



Datasheet for ABIN3073716

## TAF6 Protein (AA 1-677) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	TAF6
Protein Characteristics:	AA 1-677
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This TAF6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Sequence:	MAEEKKLKL NTVLPSESMK VVAESMGIAQ IQEETCQLLT DEVSYRIKEI AQDALKFMHM GKRQKLTTSIDYALKLKNV EPLYGFHAQE FIPFRFASGG GRELYFYEEK EVDLSDIINT PLPRVPVL DVC LKAHWLSIEG CQPAIPENPP PAPKEQQKAE ATEPLKSAKP GQEEDGPLKG KGQGATTADG KGKEKKAPPL LEGAPRLKP RSIHELSVEQ QLYYKEITEA CVGSCEAKRA EALQSIATDP GLYQMLPRFS TFISEGVRVN VVQNNLALLI YLMRMVKALM DNPTLYLEKY VHELIPAVMT CIVSRQLCLR PDVDNHWALR DFAARLVAQI CKHFSTTTNN IQSRITKTFT KSWVDEKTPW TTRYGSIAGL AELGHDFVIKT LILPRLQQEG ERIRSVLDGP VLSNIDRIGA DHVQSLLLKH CAPVLA KLRP PPDNQDAYRA EFGSLGPLLC SQVVKARAQA ALQAQQVNRT TLTITQPRPT LTLSQAPQPG PRTPGLLKVP GSIALPVQTL VSARAAAPPQ PSPPPPTKFIV MSSSSSAPST QQVLSLSTSA PGSGSTTSP VTTTVPSPVQP IVKLVSTAT APPSTAPSGP GSVQKYIVVS LPPTGEGKGG PTSHPSPVPP PASSPSPLSG SALCGGKQEA GDSPPPAPGT PKANGSQPNS GSPQPAP
-----------	---

## Product Details

---

**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)

---

## Target Details

---

Target: TAF6

---

Alternative Name: TAF6 ([TAF6 Products](#))

---

Background: Transcription initiation factor TFIID subunit 6 (RNA polymerase II TBP-associated factor subunit E) (Transcription initiation factor TFIID 70 kDa subunit) (TAF(II)70) (TFIID-70) (TFIID70) (Transcription initiation factor TFIID 80 kDa subunit) (TAF(II)80) (TFIID-80) (TFIID80), FUNCTION: The TFIID basal transcription factor complex plays a major role in the initiation of RNA polymerase II (Pol II)-dependent transcription (PubMed:33795473). TFIID recognizes and binds promoters with or without a TATA box via its subunit TBP, a TATA-box-binding protein, and promotes assembly of the pre-initiation complex (PIC) (PubMed:33795473). The TFIID complex consists of TBP and TBP-associated factors (TAFs), including TAF1, TAF2, TAF3, TAF4, TAF5, TAF6, TAF7, TAF8, TAF9, TAF10, TAF11, TAF12 and TAF13 (PubMed:33795473). The TFIID complex structure can be divided into 3 modules TFIID-A, TFIID-B, and TFIID-C (PubMed:33795473). TAF6 homodimer connects TFIID modules, forming a rigid core (PubMed:33795473). {ECO:0000269|PubMed:33795473}, FUNCTION: [Isoform 4]: Transcriptional regulator which acts primarily as a positive regulator of transcription (PubMed:20096117, PubMed:29358700). Recruited to the promoters of a number of genes including GADD45A and CDKN1A/p21, leading to transcriptional up-regulation and subsequent induction of apoptosis (PubMed:11583621). Also up-regulates expression of other genes including GCNA/ACRC, HES1 and IFFO1 (PubMed:18628956). In contrast, down-regulates transcription of MDM2 (PubMed:11583621). Acts as a transcriptional coactivator to enhance transcription of TP53/p53-responsive genes such as DUSP1 (PubMed:20096117). Can also activate transcription and apoptosis independently of TP53 (PubMed:18628956). Drives apoptosis via the intrinsic apoptotic pathway by up-regulating apoptosis effectors such as BCL2L11/BIM and PMAIP1/NOXA (PubMed:29358700). {ECO:0000269|PubMed:11583621, ECO:0000269|PubMed:18628956, ECO:0000269|PubMed:20096117},

---

## Target Details

---

ECO:0000269|PubMed:29358700}.

Molecular Weight: 72.7 kDa

UniProt: P49848

## 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)