



Rabbit Anti-MAD1 antibody

SL1595R

Product Name:	MAD1
Chinese Name:	有丝分裂抑制缺陷蛋白1抗体
Alias:	mitosis arrest deficiency 1; hMAD1; HsMAD1; MAD1L1; Mitotic arrest deficient 1; Mitotic checkpoint MAD1 protein homolog; Mitotic spindle assembly checkpoint protein MAD1; PIG9; Tax binding protein 181; TP53I9 ; Tumor protein p53 inducible protein 9; TXBP181; MD1L1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	83kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAD1:101-200/718
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	spindle microtubules. The checkpoint works by inhibiting the activity of the anaphase promoting complex, thereby preventing the degradation of several cell cycle regulators. Like other spindle checkpoint mutants, MAD1 loss-of-function mutants are sensitive to benomyl and cannot delay cell division in response to spindle depolymerization. Mad1p

becomes hyperphosphorylated upon spindle depolymerization.

Function:

Component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate. May recruit MAD2L1 to unattached kinetochores. Has a role in the correct positioning of the septum. Required for anchoring MAD2L1 to the nuclear periphery. Binds to the TERT promoter and represses telomerase expression, possibly by interfering with MYC binding.

Subunit:

Homodimer. Heterodimerizes with MAD2L1 in order to form a tetrameric MAD1L1-MAD2L1 core complex. Perturbation of the original MAD1L1-MAD2L1 structure by the spindle checkpoint may decrease MAD2L1 affinity for MAD1L1. CDC20 can compete with MAD1L1 for MAD2L1 binding, until the attachment and/or tension dampen the checkpoint signal, preventing further release of MAD2L1 on to CDC20. Also able to interact with the BUB1/BUB3 complex and the viral Tax protein. Interacts with NEK2. Interacts with TPR; the interactions occurs in a microtubule-independent manner.

Subcellular Location:

Nucleus. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton, spindle. Note=From the beginning to the end of mitosis, it is seen to move from a diffusely nuclear distribution to the centrosome, to the spindle midzone and finally to the midbody. Co-localizes with NEK2 at the kinetochore.

Tissue Specificity:

Expressed weakly at G0/G1 and highly at late S and G2/M phase.

Post-translational modifications:

Phosphorylated; by BUB1. Become hyperphosphorylated in late S through M phases or after mitotic spindle damage.

DISEASE:

Note=Defects in MAD1L1 are involved in the development and/or progression of various types of cancer.

Similarity:

Belongs to the MAD1 family.

SWISS:

Q9Y6D9

Gene ID:

8379

Database links:

[Entrez Gene: 8379](#)Human

[Omid: 602686](#)Human

[SwissProt: Q9Y6D9](#)Human

[Unigene: 654838](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

www.sunlongbiotech.com