

Anti-MAD1 Picoband Antibody

Catalog # ABO11953

Specification

Anti-MAD1 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionO9Y6D9HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit 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 r°Constitution, 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, PubMed:20133940, PubMed: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).

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:18981471, PubMed:22351768). 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.



- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-MAD1 Picoband Antibody - Images

100KD -70KD -55KD -35KD -25KD -15KD -

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

1 2 3 4 5 6 7 100KD – 70KD – 55KD – 35KD – 25KD – 15KD –

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.