



[Go to Product page](#)

Datasheet for ABIN3073632

## TAB2 Protein (AA 1-693) (Strep Tag)

### 1 Image

#### Overview

Quantity:	1 mg
Target:	TAB2
Protein Characteristics:	AA 1-693
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This TAB2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

#### Product Details

Sequence: MAQGS HQIDF QVLHDLRQKF PEVPEVVVSR CMLQNNNNLD ACCAVLSQES TRYLYGEGDL  
 NFSDDSGISG LRNHMTSLNL DLQSQNIYHH GREGSRMNGS RTLTHSISDG QLQGGQSNSE  
 LFQQEPQTAP AQVPQGFNVF GMSSSSGASN SAPHLGFHLG SKGTSSLSQQ TPRFNPIMVT  
 LAPNIQTGRN TPTSLHIHGV PPPVLNSPQG NSIYIRPYIT TPGGTTRQTQ QHSGWVSQFN  
 PMNPQQVYQP SQPGPWTTCP ASNPLSHTSS QQPNQQGHQT SHVYMPISSP TTSQPPTIHS  
 SGSSQSSAHS QYNIQNISTG PRKNQIEIKL EPPQRNNSSK LRSSGPRTSS TSSSVNSQTL  
 NRNQPTVYIA ASPPNTDELM SRSQPKVYIS ANAATGDEQV MRNQPTLFIS TNSGASAASR  
 NMSGQVSMGP AFIHHHPPKS RAIGNNSATS PRVVVTQPNT KYTFKITVSP NKPPAVSPGV  
 VSPTFELTNL LNHPDHYVET ENIQHLTDPT LAHVDRISER RKLMSGSDDA AYTQALLVHQ  
 KARMERLQRE LEIQKKKLDK LKSEVNEMEN NLTRRRLLKRS NSISQIPSLE EMQQLRSCNR  
 QLQIDIDCLT KEIDLFQARG PHFNPSAIHN FYDNIGFVGP VPPKPKDQRS IIKTPKTQDT  
 EDDEGAQWNC TACTFLNHPA LIRCEQCEMP RHF

**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.
- 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®):

---

## Product Details

---

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: TAB2

---

Alternative Name: TAB2 ([TAB2 Products](#))

---

Background: TGF-beta-activated kinase 1 and MAP3K7-binding protein 2 (Mitogen-activated protein kinase kinase kinase 7-interacting protein 2) (TAK1-binding protein 2) (TAB-2) (TGF-beta-activated kinase 1-binding protein 2),FUNCTION: Adapter required to activate the JNK and NF-kappa-B signaling pathways through the specific recognition of 'Lys-63'-linked polyubiquitin chains by its RanBP2-type zinc finger (NZF) (PubMed:10882101, PubMed:11460167, PubMed:15327770, PubMed:22158122, PubMed:33184450, PubMed:36681779). Acts as an adapter linking MAP3K7/TAK1 and TRAF6 to 'Lys-63'-linked polyubiquitin chains (PubMed:10882101, PubMed:11460167, PubMed:15327770, PubMed:22158122). The RanBP2-type zinc finger (NZF) specifically recognizes Lys-63'-linked polyubiquitin chains unanchored or anchored to the substrate proteins such as RIPK1/RIP1 and RIPK2: this acts as a scaffold to organize a large signaling complex to promote autophosphorylation of MAP3K7/TAK1, and subsequent activation of I-kappa-B-kinase (IKK) core complex by MAP3K7/TAK1 (PubMed:15327770, PubMed:18079694, PubMed:22158122). Regulates the IL1-mediated translocation of NCOR1 out of the nucleus (By similarity). Involved in heart development (PubMed:20493459). {ECO:0000250|UniProtKB:Q99K90, ECO:0000269|PubMed:10882101, ECO:0000269|PubMed:11460167, ECO:0000269|PubMed:15327770, ECO:0000269|PubMed:18079694, ECO:0000269|PubMed:20493459, ECO:0000269|PubMed:22158122, ECO:0000269|PubMed:33184450, ECO:0000269|PubMed:36681779}.

---

Molecular Weight: 76.5 kDa

---

UniProt: [Q9NYJ8](#)

---

## Target Details

---

Pathways: [TCR Signaling](#), [TLR Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [Activation of Innate immune Response](#), [Toll-Like Receptors Cascades](#), [Ubiquitin Proteasome Pathway](#)

## 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