



[Go to Product page](#)

Datasheet for ABIN3092117

DENND3 Protein (AA 1-1198) (Strep Tag)

1 Image

Overview

Quantity:	1 mg
Target:	DENND3
Protein Characteristics:	AA 1-1198
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DENND3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MRS LRKKREK PRPEQWKGLP GPPRAPEPED VAVPGGVDLL TLPQLCFPGG VCVATEPKED
 CVHFLVLTDV CGNRTYGVVA QYYRPLHDEY CFYNGKTHRE CPGCFVPPFAV CVVSRFPYYN
 SLKDCLSCLL ALLKPKDFE VDSHIKFAA KLSLIPSPPP GPLHLVFNMK SLQIVL PARA
 DPESPILDLD LHLPLLCFRP EKVLQILTCI LTEQRIVFFS SDWALLTLVT ECFMAYLYPL
 QWQHFPVPIL SDQMLDFVMA PTSFLMGCHL DHFEEVSKEA DGLVLINIDH GSITYSKSTD
 DNV DIPDVPL LAAQTFIQRV QSLQLHHELH AAHLLSSTD LKEGRAHRRSW QQLNLCIQQ
 TTLQLLVSIF RDVKNHLN YEHRVFNSEEFL KTRAPGDHQF YKQVLDTYMF HSFLKARLNR
 RMDAFAQMDL DTQSEEDRIN GMLLSPRRPT VEKRASRKSS HLHVTHRRMV VSMPNLQDIA
 MP ELAPRNSS LRLDTAGCR GSSAVLNVTP KSPYTFKIPE IHFPLESKCV QAYHAHFVSM
 LSEAMCFLAP DNSLLLARYL YLRGLVYLMQ GQLLNALLDF QNLYKTDIRI FPTDLVKRTV
 ESMSAPEWEG AEQAPELMRL ISEILDKPHE ASKLDHVKK FKLPKKHMQL GDFMKRVQES
 GIVKDASIIH RLFEALTVGQ EKQIDPETFK DFYNCWKETE AEAQEVSLPW LVMEHLDKNE

CVCKLSSSVK TNLGVGKIAM TQKRLFLTE GRPGYLEIST FRNIEEVRR TTTFLRRIP
TLKIRVASKK EVFEANLKTE CDLWHLMVKE MWAGKKLADD HKDPHYVQQA LTNVLLMDAV
VGTLQSPGAI YAASKLSYFD KMSNEMPMTL PETTLETCLKH KINPSAGEAF PQAVDVLLYT
PGHLDPAEKV EDAHPKLWCA LSEGKVTVFN ASSWTIHQHS FKVGTAKVNC MVMADQNQVW
VGSEDSVIYI INVHSMSCNK QLTAHCSSVT DLIVQDGQEA PSNVYSCSMD GMVLVWNVST
LQVTSRFQLP RGGLTSIRLH GGRLWCCTGN SIMVMKMNGS LHQELKIEEN FKDTSTSFLA
FQLLPEEEQL WAACAGRSEV YIWSLKDLAQ PPQRVPLEDC SEINCMIRVK KQVWVGSRGL
GQGTPKGIY VIDAERKTVE KELVAHMDTV RTLCSAEDRY VLSGSGREEG KVAIWKGE

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!

Product Details

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.
- 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:

DENND3

Alternative Name:

DENND3 ([DENND3 Products](#))

Background:

DENN domain-containing protein 3,FUNCTION: Guanine nucleotide exchange factor (GEF) activating RAB12. Promotes the exchange of GDP to GTP, converting inactive GDP-bound RAB12 into its active GTP-bound form (PubMed:20937701). Regulates autophagy in response to starvation through RAB12 activation. Starvation leads to ULK1/2-dependent phosphorylation of Ser-472 and Ser-490, which in turn allows recruitment of 14-3-3 adapter proteins and leads to up-regulation of GEF activity towards RAB12 (By similarity). Also plays a role in protein transport from recycling endosomes to lysosomes, regulating, for instance, the degradation of the transferrin receptor and of the amino acid transporter PAT4 (PubMed:20937701). Starvation also induces phosphorylation at Tyr-858, which leads to up-regulated GEF activity and initiates autophagy (By similarity). {ECO:0000250|UniProtKB:A2RT67, ECO:0000269|PubMed:20937701}.

Molecular Weight:

135.9 kDa

UniProt:

[A2RUS2](#)

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: 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!

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