

## MAD1L1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12347a

### Specification

# MAD1L1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9Y6D9</u> <u>NP\_001013859.1</u>, <u>NP\_001013858.1</u>, <u>NP\_003541.2</u> Human Rabbit Polyclonal Rabbit IgG 83067 124-151

## MAD1L1 Antibody (N-term) - 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

#### Target/Specificity

This MAD1L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 124-151 amino acids from the N-terminal region of human MAD1L1.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

MAD1L1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## MAD1L1 Antibody (N-term) - 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:<u>10049595</u>, PubMed:<u>20133940</u>, PubMed:<u>29162720</u>). 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:<u>29162720</u>).

#### **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**

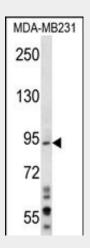
[Isoform 1]: Expressed in hepatocellular carcinomas and hepatoma cell lines (at protein level)

# MAD1L1 Antibody (N-term) - Protocols

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

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

## MAD1L1 Antibody (N-term) - Images



MAD1L1 Antibody (N-term) (Cat. #AP12347a) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the MAD1L1 antibody detected the MAD1L1 protein



# (arrow).

# MAD1L1 Antibody (N-term) - Background

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 functions as a homodimer and interacts with MAD2L1. MAD1L1 may play a role in cell cycle control and tumor suppression. Three transcript variants encoding the same protein have been found for this gene. [provided by RefSeq].

# MAD1L1 Antibody (N-term) - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Guo, Y., et al. J. Med. Genet. 47(9):616-622(2010) Wang, H.B., et al. J. Gastrointest. Surg. 14(8):1227-1234(2010) Hewitt, L., et al. J. Cell Biol. 190(1):25-34(2010) Ge, Z., et al. FASEB J. 24(2):579-586(2010) MAD1L1 Antibody (N-term) - Citations • Kinetochore protein MAD1 participates in the DNA damage response through

 <u>Kinetochore protein MAD1 participates in the DNA damage response through</u> <u>ataxia-telangiectasia mutated kinase-mediated phosphorylation and enhanced interaction</u> <u>with KU80</u>