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KD-Validated Anti-TPX2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI2286

Specification

KD-Validated Anti-TPX2 Rabbit Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q9ULW0
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 86 kDa; observed, 98 kDa KDa**
Gene Name	**TPX2**
Aliases	**TPX2; TPX2 Microtubule Nucleation Factor; HCA519; DIL-2; P100; Hepatocellular Carcinoma-Associated Antigen 519; Targeting Protein For Xklp2; C20orf1; C20orf2; FLS353; Differentially Expressed In Cancerous And Non-Cancerous Lung Cells 2; Differentially Expressed In Cancerous And Noncancerous Lung Cells 2; Hepatocellular Carcinoma-Associated Antigen 90; Protein Fls353; DIL2; Restricted Expression Proliferation Associated Protein 100; Restricted Expression Proliferation-Associated Protein 100; TPX2, Microtubule-Associated, Homolog (Xenopus Laevis); Preferentially Expressed In Colorectal Cancer; TPX2, Microtubule-Associated Protein Homolog; Differentially Expressed In Lung Cells; TPX2, Microtubule-Associated, Homolog; Chromosome 20 Open Reading Frame 1; TPX2, Microtubule-Associated; GD:C20orf1; REPP86; HCTP4**
Immunogen	**A synthesized peptide derived from human TPX2**

KD-Validated Anti-TPX2 Rabbit Monoclonal 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

KD-Validated Anti-TPX2 Rabbit Monoclonal 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

KD-Validated Anti-TPX2 Rabbit Monoclonal 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

KD-Validated Anti-TPX2 Rabbit Monoclonal Antibody - Images

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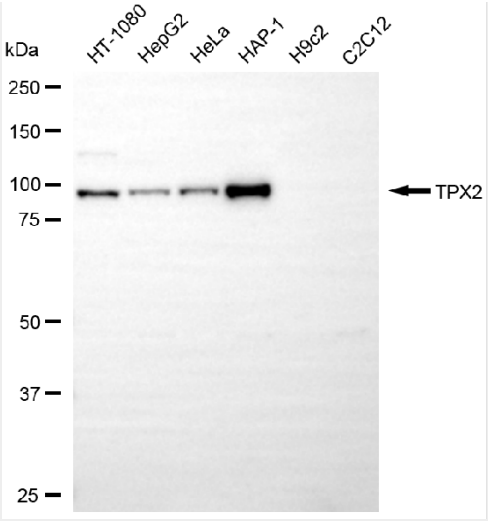
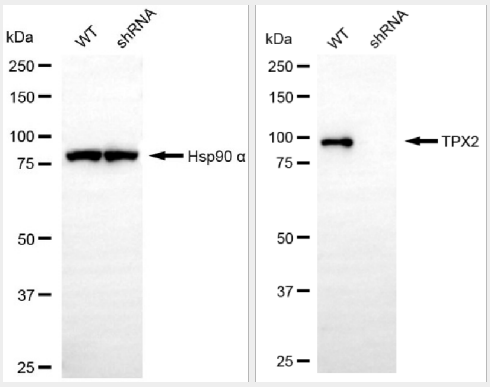


Western blotting analysis using anti-TPX2 antibody (Cat#AGI2286). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-TPX2 antibody (Cat#AGI2286, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-TPX2 antibody (Cat#AGI2286). TPX2 expression in wild-type (WT) and TPX2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-TPX2 antibody (Cat#AGI2286, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.