

**Anti-MAD2L1 (MOUSE) Monoclonal Antibody**  
**MAD2L1 Antibody**  
**Catalog # ASR4160**

**Specification**

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**Anti-MAD2L1 (MOUSE) Monoclonal Antibody - Product Information**

Host	Mouse
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Monoclonal
Application	WB, E, IP, I, LCI
Application Note	This protein A purified antibody has been tested for use in immunoprecipitation and by western blot. This antibody is not applicable for immunofluorescence microscopy. 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 protein A purified monoclonal antibody was produced by repeated immunizations with full-length recombinant human MAD2L1 protein.
Preservative	0.01% (w/v) Sodium Azide

**Anti-MAD2L1 (MOUSE) Monoclonal Antibody - Additional Information**

**Gene ID** 4085

**Other Names**  
4085

**Purity**

This Protein A purified antibody is directed against human MAD2L1 protein. The product was purified from tissue culture supernatant by chromatography. This antibody has only been tested on human cells. Reactivity against homologues from other sources is not known.

**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 (MOUSE) Monoclonal 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:<a href="http://www.uniprot.org/citations/15024386" target="\_blank">15024386</a>, PubMed:<a href="http://www.uniprot.org/citations/29162720" target="\_blank">29162720</a>). 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:<a href="http://www.uniprot.org/citations/29162720" target="\_blank">29162720</a>). 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:<a href="http://www.uniprot.org/citations/10700282" target="\_blank">10700282</a>, PubMed:<a href="http://www.uniprot.org/citations/11804586" target="\_blank">11804586</a>, PubMed:<a href="http://www.uniprot.org/citations/15024386" target="\_blank">15024386</a>).

### Cellular Location

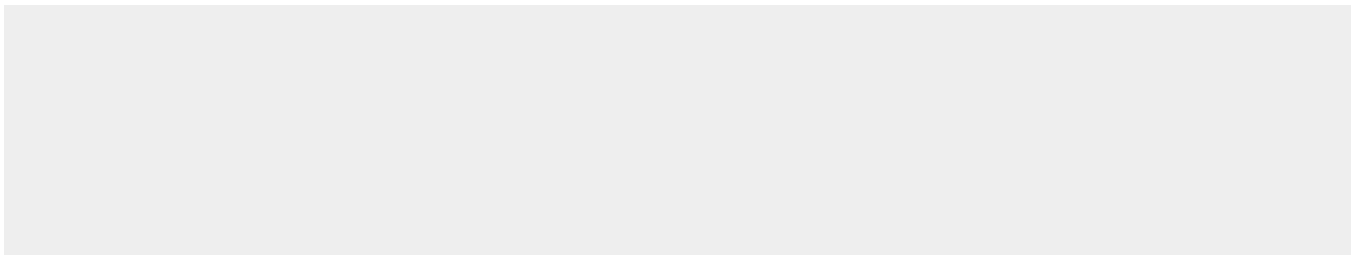
Nucleus. Chromosome, centromere, kinetochore. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole Note=Recruited by MAD1L1 to unattached kinetochores (Probable) Recruited to the nuclear pore complex by TPR during interphase Recruited to kinetochores in late prometaphase after BUB1, CENPF, BUB1B and CENPE. 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}

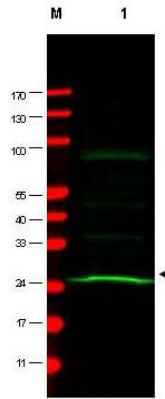
## Anti-MAD2L1 (MOUSE) Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-MAD2L1 (MOUSE) Monoclonal Antibody - Images





Western blot using Rockland's Mab anti-MAD2L1 antibody shows detection of a band at ~24 kDa (arrowhead) corresponding to MAD2L1 present in a HeLa whole cell lysate (p/n W09-000-364). Approximately 75  $\mu$ g of lysate was separated by 4-20% TG SDS-PAGE. After blocking, the membrane was probed overnight at 4°C with the primary antibody diluted to 1:200. The membrane was washed and reacted with a 1:5,000 dilution of IRDye™ 800 conjugated Sh-a-Mouse IgG [H&L] (p/n 610-632-002) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). 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 (MOUSE) Monoclonal 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. This protein has a nuclear localization. A MAD2 pseudogene has been mapped to chromosome 14.