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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
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.

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.

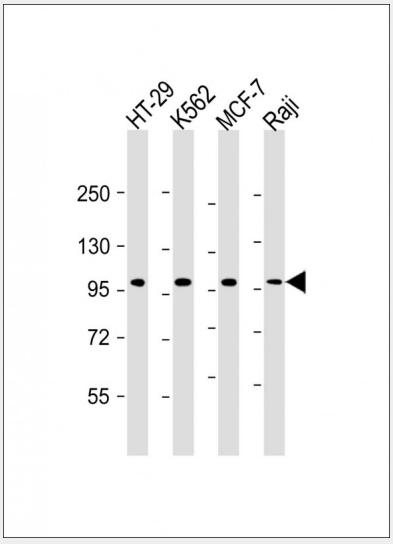
Tissue Location
Expressed in lung carcinoma cell lines but not in normal lung tissues

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).