

**TPX2 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14553c**

**Specification**

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**TPX2 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9ULW0</a>
Other Accession	<a href="#">A6H6Z7</a> , <a href="#">NP_036244.2</a>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	85653
Antigen Region	419-448

**TPX2 Antibody (Center) - Additional Information**

**Gene ID** 22974

**Other Names**

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, TPX2, C20orf1, C20orf2, DIL2, HCA519

**Target/Specificity**

This TPX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 419-448 amino acids from the Central region of human TPX2.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TPX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**TPX2 Antibody (Center) - Protein Information**

**Name** TPX2

**Synonyms** C20orf1, C20orf2, DIL2, HCA519

**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 activate AURKA kinase and stimulates local microtubule nucleation (PubMed:[26165940](#)).

#### Cellular Location

Nucleus. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Note=During mitosis it is strictly associated with the spindle pole and with the mitotic spindle, whereas during S and G2, it is diffusely distributed throughout the nucleus. Is released from the nucleus in apoptotic cells and is detected on apoptotic microtubules.

#### Tissue Location

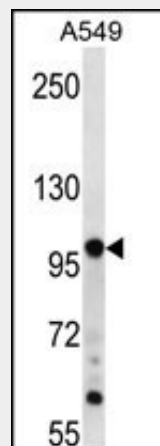
Expressed in lung carcinoma cell lines but not in normal lung tissues

#### TPX2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### TPX2 Antibody (Center) - Images



TPX2 Antibody (Center) (Cat. #AP14553c) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the TPX2 antibody detected the TPX2 protein (arrow).

### **TPX2 Antibody (Center) - Background**

TPX2 is a 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 Antibody (Center) - References**

Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press :  
Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009)  
Bibby, R.A., et al. J. Biol. Chem. 284(48):33177-33184(2009)  
Shigeishi, H., et al. Int. J. Oncol. 34(6):1565-1571(2009)  
Moss, D.K., et al. J. Cell. Sci. 122 (PT 5), 644-655 (2009) :