

Datasheet for ABIN3135267

Cortactin Protein (CTTN) (AA 1-546) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	Cortactin (CTTN)
Protein Characteristics:	AA 1-546
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Cortactin protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MWKASAGHAV SITQDDGGAD DWETDPDFVN DVSEKEQRWG AKTVQGSGHQ EHINIHKLRE NVFQEHQTLK EKELETGPKA SHGYGGKFGV EQDRMDRSV GHEYQSKLSK HCSQVDSVRG FGGKFGVQMD RVDQSAVGFE YQKTEKHAS QKDYSSGFGG KYGVQADRVD KSAVGFDYQG KTEKHESQKD YSKGFGGKYG IDKDKVDKSA VGFEYQGKTE KHESQKDYVK GFGGKFGVQT DRQDKCALGW DHQEKQLLHE SQKDYKTGFG GKFGVQSERQ DSSAVGFDYK ERLAKHESQQ DYAKGFGGKY GVQKDRMDKN ASTFEEVVQV PSAYQKTVPI EAVTSKTSNI RANFENLAKE REQEDRRKAE AERAQMAKE RQEQUEARRK LEEQARAKKQ TPPASPPSPQ IEDRPPSSPI YEDAAPFKAE PSYRGSEPEP EYSIEAAGIP EAGSQQGLTY TSEPVYETTE APGHYQAEDD TYDGYESDLG ITAIALYDYQ AAGDDEISFD PDDIITNIEM IDDGWWRGVC KGRYGLFPAN YVELRQ</p> <p>Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.</p>
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Product Details

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Ctn 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 receipt 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:	Cortactin (CTTN)
Alternative Name:	Cttn (CTTN Products)
Background:	<p>Contributes to the organization of the actin cytoskeleton and cell shape (PubMed:17403031). Plays a role in the formation of lamellipodia and in cell migration (By similarity). Plays a role in the regulation of neuron morphology, axon growth and formation of neuronal growth cones (By similarity). Through its interaction with CTTNBP2, involved in the regulation of neuronal spine density (PubMed:22262902). Plays a role in the invasiveness of cancer cells, and the formation of metastases (By similarity). Plays a role in focal adhesion assembly and turnover (By similarity). In complex with ABL1 and MYLK regulates cortical actin-based cytoskeletal rearrangement critical to sphingosine 1-phosphate (S1P)-mediated endothelial cell (EC) barrier enhancement (By similarity). Plays a role in intracellular protein transport and endocytosis, and in modulating the levels of potassium channels present at the cell membrane (PubMed:17959782). Plays a role in receptor-mediated endocytosis via clathrin-coated pits (By similarity). Required for stabilization of KCNH1 channels at the cell membrane (By similarity).</p> <p>{ECO:0000250 UniProtKB:Q14247, ECO:0000250 UniProtKB:Q66HL2, ECO:0000269 PubMed:17403031, ECO:0000269 PubMed:17959782, ECO:0000269 PubMed:22262902}.</p>
Molecular Weight:	62.2 kDa Including tag.
UniProt:	Q60598
Pathways:	MAPK Signaling

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:	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 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