

### KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1870

### **Specification**

## KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody - Product Information

Application WB, FC
Primary Accession Q9UI95
Reactivity Human
Clonality Monoclo

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 24 kDa, observed, 24 kDa KDa

Gene Name MAD2L2

Aliases MAD2L2; Mitotic Arrest Deficient 2 Like 2;

MAD2B; REV7; POLZ2; FANCV; MAD2 (Mitotic Arrest Deficient, Yeast, Homolog)-Like 2; Polymerase

(DNA-Directed), Zeta 2, Accessory Subunit; Mitotic Spindle Assembly Checkpoint Protein MAD2B; Mitotic Arrest Deficient 2-Like Protein 2; Mitotic Arrest Deficient Homolog-Like 2; MAD2-Like Protein 2; REV7 Homolog; HREV7; MAD2 Mitotic

**Arrest Deficient-Like 2** 

Immunogen A synthesized peptide derived from human

Mad2L2

# KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID **10459** 

**Other Names** 

Mitotic spindle assembly checkpoint protein MAD2B, Mitotic arrest deficient 2-like protein 2, MAD2-like protein 2, REV7 homolog, hREV7, MAD2L2, MAD2B, REV7

# KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody - Protein Information

Name MAD2L2

Synonyms MAD2B, REV7

#### **Function**

Adapter protein able to interact with different proteins and involved in different biological processes (PubMed:<a href="http://www.uniprot.org/citations/11459825" target="\_blank">11459825</a>, PubMed:<a href="http://www.uniprot.org/citations/11459826" target=" blank">11459826</a>, PubMed:<a href="http://www.uniprot.org/citations/17296730"



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target=" blank">17296730</a>, PubMed:<a href="http://www.uniprot.org/citations/17719540" target="blank">17719540</a>, PubMed:<a href="http://www.uniprot.org/citations/19443654" target="blank">19443654</a>, PubMed:<a href="http://www.uniprot.org/citations/29656893" target=" blank">29656893</a>). Mediates the interaction between the error-prone DNA polymerase zeta catalytic subunit REV3L and the inserter polymerase REV1, thereby mediating the second polymerase switching in translesion DNA synthesis (PubMed: <a href="http://www.uniprot.org/citations/20164194" target=" blank">20164194</a>). Translesion DNA synthesis releases the replication blockade of replicative polymerases, stalled in presence of DNA lesions (PubMed: <a href="http://www.uniprot.org/citations/20164194" target=" blank">20164194</a>). Component of the shieldin complex, which plays an important role in repair of DNA double-stranded breaks (DSBs) (PubMed: <a href="http://www.uniprot.org/citations/29656893" target=" blank">29656893</a>). During G1 and S phase of the cell cycle, the complex functions downstream of TP53BP1 to promote non-homologous end joining (NHEJ) and suppress DNA end resection (PubMed: <a href="http://www.uniprot.org/citations/29656893" target=" blank">29656893</a>). Mediates various NHEI-dependent processes including immunoglobulin class-switch recombination, and fusion of unprotected telomeres (PubMed:<a href="http://www.uniprot.org/citations/29656893" target=" blank">29656893</a>). May also regulate another aspect of cellular response to DNA damage through regulation of the JNK-mediated phosphorylation and activation of the transcriptional activator ELK1 (PubMed:<a href="http://www.uniprot.org/citations/17296730" target=" blank">17296730</a>). Inhibits the FZR1- and probably CDC20-mediated activation of the anaphase promoting complex APC thereby regulating progression through the cell cycle (PubMed:<a href="http://www.uniprot.org/citations/11459825" target=" blank">11459825</a>, PubMed: <a href="http://www.uniprot.org/citations/17719540" target=" blank">17719540</a>). Regulates TCF7L2-mediated gene transcription and may play a role in epithelial-mesenchymal transdifferentiation (PubMed:<a href="http://www.uniprot.org/citations/19443654" target=" blank">19443654</a>).

#### **Cellular Location**

Nucleus. Cytoplasm, cytoskeleton, spindle. Cytoplasm. Chromosome. Note=Recruited to sites of chromosomal double-stranded breaks during G1 and S phase of the cell cycle

## **Tissue Location**

Ubiquitously expressed.

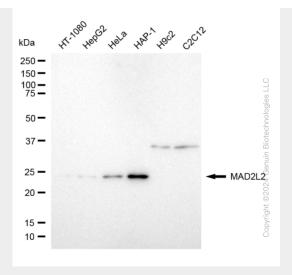
## KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody -**Protocols**

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

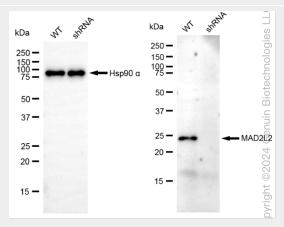
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cvtometv
- Cell Culture

KD-Validated Anti-Mitotic Arrest Deficient 2 Like 2 Rabbit Monoclonal Antibody - Images

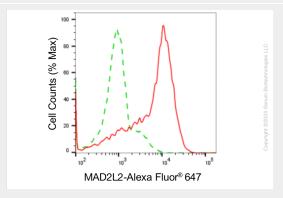




Western blotting analysis using anti-MAD2L2 antibody (Cat#63299). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MAD2L2 antibody (Cat#63299, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{TM}}$  ECL Substrate Kit (Cat#716). MAD2L2, mitotic arrest deficient 2 like 2.



Western blotting analysis using anti-MAD2L2 antibody (Cat#63299). MAD2L2 expression in wild-type (WT) and MAD2L2 shRNA 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-MAD2L2 antibody (Cat#63299, 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 MAD2L2 expression in HAP-1 cells using anti-MAD2L2 antibody (Cat#63299, 1:2,000). Green, isotype control; red,MAD2L2.