

Datasheet for ABIN3092036

DAB2IP Protein (AA 1-1189) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	DAB2IP
Protein Characteristics:	AA 1-1189
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAB2IP protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSAGGSARKS TGRSSYYYRL LRRPRLQQR SRSRSRTRPA RESPQERPGS RRSLPGSLSE KSPSMEPSAA TPFRVTGFLS RRLKGSIKRT KSQPKLDRNH SFRHILPGFR SAAAAAADNE RSHLMPRLKE SRSHESLLSP SSAVEALDLS MEEEVVVKPV HSSILGQDYC FEVTTSSGSK CFSCRSAAER DKWMENLRRA VHPNKDNSRR VEHLKLWVI EAKDLPACKK YLCELCLDDV LYARTTGKLG TDNVFWGEHF EFHNLPLRT VTVHLYRETD KKKKKERNYSY LGLVSLPAAS VAGRQFVEKW YPVVTPNPKG GKGPMPMIRI KARYQTITIL PMEMYKEFAE HITNHYLGLC AALEPILSAK TKEEMASALV HILQSTGKVK DFLTDLMMSE VDRCGDNEHL IFRENTLATK AIEEYLKLVG QKYLQDALGE FIKALYESDE NCEVDPSKCS AADLPEHQGN LKMCCCLAFD KIINSYCVFP RELKEVFASW RQECSSRGRP DISERLISAS LFLRFLCPAI MSPSLFNLLQ EYPDDRTART LTIAKVTQN LANFAKFGSK EEYMSFMNQF LEHEWTNMQR FLEISNPET LSNTAGFEGY IDLGRELSSL HSLLWEAVSQ LEQSIVSKLG PLPRILRDVH TALSTPGSGQ LPGTNDLAST PGSGSSSISA GLQKMVIEND LSGLIDFTRL PSPTPENKDL FFVTRSSGVQ
-----------	--

PSPARSSSYS EANEPDLQMA NGGKSLSMVD LQDARTLDGE AGSPAGPDVL PTDGQAAAAQ
LVAGWPARAT PVNLAGLATV RRAGQTPTTP GTSEGAPGRP QLLAPLSFQN PVYQMAAGLP
LSPRGLGDSG SEGHSLSH SNSEELAAAA KLGSFSTAAE ELARRPGELA RRQMSLTEKG
GQPTVPRQNS AGPQRRIDQP PTPPPPPPPA PRGRTPPNLL STLQYPRPSS GTLASASPDW
VGPSTRLRQQ SSSSKGDSPE LKPRAVHKQG PSPVSPNALD RTAAWLLTMN AQLLEDEGLG
PDPHRDLRLR SKDELSQAEK DLAVLQDKLR ISTKKLEEYE TLFKCQEETT QKLVLEYQAR
LEEGERLRR QQEDKDIQMK GIISRLMSVE EELKKDHAEM QAAVDSKQKI IDAQEKRIAS
LDAANARLMS ALTQLKERYM MQARNGISPT NPTKLQITEN GEFNRSSNC

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:

DAB2IP

Alternative Name:

DAB2IP ([DAB2IP Products](#))

Background:

Disabled homolog 2-interacting protein (DAB2 interaction protein) (DAB2-interacting protein) (ASK-interacting protein 1) (AIP-1) (DOC-2/DAB-2 interactive protein),FUNCTION: Functions as a scaffold protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways. Involved in several processes such as innate immune response, inflammation and cell growth inhibition, apoptosis, cell survival, angiogenesis, cell migration and maturation. Also plays a role in cell cycle checkpoint control, reduces G1 phase cyclin levels resulting in G0/G1 cell cycle arrest. Mediates signal transduction by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF), interferon (IFN) or lipopolysaccharide (LPS). Modulates the balance between phosphatidylinositol 3-kinase (PI3K)-AKT-mediated cell survival and apoptosis stimulated kinase (MAP3K5)-JNK signaling pathways, sequesters both AKT1 and MAP3K5 and counterbalances the activity of each kinase by modulating their phosphorylation status in response to pro-inflammatory stimuli. Acts as a regulator of the endoplasmic reticulum (ER) unfolded protein response (UPR) pathway, specifically involved in transduction of the ER stress-response to the JNK cascade through

Target Details

ERN1. Mediates TNF-alpha-induced apoptosis activation by facilitating dissociation of inhibitor 14-3-3 from MAP3K5, recruits the PP2A phosphatase complex which dephosphorylates MAP3K5 on 'Ser-966', leading to the dissociation of 13-3-3 proteins and activation of the MAP3K5-JNK signaling pathway in endothelial cells. Mediates also TNF/TRAF2-induced MAP3K5-JNK activation, while it inhibits CHUK-NF-kappa-B signaling. Acts a negative regulator in the IFN-gamma-mediated JAK-STAT signaling cascade by inhibiting smooth muscle cell (VSMCs) proliferation and intimal expansion, and thus, prevents graft arteriosclerosis (GA). Acts as a GTPase-activating protein (GAP) for the ADP ribosylation factor 6 (ARF6) and Ras. Promotes hydrolysis of the ARF6-bound GTP and thus, negatively regulates phosphatidylinositol 4,5-bisphosphate (PIP2)-dependent TLR4-TIRAP-MyD88 and NF-kappa-B signaling pathways in endothelial cells in response to lipopolysaccharides (LPS). Binds specifically to phosphatidylinositol 4-phosphate (PtdIns4P) and phosphatidylinositol 3-phosphate (PtdIns3P). In response to vascular endothelial growth factor (VEGFA), acts as a negative regulator of the VEGFR2-PI3K-mediated angiogenic signaling pathway by inhibiting endothelial cell migration and tube formation. In the developing brain, promotes both the transition from the multipolar to the bipolar stage and the radial migration of cortical neurons from the ventricular zone toward the superficial layer of the neocortex in a glial-dependent locomotion process. Probable downstream effector of the Reelin signaling pathway, promotes Purkinje cell (PC) dendrites development and formation of cerebellar synapses. Functions also as a tumor suppressor protein in prostate cancer progression, prevents cell proliferation and epithelial-to-mesenchymal transition (EMT) through activation of the glycogen synthase kinase-3 beta (GSK3B)-induced beta-catenin and inhibition of PI3K-AKT and Ras-MAPK survival downstream signaling cascades, respectively. {ECO:0000269|PubMed:12813029, ECO:0000269|PubMed:17389591, ECO:0000269|PubMed:18292600, ECO:0000269|PubMed:19033661, ECO:0000269|PubMed:19903888, ECO:0000269|PubMed:19948740, ECO:0000269|PubMed:20080667, ECO:0000269|PubMed:20154697, ECO:0000269|PubMed:21700930, ECO:0000269|PubMed:22696229}.

Molecular Weight:	131.6 kDa
UniProt:	Q5VWQ8
Pathways:	EGFR Signaling Pathway , Cellular Response to Molecule of Bacterial Origin , Tube Formation

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
--------------------	---

Application Details

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