

MAD2L1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50070

Product Information

Application WB
Primary Accession Q13257
Reactivity Human
Host Rabbit
Clonality polyclonal
Calculated MW 23510

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

Dilution WB~~ 1:1000

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

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:<u>10700282</u>, PubMed:<u>11804586</u>, PubMed:<u>15024386</u>).

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}

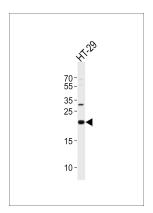
Background

Component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate. 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.

References

Li Y.,et al.Science 274:246-248(1996). Gemma A.,et al.Lung Cancer 32:289-295(2001). Jin D.-Y.,et al.Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases. Klebert S.,et al.Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases. Nobori T.,et al.Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysate from HT-29 cell line,using MAD2L1 Antibody(C21657). C21657 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

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