

Datasheet for ABIN3092126

## DNAJC2 Protein (AA 1-621) (Strep Tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	DNAJC2
Protein Characteristics:	AA 1-621
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNAJC2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

#### Product Details

Sequence: MLLLPSAADG RGTAITHALT SASTLCQVEP VGRWFEEAFVK RRNRNASASF QELEDKKELS  
EESEDEELQL EEFPMKLTLD PKDWKNQDHY AVLGLGHVRY KATQRQIKAA HKAMVLKHHHP  
DKRKAAGEPI KEGDNDYFTC ITKAYEMLSD PVKRRAFNSV DPTFDNSVPS KSEAKDNFFE  
VFTPVFERNS RWSNKKNVPK LGDMNSSFED VDIFYSFWYN FDSWREFSYL DEEEKEKAEC  
RDERRWIEKQ NRATRAQRKK EEMNRIRTLV DNAYSCDPRI KKFKEEEKAK KEAEKKAKAE  
AKRKEQEAKE KQRQAELEAA RLAKEKEEEE VRQQALLAKK EKDIQKKAIAK KERQKLRNSC  
KTNWNHFSNE AERVKMMEEV EKLCDRLELA SLQCLNETLT SCTKEVGKAA LEKQIEEINE  
QIRKEKEEAE ARMRQASKNT EKSTGGGGNG SKNWSDDLQ LLIKAVNLFP AGTNSRWEVI  
ANYMNIHSSS GVKRTAKDVI GKAKSLQKLD PHQKDDINKK AFDKFKKEHG VVPQADNATP  
SERFEGPYTD FTPWTTEEQK LLEQALKTYP VNTPERWEKI AEAVPGRTKK DCMKRYKELV  
EMVKAKKAAQ EQVLNASRAK K

**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 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.

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### 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
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## Product Details

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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

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Target: DNAJC2

Alternative Name: DNAJC2 ([DNAJC2 Products](#))

Background: DnaJ homolog subfamily C member 2 (M-phase phosphoprotein 11) (Zuotin-related factor 1) [Cleaved into: DnaJ homolog subfamily C member 2, N-terminally processed],FUNCTION: Acts both as a chaperone in the cytosol and as a chromatin regulator in the nucleus. When cytosolic, acts as a molecular chaperone: component of the ribosome-associated complex (RAC), a complex involved in folding or maintaining nascent polypeptides in a folding-competent state. In the RAC complex, stimulates the ATPase activity of the ribosome-associated pool of Hsp70-type chaperones HSPA14 that bind to the nascent polypeptide chain. When nuclear, mediates the switching from polycomb-repressed genes to an active state: specifically recruited at histone H2A ubiquitinated at 'Lys-119' (H2AK119ub), and promotes the displacement of the polycomb PRC1 complex from chromatin, thereby facilitating transcription activation. {ECO:0000269|PubMed:15802566, ECO:0000269|PubMed:16002468, ECO:0000269|PubMed:21179169}.

Molecular Weight: 72.0 kDa

UniProt: [Q99543](#)

Pathways: [Chromatin Binding](#)

## Application Details

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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

## Application Details

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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!

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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. 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)

## Images

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**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process