

# **TPX2 Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8582b

#### **Product Information**

ApplicationWB, EPrimary AccessionQ9ULW0ReactivityHumanHostMouseClonalitymonoclonalIsotypeIgG1,k

**Clone Names** 1696CT464.66.9

Calculated MW 85653

#### **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 E~~Use at an assay dependent concentration.

**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.

#### **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

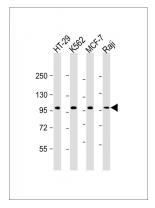
## **Background**

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.

### 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).

## **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 LysateSyproteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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