

Datasheet for ABIN3135985

**CADPS Protein (AA 1-1355) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	CADPS
Protein Characteristics:	AA 1-1355
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CADPS protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence:	MLDPSSEEE SDEILEEERG KDVLGSAASG ARLSPSRTSE GSAGSAGMGG SGAGAGVGAG GGGGSGASSG GGAGGLQPSS RAGGGRPSSP SPSVVSEKEK EELERLQKEE EERKKRLQLY VFVMRCIAYP FNAKQPTDMA RRQKISKQQ LQTVKDRFQA FLNGETQIVA DEAFMNAVQS YYEVFLKSDR VARMVQSGGC SANDSREVF KKHIEKRVRS LPEIDGLSKET VLSSWMAKFD AIYRGEEDPR KQQARMTASA ASELILSKEQ LYEMFQNILG IKKFEHQLLY NACQLDNPDE QAAQIRRELD GRLQMADQIA RERKFPKFVS KEMENMYIEE LKSSVNLLMA NLESMPVSKG GEFKLQKLKR SHNASIIDMG EESENQLSKS DVLLSFSLEV VIMEVQGLKS LAPNRIVYCT MEVEGGEKLQ TDQAEASKPT WGTQGDFSTT HALPAVKVKL FTESTGVLAL EDKELGRVIL HPTPNPKQS EWHKMTVSKN CPDQDLKIKL AVRMDKPQNM KHSGYLWTIG KNVWKRWKKR FFVLVQVSQY TFAMCSYREK KAEPQELLQL DGYTVDYTDP QPGLEGGRA FNAVKEGDTV IFASDDEQDR ILWVQAMYRA TGQSHKPVPP TQVQKLNAKG GNVPQLDAPI SQFSGLKDAD RAQKHGMDEF ISSNPCNFDH ASLFEMVQRL TLDHRLNDSY SCLGWFSFGQ VFLDEYCAR
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NGVRGCHRHL CYLRDLLERA ENGAMIDPTL LHYSFAFCAS HVHGNRPDGI GTVTVEEKER  
FEEIKERLRV LLENQITHFR YCFPFGRPEG ALKATLSLLE RVLMKDIVTP VPQEEVKTVI  
RKCLEQAALV NYSRLSEYAK IEENQKDAEN VGRLITPAKK LEDTIRLAEL VIEVLQQNEE  
HHAEPHVDKG EFAFWWSGLM VEHAETFLSL FAVDMAALE VQPPDTWDSF PLFQLLNDFL  
RTDYNLCNGK FHKHLQDLFA PLVVRVYDLM ESSIAQSIHR GFERESWEPV KSLTSNLPNV  
NLPNVNLPKV PNLVNIPLG IPQMPTFSAP SWMAAIYDAD NGSQTSEDLF WKLDALQTFI  
RDLHWPEEEF GKHLEQRLKL MASDMIESC V KRTRIAFEVK LQKTSRSTDF RVPQSICTMF  
NVMVDAKAQS TKLCSMEMGQ EHQYHSKIDE LIEETVKEMI TLLVAKFVTI LEGVLAKLSR  
YDEGTLFSSF LSFTVKAASK YVDVPKPGMD VADAYVTFVR HSQDVLRDKV NEEMYIERLF  
DQWYNSSMNI ICTWLTDRMD LQLHIYQLKT LIRMVKKTYR DFRLQGVLDL TLNSKTYETI  
RNRLTVEEAT ASVSEGGGLQ GISMKDSDEE DEEDD

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Cadps 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.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

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## Product Details

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: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target: CADPS

Alternative Name: Cadps ([CADPS Products](#))

Background: Calcium-binding protein involved in exocytosis of vesicles filled with neurotransmitters and neuropeptides. Probably acts upstream of fusion in the biogenesis or maintenance of mature secretory vesicles. Regulates catecholamine loading of DCVs. May specifically mediate the Ca(2+)-dependent exocytosis of large dense-core vesicles (DCVs) and other dense-core vesicles by acting as a PtdIns(4,5)P<sub>2</sub>-binding protein that acts at prefusion step following ATP-dependent priming and participates in DCVs-membrane fusion. However, it may also participate in small clear synaptic vesicles (SVs) exocytosis and it is unclear whether its function is related to Ca(2+) triggering (By similarity). {ECO:0000250, ECO:0000269|PubMed:15820695}.

Molecular Weight: 154.1 kDa Including tag.

UniProt: [Q80TJ1](#)

Pathways: [Synaptic Vesicle Exocytosis](#)

## 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

## Application Details

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