



[Go to Product page](#)

Datasheet for ABIN3096018
TPX2 Protein (AA 1-747) (Strep Tag)

Overview

Quantity:	1 mg
Target:	TPX2
Protein Characteristics:	AA 1-747
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TPX2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence: MSQVKSSYSY DAPSDFINFS SLDDEGDTQN IDSWFEEKAN LENKLLGKNG TGGLFQGKTP
LRKANLQQAI VTPLKPDNT YYKEAEKENL VEQSIPSNAC SSLEVEAAIS RKTPAQPPRR
SLRLSAQKDL EQKEKHHVKM KAKRCATPVI IDEILPSKKM KVSNNKKKPE EEGSAHQDTA
EKNASSPEKA KGRHTVPCMP PAKQKFLKST EEQELEKSMK MQQEVVEMRK KNEEFKKLAL
AGIGQPVKKS VSQVTKSVDF HFRTDERIKQ HPKNQEEYKE VNFTSELRKH PSSPARVTKG
CTIVKPFNLS QGKKRTFDET VSTYVPLAQQ VEDFHKRTPN RYHLRSKKDD INLLPSKSSV
TKICRDPQTP VLQTKHRARA VTCKSTAELE AEELEKLQY KFKARELDPR ILEGGPILPK
KPPVKPPTPEP IGFDLIEIKR IQERESKKKT EDEHFEFHSR PCPTKILEDV VGVPEKKVLP
ITVPKSPAFA LKNRIRMPTK EDEEEDPEVW IKAQVPVPHYG VPFKQIPEA RTVEICPFSF
DSRDKERQLQ KEKKIKELQK GEVPKFKALP LPHFDTINLP EKKVKNVTQI EPFCLETDRR
GALKAQTWKH QLEEELRQQK EAACFKARPN TVISQEPFVP KKEKKSVAEG LSGSLVQEPF
QLATEKRAKE RQELEKRMAE VEAQKAQQLE EARLQEEEQK KEELARLRRE LVHKANPIRK

YQGLEIKSSD QPLTVPVSPK FSTRFHC

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

Product Details

(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)

Target Details

Target: TPX2

Alternative Name: TPX2 ([TPX2 Products](#))

Background: Targeting protein for Xklp2 (Differentially expressed in cancerous and non-cancerous lung cells 2) (DIL-2) (Hepatocellular carcinoma-associated antigen 519) (Hepatocellular carcinoma-associated antigen 90) (Protein fls353) (Restricted expression proliferation-associated protein 100) (p100),FUNCTION: Spindle assembly factor required for normal assembly of mitotic spindles. Required for normal assembly of microtubules during apoptosis. Required for chromatin and/or kinetochore dependent microtubule nucleation. Mediates AURKA localization to spindle microtubules (PubMed:18663142, PubMed:19208764, PubMed:37728657). Activates AURKA by promoting its autophosphorylation at 'Thr-288' and protects this residue against dephosphorylation (PubMed:18663142, PubMed:19208764). TPX2 is inactivated upon binding to importin-alpha (PubMed:26165940). At the onset of mitosis, GOLGA2 interacts with importin-alpha, liberating TPX2 from importin-alpha, allowing TPX2 to activates AURKA kinase and stimulates local microtubule nucleation (PubMed:26165940).
{ECO:0000269|PubMed:18663142, ECO:0000269|PubMed:19208764, ECO:0000269|PubMed:26165940}.

Molecular Weight: 85.7 kDa

UniProt: [Q9ULW0](#)

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.

Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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)