

## **Anti-Mad2L1 Picoband Antibody**

**Catalog # ABO11973** 

# **Specification**

# Anti-Mad2L1 Picoband Antibody - Product Information

Application WB
Primary Accession Q13257
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Mitotic spindle assembly checkpoint protein MAD2A(MAD2L1) detection. Tested with WB in Human.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-Mad2L1 Picoband Antibody - Additional Information**

**Gene ID 4085** 

#### **Other Names**

Mitotic spindle assembly checkpoint protein MAD2A, HsMAD2, Mitotic arrest deficient 2-like protein 1, MAD2-like protein 1, MAD2L1, MAD2

## Calculated MW 23510 MW KDa

## **Application Details**

Western blot, 0.1-0.5 μg/ml, Human<br>

### **Subcellular Localization**

Nucleus. Chromosome, centromere, kinetochore. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole. 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.

#### **Protein Name**

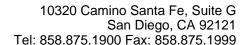
Mitotic spindle assembly checkpoint protein MAD2A

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

#### **Immunogen**

E.coli-derived human Mad2L1 recombinant protein (Position: A2-D205). Human Mad2L1 shares 94% amino acid (aa) sequence identity with mouse Mad2L1.





**Purification**Immunogen affinity purified.

**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the MAD2 family.

## **Anti-Mad2L1 Picoband 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/15024386" 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 Picoband Antibody - Protocols**

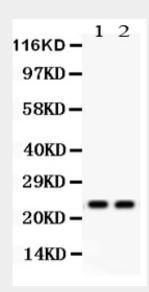
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-Mad2L1 Picoband Antibody - Images



Anti- Mad2L1 Picoband antibody, ABO11973, Western blottingAll lanes: Anti Mad2L1 (ABO11973) at 0.5ug/mlLane 1: 293T Whole Cell Lysate at 40ugLane 2: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 23KDObserved bind size: 23KD

### Anti-Mad2L1 Picoband Antibody - Background

Mitotic spindle assembly checkpoint protein MAD2A is a protein that in humans is encoded by the MAD2L1 gene. This gene belongs to the MAD2 family. It is mapped to 4q27. MAD2L1 is a component of the mitotic spindle assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate. The protein has two highly different native conformations, an inactive open conformation that cannot bind CDC20 and that predominates in cytosolic monomers, and an active closed conformation. It is required for the execution of the mitotic checkpoint which monitors the process of kinetochore-spindle attachment.