

Datasheet for ABIN3130793

TPX2 Protein (AA 1-745) (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	TPX2
Protein Characteristics:	AA 1-745
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TPX2 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MSQVPTTYSF DAPTDFINFS SLDAEEDTEN IDSWFDEKAN LENKFLRQRG IGEPFQGKNS LRKAKLQQGF VTPLKAVDNT YHKETEKENL QKQSIPSNDC SSLDAKRAVS GNTPVQPQRR SIRLSAQKDL EQKEKNHVAS VEMKAKRCVA PATDCPPQKR MKVSHKKKLE EEEEGSAPAT SRKNERETLE KAKGKHTVPG VPPAREKVLK STEEQEIEKR LRMQQEVVEL RRKNEEFKKL ALAGPGQPVK KSTSQVTKTV DFHFLTDERI KQHPKNQEEY KEVNFMSSEL RKSSTPARGT RGCTIIPFN LSKGKKRTFD EAASTYVPIA QQVEAFHKRT PNRYHLRNKK DESLLPSKSV NKIARDPQTP ILQTKYRTRA VTCKSTAEQE AEELEKLQQY KFKARELDPR IFESGPILPK RAPVKPPTQP VGFDLEIEKR IHERESKKKT EDEQFEFHSR PCPTKILEDV VGVPEKKVIP ATVPKSPVFA LKNRIRVPIK DEEEKPVVI KAQVPVHYGV PYKPHIAEAR NVEVCPFSFD TRDKERQLQK EKKIKEMQKG EVPKFKALPV PHFDTINLPE KKVKNVTQAE PFSLETDKRG AYKAEMWKHQ LEEEQKQKD AACFKARPNT VIFQEPFVPK KEKKSLAENP SGSLVQEPFQ LATERRAKER QELEKKMAEV EAWKLQLEE VRQEEEEQK EELARLRKEL VHKANPIRKY
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AAVEVKSEL PLTVPVSPKF STRFQ

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Tpx2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Product Details

Grade: Crystallography grade

Target Details

Target: TPX2

Alternative Name: Tpx2 ([TPX2 Products](#))

Background: 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. Activates AURKA by promoting its autophosphorylation at 'Thr-288' and protects this residue against dephosphorylation. TPX2 is inactivated upon binding to importin-alpha. 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. {ECO:0000250|UniProtKB:Q9ULW0, ECO:0000269|PubMed:18663142}.

Molecular Weight: 86.8 kDa Including tag.

UniProt: [A2APB8](#)

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 gurantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



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