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# TPX2 Antibody
**Purified Mouse Monoclonal Antibody (Mab)**
**Catalog # AM8582b**

## Specification

### TPX2 Antibody - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q9ULW0 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **monoclonal** |
| Isotype | **IgG1,k** |
| Calculated MW | **85653** |

### TPX2 Antibody - 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 a mouse immunized with a recombinant protein between 1-531 amino acids from the human TPX2.

**Dilution**
WB~~1:2000

**Format**
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**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 is for research use only and not for use in diagnostic or therapeutic procedures.

### TPX2 Antibody - 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 stimulate 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.

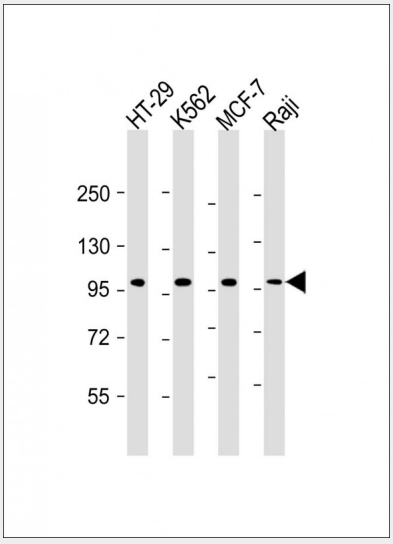
**Tissue Location**
Expressed in lung carcinoma cell lines but not in normal lung tissues

## TPX2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TPX2 Antibody - Images




All lanes : Anti-TPX2 Antibody at 1:2000 dilution Lane 1: HT-29 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000

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dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

**TPX2 Antibody - 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 Antibody - References**

Manda R.,et al.Genomics 61:5-14(1999).
Zhang Y.,et al.Cytogenet. Cell Genet. 84:182-183(1999).
Nezu J.,et al.Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
Wang Y.,et al.J. Immunol. 169:1102-1109(2002).
Deloukas P.,et al.Nature 414:865-871(2001).