

Anti-MAD1 Picoband Antibody
Catalog # ABO11953**Specification****Anti-MAD1 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	Q9Y6D9
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Mitotic spindle assembly checkpoint protein MAD1(MAD1L1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MAD1 Picoband Antibody - Additional Information

Gene ID 8379

Other Names

Mitotic spindle assembly checkpoint protein MAD1, Mitotic arrest deficient 1-like protein 1, MAD1-like protein 1, Mitotic checkpoint MAD1 protein homolog, HsMAD1, hMAD1, Tax-binding protein 181, MAD1L1, MAD1, TXBP181

Calculated MW

83067 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. From the beginning to the end of mitosis, it is seen to move from a diffusely nuclear distribution to the centrosome, to the spindle midzone and finally to the midbody. Colocalizes with NEK2 at the kinetochore.

Tissue Specificity

Expressed weakly at G0/G1 and highly at late S and G2/M phase.

Protein Name

Mitotic spindle assembly checkpoint protein MAD1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human MAD1 recombinant protein (Position: L362-A632). Human MAD1 shares 81% amino acid (aa) sequence identity with mouse MAD1.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the MAD1 family.

Anti-MAD1 Picoband Antibody - Protein Information

Name MAD1L1

Synonyms MAD1, TXBP181

Function

Component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate (PubMed: [10049595](http://www.uniprot.org/citations/10049595), PubMed: [20133940](http://www.uniprot.org/citations/20133940), PubMed: [29162720](http://www.uniprot.org/citations/29162720)). Forms a heterotetrameric complex with the closed conformation form of MAD2L1 (C-MAD2) at unattached kinetochores during prometaphase, recruits an open conformation of MAD2L1 (O-MAD2) and promotes the conversion of O-MAD2 to C-MAD2, which ensures mitotic checkpoint signaling (PubMed: [29162720](http://www.uniprot.org/citations/29162720)).

Cellular Location

Nucleus. Chromosome, centromere, kinetochore. Nucleus envelope Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Note=Co-localizes with TPR at the nucleus envelope during interphase and throughout the cell cycle (PubMed:22351768, PubMed:18981471). From the beginning to the end of mitosis, it is seen to move from a diffusely nuclear distribution to the centrosome, to the spindle midzone and finally to the midbody (PubMed:9546394). Localizes to kinetochores during prometaphase (PubMed:22351768, PubMed:29162720). Does not localize to kinetochores during metaphase (PubMed:29162720) Colocalizes with NEK2 at the kinetochore (PubMed:14978040). Colocalizes with IK at spindle poles during metaphase and anaphase (PubMed:22351768).

Tissue Location

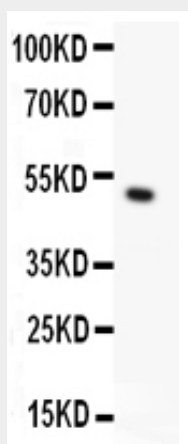
[Isoform 1]: Expressed in hepatocellular carcinomas and hepatoma cell lines (at protein level)

Anti-MAD1 Picoband Antibody - Protocols

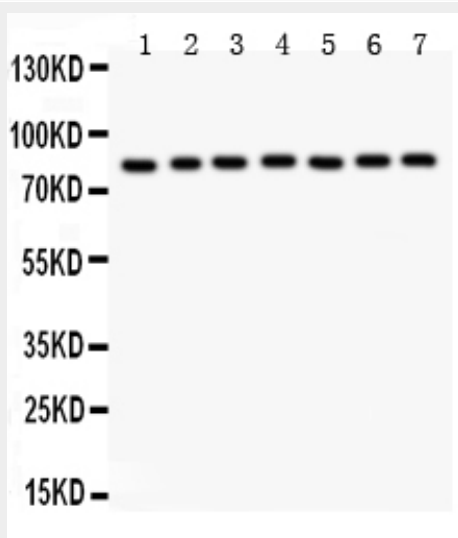
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

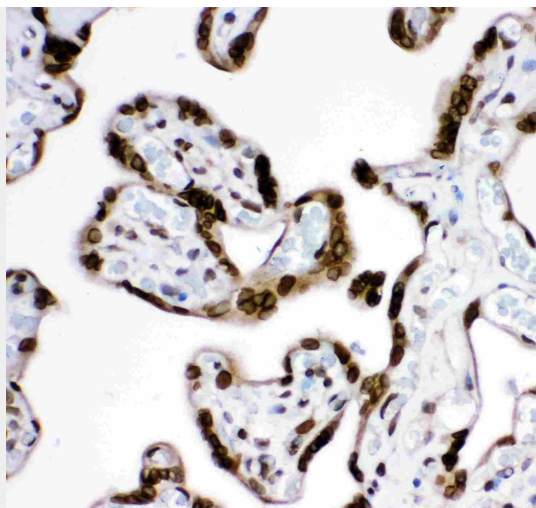
Anti-MAD1 Picoband Antibody - Images



Anti- MAD1 Picoband antibody, ABO11953, Western blottingAll lanes: Anti MAD1 (ABO11953) at 0.5ug/mlWB: Recombinant Human MAD1 Protein 0.5ngPredicted bind size: 50KDObserved bind size: 50KD



Anti- MAD1 Picoband antibody, ABO11953, Western blottingAll lanes: Anti MAD1 (ABO11953) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: 293T Whole Cell Lysate at 40ugLane 5: SHG Whole Cell Lysate at 40ugLane 6: 22RV1 Whole Cell Lysate at 40ugLane 7: PANC Whole Cell Lysate at 40ugPredicted bind size: 83KDObserved bind size: 83KD



Anti- MAD1 Picoband antibody, ABO11953, IHC(P)IHC(P): Human Placenta Tissue

Anti-MAD1 Picoband Antibody - Background

Mitotic spindle assembly checkpoint protein MAD1 is a protein that in humans is encoded by the MAD1L1 gene. It is mapped to 7p22.3. MAD1L1 is a component of the mitotic spindle-assembly checkpoint that prevents the onset of anaphase until all chromosome are properly aligned at the metaphase plate. MAD1L1 can function as a homodimer. It localizes to the centrosome during metaphase and to the spindle midzone and the midbody during anaphase and telophase. MAD1L1 may also play a role in cell cycle control and tumor suppression.