

### KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1352

### **Specification**

# **KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal Antibody - Product Information**

Application WB, FC, ICC Primary Accession Q9Y6D9

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 83 kDa; observed, 75 kDa KDa

Gene Name MAD1L1

Aliases

MAD1L1; Mitotic Arrest Deficient 1 Like 1;

TXBP181; MAD1; HsMAD1; TP53I9; PIG9;

Mitotic Spindle Assembly Checkpoint

Protein MAD1; Mitotic Arrest Deficient
1-Like Protein 1; Mitotic Checkpoint MAD1
Protein Homolog; MAD1 Mitotic Arrest
Deficient Like 1; Tax-Binding Protein 181;
MAD1-Like Protein 1; MAD1 (Mitotic Arrest

Deficient, Yeast, Homolog)-Like 1; Mitotic-Arrest Deficient 1, Yeast, Homolog-Like 1; MAD1 Mitotic Arrest

Deficient-Like 1 (Yeast); Tumor Protein P53

**Inducible Protein 9; HMAD1; MVA7** 

Immunogen A synthesized peptide derived from human

MAD1

# KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal 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

## KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal 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:<a

href="http://www.uniprot.org/citations/10049595" target="\_blank">10049595</a>, PubMed:<a href="http://www.uniprot.org/citations/20133940" target="\_blank">20133940</a>, PubMed:<a href="http://www.uniprot.org/citations/29162720" target="\_blank">29162720</a>). 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:<a href="http://www.uniprot.org/citations/29162720" target="\_blank">29162720</a>).

### **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**

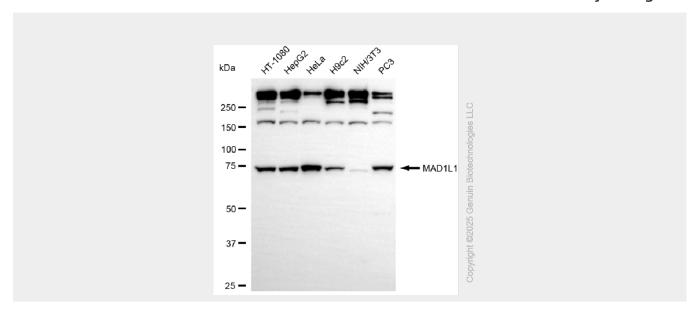
[Isoform 1]: Expressed in hepatocellular carcinomas and hepatoma cell lines (at protein level)

# KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal Antibody - Protocols

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

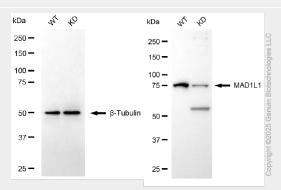
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### KD-Validated Anti-Mitotic Arrest Deficient 1 Like 1 Rabbit Monoclonal Antibody - Images

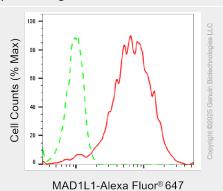




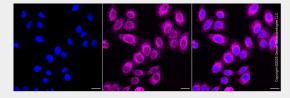
Western blotting analysis using anti-MAD1L1 antibody (Cat#61622). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MAD1L1 antibody (Cat#61622, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{TM}}$  ECL Substrate Kit (Cat#716).



Western blotting analysis using anti-MAD1L1 antibody (Cat#61622). MAD1L1 expression in wild-type (WT) and MAD1L1 knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-MAD1L1 antibody (Cat#61622, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{m}}$  ECL Substrate Kit (Cat#716).



Flow cytometric analysis of MAD1L1 expression in HepG2 cells using anti-MAD1L1 antibody (Cat#61622, 1:2,000). Green, isotype control; red, MAD1L1.



Immunocytochemical staining of HepG2 cells with anti-MAD1L1 antibody (Cat#61622, 1:1,000). Nuclei were stained blue with DAPI; MAD1L1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar,  $20~\mu m$ .