

# MAD2L2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20654c

## Product Information

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<b>Application</b>	WB, IHC-P, IF, E
<b>Primary Accession</b>	<a href="#">Q9UI95</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB48484
<b>Calculated MW</b>	24334

## Additional Information

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<b>Gene ID</b>	10459
<b>Other Names</b>	Mitotic spindle assembly checkpoint protein MAD2B, Mitotic arrest deficient 2-like protein 2, MAD2-like protein 2, REV7 homolog, hREV7, MAD2L2, MAD2B, REV7
<b>Target/Specificity</b>	This MAD2L2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 198-231 amino acids from the C-terminal region of human MAD2L2.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 IF~~1:25 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	MAD2L2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	MAD2L2
<b>Synonyms</b>	MAD2B, REV7
<b>Function</b>	Adapter protein able to interact with different proteins and involved in

different biological processes (PubMed:[11459825](#), PubMed:[11459826](#), PubMed:[17296730](#), PubMed:[17719540](#), PubMed:[19443654](#), PubMed:[29656893](#)). 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:[20164194](#), PubMed:[23143872](#)). Translesion DNA synthesis releases the replication blockade of replicative polymerases, stalled in presence of DNA lesions (PubMed:[20164194](#)). Component of the shieldin complex, which plays an important role in repair of DNA double-stranded breaks (DSBs) (PubMed:[29656893](#)). 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:[29656893](#)). Mediates various NHEJ-dependent processes including immunoglobulin class-switch recombination, and fusion of unprotected telomeres (PubMed:[29656893](#)). 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:[17296730](#)). Inhibits the FZR1- and probably CDC20-mediated activation of the anaphase promoting complex APC thereby regulating progression through the cell cycle (PubMed:[11459825](#), PubMed:[17719540](#)). Regulates TCF7L2-mediated gene transcription and may play a role in epithelial-mesenchymal transdifferentiation (PubMed:[19443654](#)).

**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.

## Background

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Adapter protein able to interact with different proteins and involved in different biological processes. 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. Translesion DNA synthesis releases the replication blockade of replicative polymerases, stalled in presence of DNA lesions. 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. Inhibits the FZR1- and probably CDC20-mediated activation of the anaphase promoting complex APC thereby regulating progression through the cell cycle. Regulates TCF7L2-mediated gene transcription and may play a role in epithelial-mesenchymal transdifferentiation.

## References

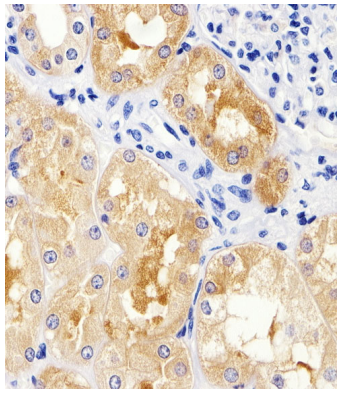
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- Nelson K.K., et al. *Biochem. J.* 343:673-680(1999).  
Hirota T., et al. Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.  
Cahill D.P., et al. *Genomics* 58:181-187(1999).  
Murakumo Y., et al. *J. Biol. Chem.* 275:4391-4397(2000).  
Ota T., et al. *Nat. Genet.* 36:40-45(2004).

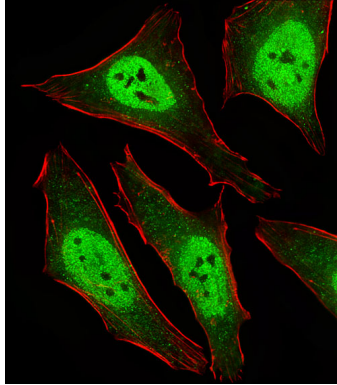
## Images

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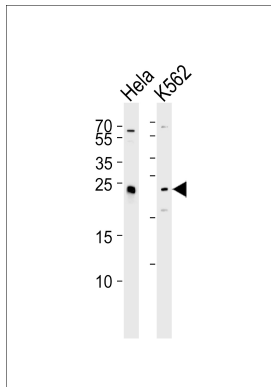
Immunohistochemical analysis of paraffin-embedded H. kidney section using MAD2L2 Antibody (C-term)(Cat#AP20654c). AP20654c was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at



1:400 dilution was used as the secondary antibody, followed by DAB staining.



Fluorescent image of HeLa cells stained with MAD2L2 Antibody (C-term)(Cat#AP20654c). AP20654c was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from HeLa, K562 cell line (from left to right), using MAD2L2 Antibody (C-term)(Cat. #AP20654c). AP20654c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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