

MAD2 Polyclonal Antibody

Catalog # AP70801

Product Information

Application	WB
Primary Accession	<u>Q13257</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23510

Additional Information

Gene ID	4085
Other Names	MAD2L1; MAD2; Mitotic spindle assembly checkpoint protein MAD2A; HsMAD2; Mitotic arrest deficient 2-like protein 1; MAD2-like protein 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
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: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}

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.

Images



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