10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MAD2L1 (RABBIT) Antibody
MAD2L1 Antibody
Catalog # ASR5238

Specification

Anti-MAD2L1 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a predominant band at ~ 24 kDa corresponding to full length protein by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to N-terminal region near amino acid residues 1-25 of Human MAD2L1 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-MAD2L1 (RABBIT) Antibody - Additional Information

Gene ID 4085

Other Names
4085

Purity
This affinity purified antibody is directed against human MAD2L1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, dog, macaque, chimpanzee and gecko based on 100% homology for the immunogen sequence. Cross reactivity with MAD2L1 may occur from mouse and chicken sources, as only a two amino acid residue change is found within the immunogen sequence (90% positive by BLAST). Cross reactivity with MAD2L1 homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-MAD2L1 (RABBIT) Antibody - Protein Information

Name MAD2L1

Synonyms MAD2

Function
Component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate (PubMed:15024386, PubMed:29162720). In the closed conformation (C-MAD2) forms a heterotetrameric complex with MAD1L1 at unattached kinetochores during prometaphase, the complex recruits open conformation molecules of MAD2L1 (O-MAD2) and then promotes the conversion of O-MAD2 to C-MAD2 (PubMed:29162720). Required for the execution of the mitotic checkpoint which monitors the process of kinetochore-spindle attachment and inhibits the activity of the anaphase promoting complex by sequestering CDC20 until all chromosomes are aligned at the metaphase plate (PubMed:10700282, PubMed:11804586, PubMed:15024386).

Cellular Location
Nucleus. Chromosome, centromere, kinetochore. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole Note=Recruited by MAD1L1 to unattached kinetochores (Probable) Recruited to the nuclear pore complex by TPR during interphase Recruited to kinetochores in late prometaphase after BUB1, CENPF, BUB1B and CENPE. Kinetochore association requires the presence of NEK2 Kinetochore association is repressed by UBD. Sequestered to the cytoplasm upon interaction with isoform 3 of MAD1L1 (PubMed:19010891) {ECO:0000269|PubMed:19010891, ECO:0000305}

Anti-MAD2L1 (RABBIT) 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

Anti-MAD2L1 (RABBIT) Antibody - Images

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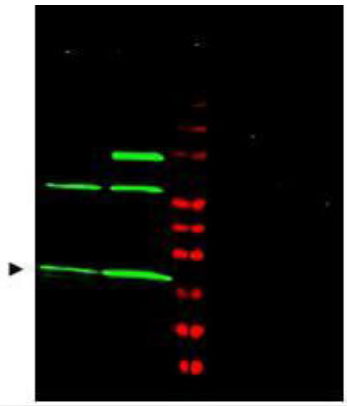

Western blot using Rockland's Affinity Purified anti-MAD2L1 antibody shows detection of a predominant band at ~24 kDa corresponding to MAD2L1 (arrowhead) present in Jurkat (p/n W09-001-370) [lane 1] and HeLa (p/n W09-000-364) [lane 2] whole cell lysates using the 800 nm channel (green). The identity of the higher molecular weight bands is unknown, although they may represent complexes of MAD2L1 with related binding proteins. Specific band reactivity is blocked when the antibody is pre-incubated with immunizing peptide (lanes 4 and 5 respectively) which completely blocks antibody staining. ~ 35 µg of lysate was separated on a 4-20% Tris-glycine gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1200. Incubation was 2h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] MXHu (p/n 611-432-122) for 45 min at room temperature. Molecular weight markers were used for size comparison using the 700 nm channel (lane 3). IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-MAD2L1 (RABBIT) Antibody - Background

MAD2L1 (also called mitotic spindle assembly checkpoint protein, MAD2A, MAD2-like 1 and HsMAD2) is a component of the mitotic spindle assembly checkpoint monitors the process of kinetochore-spindle attachment and delays the onset of anaphase when this process is not complete. MAD2L1 inhibits the activity of the anaphase-promoting complex by sequestering CDC20 until all chromosomes are aligned at the metaphase plate. MAD2L1 is related to the MAD2L2 gene located on chromosome 1. A MAD2 pseudogene has been mapped to chromosome 14. This protein has a nuclear localization.