

Datasheet for ABIN3092062
DAAM2 Protein (AA 1-1068) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	DAAM2
Protein Characteristics:	AA 1-1068
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAAM2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MAPRKRSHHG LGFLCCFGGS DIPEINLRDN HPLQFMEFSS PIPNAEELNI RFAELVDELD
LTDKNREAMF ALPPEKKWQI YCSKKKEQED PNKLATSWPD YYIDRINSMA AMQSLYAFDE
EETEMRNQVV EDLKTALRTQ PMRFVTRFIE LEGLTCLLN F LRSMDHATCE SRIHTSLIGC
IKALMNNSQG RAHVLAQPEA ISTIAQSLRT ENSKTKVAVL EILGAVCLVP GGHKVQLQAM
LHYQVYAAER TRFQTLNEL DRSLGRYRDE VNLKTAIMS F INAVLNAGAG EDNLEFRLHL
RYEFLMLGIQ PVIDKLRQHE NAILDKHLDF FEMVRNEDDL ELARRFDMVH IDTKSASQMF
ELIHKKLYT EAYPCLLSVL HHCLQMPYKR NGGYFQQWQL LDRILQQIVL QDERGVDPDL
APLENFNVKN IVNMLINENE VKQWRDQAEK FRKEHMELVS RLERKERECE TKTLEKEEMM
RTLNMKMDKL ARESQELRQA RGQVAELVAQ LSELSTGPVS SPPPPGGPPT LSSSMTTNDL
PPPPPLPFA CCCCCPPPL PPGGPPTPPG APPCLGMGLP LPQDPYPSSD VPLRKKRVPQ
PSHPLKSFNW VKLNEERVPG TVWNEIDDMQ VFRILDLEDF EKMFSA YQRH QKELGSTEDI
YLASRKVKEL SVIDGRRQN CIILLSKLLK SNEEIRQAIL KMDEQEDLAK DMLEQLLKFI

PEKSDIDLLE EHKHEIERMA RADRFlyEMS RIDHYQQRLQ ALFFKKKFQE RLAEAKPKVE
AILLASRELV RSKRLRQMLE VILAIGNFMN KGQRGGAYGF RVASLNKIAD TKSSIDRNIS
LLHYLIMILE KHFPDILNMP SELQHLPEAA KVNLAELEKE VGNLRRGLRA VEVELEYQRR
QVREPSDKFV PVMSDFITVS SFSFSELEDQ LNEARDKFAK ALMHFGEHDS KMQPDEFFGI
FDTFLQAFSE ARQDLEAMRR RKEEEEERRAR MEAMLKEQRE RERWQRQRKV LAAGSSLEEG
GEFDDLVSAL RSGEVFDKDL CKLKRSRKRS GSQALEVTRE RAINRLNY

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.

Product Details

- 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®): <ol style="list-style-type: none">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:	DAAM2
Alternative Name:	DAAM2 (DAAM2 Products)
Background:	<p>Disheveled-associated activator of morphogenesis 2,FUNCTION: Key regulator of the Wnt signaling pathway, which is required for various processes during development, such as dorsal patterning, determination of left/right symmetry or myelination in the central nervous system. Acts downstream of Wnt ligands and upstream of beta-catenin (CTNNB1). Required for canonical Wnt signaling pathway during patterning in the dorsal spinal cord by promoting the aggregation of Disheveled (Dvl) complexes, thereby clustering and formation of Wnt receptor signalosomes and potentiating Wnt activity. During dorsal patterning of the spinal cord, inhibits oligodendrocytes differentiation via interaction with PIP5K1A. Also regulates non-canonical Wnt signaling pathway. Acts downstream of PITX2 in the developing gut and is required for left/right asymmetry within dorsal mesentery: affects mesenchymal condensation by lengthening cadherin-based junctions through WNT5A and non-canonical Wnt signaling, inducing polarized condensation in the left dorsal mesentery necessary to initiate gut rotation. Together with DAAM1, required for myocardial maturation and sarcomere assembly. Is a regulator of actin nucleation and elongation, filopodia formation and podocyte migration (PubMed:33232676). {ECO:0000250 UniProtKB:Q80U19, ECO:0000269 PubMed:33232676}.</p>

Target Details

Molecular Weight: 123.5 kDa

UniProt: [Q86T65](#)

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