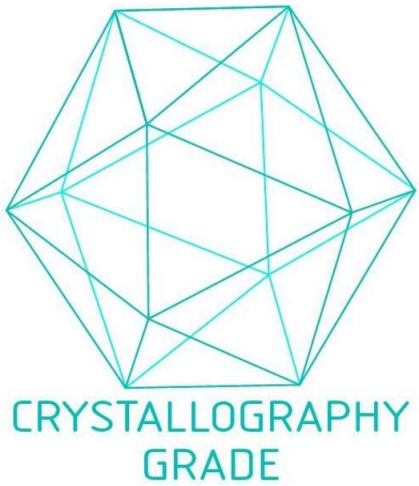

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process