

Datasheet for ABIN3131836

CNTNAP1 Protein (AA 21-1385) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	CNTNAP1
Protein Characteristics:	AA 21-1385
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CNTNAP1 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	WGYGNCNEEL VGPLYARSLG ASSYYGLFTT ARFARLHGIS GWSPRIGDPN PWLQIDLMKK HRIRAVATQG AFNSWDWVTR YMLLYGDRVD SWTPFYQKGH NATFFGNVND SAVVRHDLHY HFTARYIRIV PLAWNPRGKI GLRLGIYGCP YTSSILYFDG DDAISYRFQR GASQSLWDVF AFSFKTEEKD GLLLHTEGSQ GDYVTLELQG AHLLLHMSLG SSPIQPRPGH TTVSLGGVLN DLSWHYVRVD RYGRDANFTL DGYAHHFVLN GDFERLNLEN EIFIGGLVGA ARKNLAYRHN FRGCIENVII NRINIAEMAV MRHSRITFEG NVAFRCLDPV PHPINFGGPH NRVQVPGFPR RGRLAVSFRF RTWDLTGLLL FSHLGDGLGH VELMLSEGQV NVSIAQTGRK KLQFAAGYRL NDGFWHEVNF VAQENHAVIS IDDEVEGAEVR VSYPLLIRTG TSYFFGGCPK PASRWGCHSN QTAFHGCMEI LKVDGQLVNL TLVEFRKLG YFAEVLFDTCG ITDRCSNMC EHDGRCYQSW DDFICYCELT GYKGVTCHEP LYKESCEAYR LSGKYSGNYT IDPDGSGPLK PFVVYCDIRE NRAWTVVRHD RLWTTTRVTGS SMDRPFGLAI QYWNASWEEV SALANASQHC EQWIEFSCYN SRLLNTAGGY PYSFWIGRNE EQHFYWGGSQ PGIQRACAGL DQSCVDPALH CNCDDADQPQW
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RTDKGLLTFV DHLPVTQVVV GDTNRSNSEA QFFLRPLRCY GDRNSWNTIS FHTGAALRFP
PIRANHSLDV SFYFRTSAPS GVFLENMGGP FCRWRRPYVR VELNTRSDVV FAFDIGNGDE
NLTVHSDDFE FNDDEWHLVR AEINVKQARL RVDHRPWVLR PMPLQTYIWL VYDQPLYVGS
AELKRRPFVG CLRAMRLNGV TLNLEGRANA SEGTFPNCTG HCTHPRFPCF HGGRCVERY
YYTCDCDLTA FDGPYCNHDI GGFFETGTWM RYNLQSALRS AAREFSHMLS RPVPGYEPGY
VPGYDTPGYV PGYHGPYRL PEYPRPGRP VPGYRGPVYNV TGEVSFSFS TNSAPAVLLY
VSSFVRDYMA VLIKEDGTLQ LRYQLGTSPY VYQLTTRPVT DGQPHSVNIT RVYRNLFIQV
DYFPLTEQKF SLLVDSQLDS PKALYLGRVM ETGVIDPEIQ RYNTPGFSGC LSGVRFNNVA
PLKTHFRTPR PMTAELAEAM RVQGELSES NCGAMPRLVSE VPPELDPWYL PPDPFYHDD
GWIAILLGFL VAFLLGLVG MLVLFYLNH RYKGSYHTNE PKATHDSHPG GKAPLPPSGP
AQAPAPTAP TQLPTAPAP APAPASGPGP RDQNLQILE ESRSE

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Cntnap1 Protein (raised in Insect Cells) 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:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect

Product Details

cells:

1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. 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: Protein is endotoxin-free.

Grade: Crystallography grade

Target Details

Target: CNTNAP1

Alternative Name: Cntnap1 ([CNTNAP1 Products](#))

Background: Seems to play a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. Seems to demarcate the paranodal region of the axo-glial junction. In association with contactin may have a role in the signaling between axons and myelinating glial cells. Mice that lack CNTAP1 exhibit tremor, ataxia, and significant motor paresis. Normal paranodal junctions fail to form, and the organization of the paranodal loops is disrupted. Contactin is undetectable in the paranodes, and potassium channels are displaced from the juxtaparanodal into the paranodal domains. Also results in a severe decrease in peripheral nerve conduction velocity.

Molecular Weight: 155.4 kDa Including tag.

UniProt: [O54991](#)

Pathways: [Cell-Cell Junction Organization](#)

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.

Application Details

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