

Datasheet for ABIN3091965

CTNNA2 Protein (AA 1-953) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	CTNNA2
Protein Characteristics:	AA 1-953
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CTNNA2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MTSATSPIIL KWDPKSLEIR TLTVERLLEP LVTQVTTLVN TSNKGPSGKK KGRSKKAHVL AASVEQATQN FLEKGEQIAK ESQDLKEELV AAVEDVRKQG ETMRIASSEF ADDPCSSVKR GTMVRAARAL LSAVTRLLIL ADMADVMRLL SHLKIVVEAL EAVKNATNEQ DLANRFKEFG KEMVKLNYVA ARRQQLKDP HCRDEMAAAR GALKKNATML YTASQAFLRH PDVAATRANR DYVFKQVQEA IAGISNAAQA TSPTDEAKGH TGIGELAAAL NEFDNKIILD PMTFSEARFR PSLEERLESI ISGAALMADS SCTRDDRRER IVAECNAVRQ ALQDLLSEYM NNTGRKEKGD PLNIAIDKMT KKTRDLRRQL RKAVMDHISD SFLETNVPLL VLIEAAKSGN EKEVKEYAQV FREHANKLVE VANLACSISN NEEGVKLVRM AATQIDSLCP QVINAALTLA ARPQSKVAQD NMDVFKDQWE KQVRVLTEAV DDITSVDDFL SVSENHILED VNKCVIALQE GDVDTLDRTA GAIRGRAARV IHIINAEMEN YEAGVYTEKV LEATKLLSET VMPRFAEQVE VAIEALSANV PQPFEENEFI DASRLVYDGV RDIRKAVLMI RTPEELED DSDFEQEDYDVR SRTSVQTEDD QLIAGQSARA IMAQLPQEEK AKIAEQVEIF HQEKSCLDAE VAKWDDSGND IIVLAKQMCM
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IMMEMTDFTR GKGPLKNTSD VINAACKIAE AGSRMDKLAR AVADQCPDSA CKQDLLAYLQ
RIALYCHQLN ICSKVKAEVQ NLGGELIVSG TGVQSTFTTF YEVDCCVIDG GRASQLSTHL
PTCAEGAPIG SGSSDSSMLD SATSLIQAAG NLMAVVLTV KASYVASTKY QKVYGTAAVN
SPVSWKMKKA PEKKPLVKRE KPEEFQTRVR RGSQKKHISP VQALSEFKAM DSF

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.

Product Details

- 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.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	CTNNA2
Alternative Name:	CTNNA2 (CTNNA2 Products)
Background:	Catenin alpha-2 (Alpha N-catenin) (Alpha-catenin-related protein),FUNCTION: May function as a linker between cadherin adhesion receptors and the cytoskeleton to regulate cell-cell adhesion and differentiation in the nervous system (By similarity). Required for proper regulation of cortical neuronal migration and neurite growth (PubMed:30013181). It acts as a negative regulator of Arp2/3 complex activity and Arp2/3-mediated actin polymerization (PubMed:30013181). It thereby suppresses excessive actin branching which would impair neurite growth and stability (PubMed:30013181). Regulates morphological plasticity of synapses and cerebellar and hippocampal lamination during development. Functions in the control of startle modulation (By similarity). {ECO:0000250 UniProtKB:Q61301, ECO:0000269 PubMed:30013181}.
Molecular Weight:	105.3 kDa
UniProt:	P26232
Pathways:	Regulation of Muscle Cell Differentiation

Application Details

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

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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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