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TPX2 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14553c

Specification

TPX2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9ULW0

TPX2 Antibody (Center) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TPX2 Antibody (Center) Blocking Peptide - 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 activates AURKA kinase and stimulates local microtubule nucleation (PubMed:<a

href="http://www.uniprot.org/citations/26165940" target="_blank">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 (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

TPX2 Antibody (Center) Blocking Peptide - Images

TPX2 Antibody (Center) Blocking Peptide - 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.

TPX2 Antibody (Center) Blocking Peptide - 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) :