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MAD2L2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20654c

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q9UI95
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB48484
Calculated MW	24334

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
Target/Specificity	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.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:25 E~~Use at an assay dependent concentration.
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	MAD2L2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAD2L2
Synonyms	MAD2B, REV7

Function	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

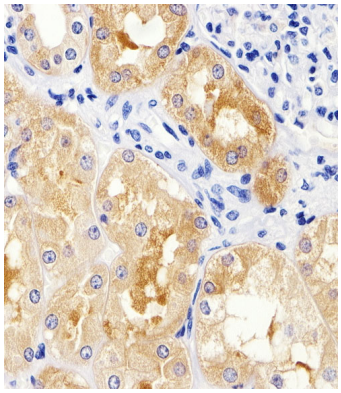
Adapter protein able to interact with different proteins and involved in different biological processes. Mediates the interaction between the error-prone DNA polymerase zeta catalytic subunit REV3L and the inserter polymerase REV1, thereby mediating the second polymerase switching in translesion DNA 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

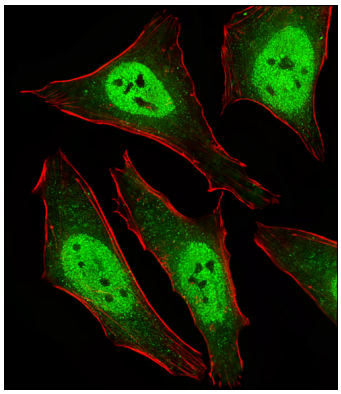
Nelson K.K.,et al.Biochem. J. 343:673-680(1999).
Hirota T.,et al.Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
Cahill D.P.,et al.Genomics 58:181-187(1999).
Murakumo Y.,et al.J. Biol. Chem. 275:4391-4397(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images

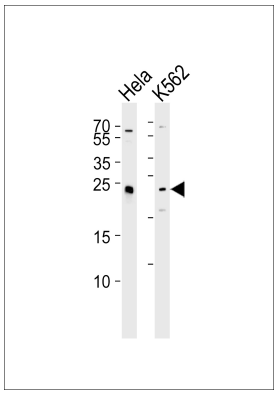
Immunohistochemical analysis of paraffin-embedded H. kidney section using MAD2L2 Antibody (C-term)(Cat#AP20654c). AP20654c was diluted at 1:25



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 lgG 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'.