

# TPX2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14553c

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9ULW0</a>
<b>Other Accession</b>	<a href="#">A6H6Z7</a> , <a href="#">NP_036244.2</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB34505
<b>Calculated MW</b>	85653
<b>Antigen Region</b>	419-448

## Additional Information

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<b>Gene ID</b>	22974
<b>Other Names</b>	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
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	TPX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	TPX2
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<b>Synonyms</b>	C20orf1, C20orf2, DIL2, HCA519
<b>Function</b>	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: <a href="#">18663142</a> , PubMed: <a href="#">19208764</a> , PubMed: <a href="#">37728657</a> ). Activates AURKA by promoting its autophosphorylation at 'Thr-288' and protects this residue against dephosphorylation (PubMed: <a href="#">18663142</a> , PubMed: <a href="#">19208764</a> ). TPX2 is inactivated upon binding to importin-alpha (PubMed: <a href="#">26165940</a> ). At the onset of mitosis, GOLGA2 interacts with importin-alpha, liberating TPX2 from importin-alpha, allowing TPX2 to activate AURKA kinase and stimulate local microtubule nucleation (PubMed: <a href="#">26165940</a> ).
<b>Cellular Location</b>	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.
<b>Tissue Location</b>	Expressed in lung carcinoma cell lines but not in normal lung tissues

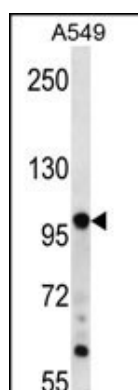
## Background

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.

## 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) :

## 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.