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Anti-MAD1 Picoband Antibody

Catalog # ABO11953

Product Information

Application	WB, IHC-P
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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.

Protein Information

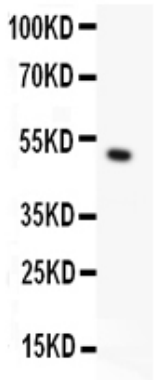
Name	MAD1L1
Synonyms	MAD1, TXBP181
Function	Component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate (PubMed:10049595, PubMed:20133940, PubMed:29162720). Forms a heterotetrameric complex with the closed conformation 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)

Background

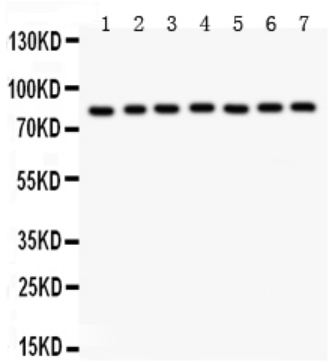
Mitotic spindle assembly checkpoint protein MAD1 is a protein that in humans is encoded by the MAD1L1 gene. It is mapped to 7p22.3. MAD1L1 is a component of the mitotic spindle-assembly checkpoint that prevents the onset of anaphase until all chromosome are properly aligned at the metaphase plate. MAD1L1 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.

Images

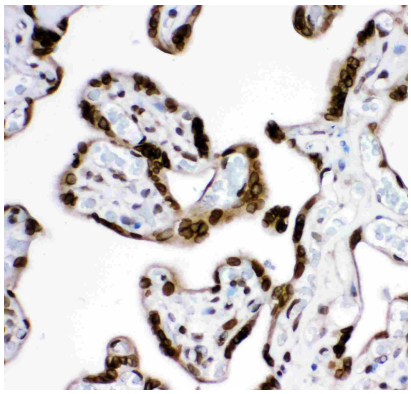
Anti- MAD1 Picoband antibody, ABO11953, Western blottingAll lanes: Anti MAD1 (ABO11953) at 0.5ug/mlWB: Recombinant Human MAD1 Protein 0.5ngPredicted bind



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.