

Datasheet for ABIN3092123

## DENND1B Protein (AA 1-775) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	DENND1B
Protein Characteristics:	AA 1-775
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DENND1B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MDCRTKANPD RTFDLVLKVK CHASENEDPV VLWKFPEDFG DQEILQSVPK FCFPFDERV</p> <p>SQNQVGQHFT FVLTDIESKQ RFGFCRLTSG GTICLCILSY LPWFEVYYKL LNTLADYLAK</p> <p>ELENDLNETL RSLYNHPVPK ANTPVNLSVN QEIFIACEQV LKQPALVPH SYFIAPDVTG</p> <p>LPTIPESRNL TEYFVAVDVN NMLQLYASML HERRIVISS KLSTLTACIH GSAALLYPMY</p> <p>WQHIYPVLP PHLLDYCCAP MPYLIGHSS LIERVKNKSL EDVVMLNVDN NTLESPFSDL</p> <p>NNLPDVVSA LKNKLKKQST ATGDGVARAF LRAQAALFGS YRDALRYKPG EPITFCEESF</p> <p>VKHRSSVMKQ FLETAINLQL FKQFIDGRLA KLNAGRGFSD VFEEITSGG FCGGNPRSYQ</p> <p>QWVHTVKKGG ALFNTAMTKA TPAVRTAYKF AKNHAKLGLK EVKSKLKHKE NEEDYGTCCS</p> <p>SVQYTPVYKL HNEKGGNSEK RKLAQARLKR PLKSLDGALY DDEDDDDIER ASKLSSEDGE</p> <p>EASAYLYESD DSVETRVKTP YSGEMDLLGE ILDTLSTHSS DQGKLAAAKS LDFFRSMDDI</p> <p>DYKPTNKSNA PSENNLAFLC GGSGDQAEWN LGQDDSAHGH KHLPPSPRKR VSSSGLTDSL</p>

FILKEENSNK HLGADNVSDP TSGLDFQLTS PEVSQTDKGK TEKRETL SQI SDDLIPGLG  
RHSSTFVPWE KEGKEAKETS EDIGLLHEV SLCHMTSDFQ QSLNISDKNT NGNQT

**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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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## Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: DENND1B

Alternative Name: DENND1B ([DENND1B Products](#))

Background: DENN domain-containing protein 1B (Connecdenn 2) (Protein FAM31B),FUNCTION: Guanine nucleotide exchange factor (GEF) for RAB35 that acts as a regulator of T-cell receptor (TCR) internalization in TH2 cells (PubMed:20154091, PubMed:20937701, PubMed:24520163, PubMed:26774822). Acts by promoting the exchange of GDP to GTP, converting inactive GDP-bound RAB35 into its active GTP-bound form (PubMed:20154091, PubMed:20937701). Plays a role in clathrin-mediated endocytosis (PubMed:20154091). Controls cytokine production in TH2 lymphocytes by controlling the rate of TCR internalization and routing to endosomes: acts by mediating clathrin-mediated endocytosis of TCR via its interaction with the adapter protein complex 2 (AP-2) and GEF activity (PubMed:26774822). Dysregulation leads to impaired TCR down-modulation and recycling, affecting cytokine production in TH2 cells (PubMed:26774822). {ECO:0000269|PubMed:20154091, ECO:0000269|PubMed:20937701, ECO:0000269|PubMed:24520163, ECO:0000269|PubMed:26774822}.

Molecular Weight: 86.6 kDa

UniProt: [Q6P3S1](#)

## 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.

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## Application Details

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Restrictions: For Research Use only

## Handling

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Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months