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Datasheet for 200-301-903

MAD1L1 Antibody

Overview

Description:	Anti-MAD1L1 (MOUSE) Monoclonal Antibody - 200-301-903
Item No.:	200-301-903
Size:	100 µg
Applications:	IP
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	MAD1L1 (also called mitotic spindle assembly checkpoint protein, MAD1A, MAD1-like 1 and HsMAD1) is a component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate. MAD1L1 has a role in the correct positioning of the septum and is required for anchoring MAD2L1 to the nuclear periphery. MAD1L1 forms a homodimer and also 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. MAD1L1 is also able to interact with the BUB1/BUB3 complex and the viral Tax protein. MAD1L1 is a nuclear protein that is seen to move from the beginning to the end of mitosis from a diffusely nuclear distribution to the centrosome, to the spindle midzone and finally to the midbody. Multiple isoforms may exist for this protein (MAD1L1 and MAD1L2). MAD1L1 is induced by TP53 and is phosphorylated by BUB1. MAD1L1 is hyperphosphorylated in late S through M phases or after mitotic spindle damage. Defects in MAD1L1 are involved in the development and/or progression of various types of cancer.
Synonyms:	mouse anti-MAD1L1 antibody, Mitotic arrest deficient 1 antibody, Mitotic checkpoint MAD1 protein homolog antibody, Mitotic spindle assembly checkpoint protein MAD1 antibody, PIG9 antibody, Tax binding protein 181 antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	9B10
Format:	IgG2b

Target Details

Gene Name:	MAD1L1
Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	This protein A purified monoclonal antibody was produced by repeated immunizations with full-length recombinant human MAD1L1 protein.
Purity/Specificity:	This Protein A purified antibody is directed against human MAD1L1 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.
Relevant Links:	• NCBI - Q9Y6D9.2 • UniProtKB - Q9Y6D9 • GeneID - 8379

Application Details

Suggested Applications:	IP (Based on references)
Application Note:	This protein A purified antibody is suitable for use in flow cytometry, immunoprecipitation, immunofluorescence and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a predominant band at ~ 83 kDa corresponding to full-length protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:200 - 1:1,000

Formulation

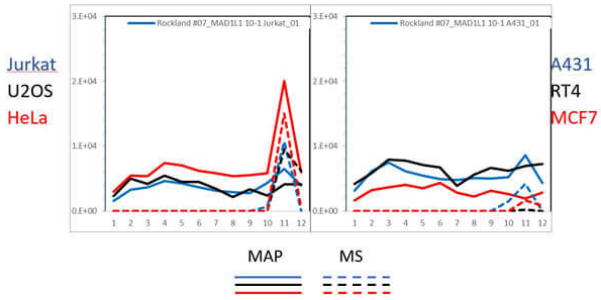
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



PAGE-MAP
PAGE-MAP (microsphere affinity proteomics) of Mouse Anti-MAD1L1 Antibody (Catalog Number: 200-301-903, Lot Number: 17028). Antibody array western blot binding of gelfree size separated fractions of multiple lysates (solid lines) and shotgun mass spectroscopy identification (dashed lines) of the target band run in parallel correlate confirming the specificity of this antibody against MAD1L1. Data was provided by the Lund-Johansen lab of Oslo University Hospital. For more information on PAGE-MAP/IP-MS identification of antibody specificity and its large-scale implementation for antibody validation see Sikorski et. al., (2018) Nature Methods 15, 909-912. PMID: 30377371

References

- Sikorski et al. A high-throughput pipeline for validation of antibodies. *Nature Methods* (2018)

Disclaimer

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