

### Certificate of Analysis

**Product:** Affinity Purified Anti-Human MAD2L2 (Rabbit)

**Code:** 600-401-470

**Lot #:** 13402

**Size:** 100 µg

**Physical State:** Liquid (sterile filtered)

**Antibody Concentration:** 0.81 mg/ml (by UV absorbance at 280 nm)

**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

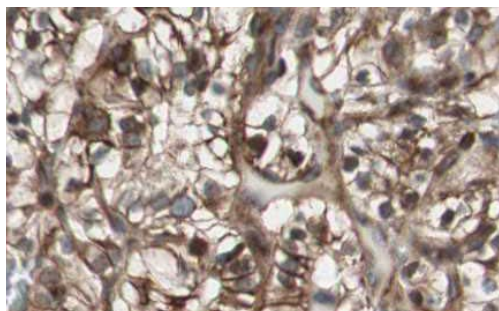
**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

**Background Information:** MAD2L2 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. MAD2L2 is a homolog of MAD2L1.

**Application Note(s):** This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. For western blotting HeLa whole cell lysates and nuclear extracts are suggested. Reactivity in other immunoassays is unknown. Antibody activity can be blocked using a control peptide (see below for ordering information).

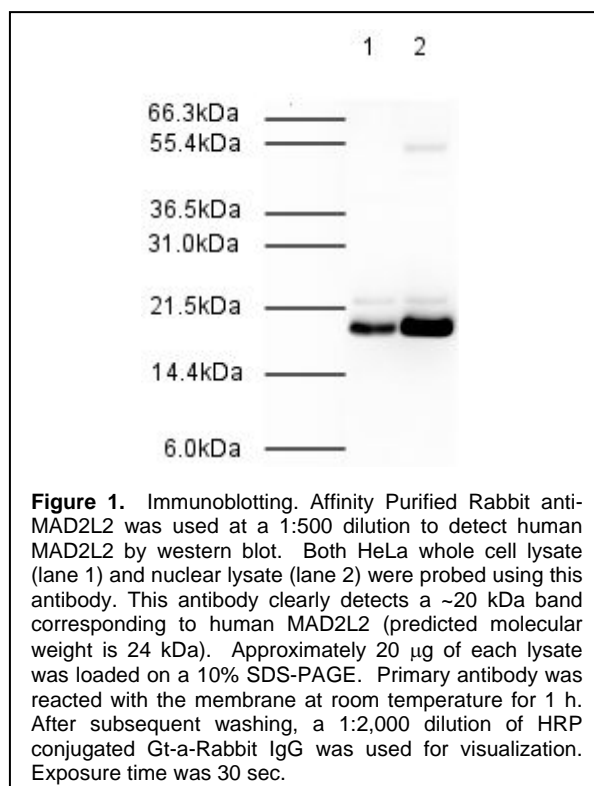
#### Recommended Dilutions:

<b>ELISA</b>	1:7,500 - 1:30,000
<b>WESTERN BLOT</b>	1:500 - 1:2,000
<b>IMMUNOHISTOCHEMISTRY</b>	1:500 - 1:2,000
<b>OTHER APPLICATIONS</b>	User Optimized



**Figure 2.** Immunohistochemistry. Rockland's Affinity Purified anti-MAD2L2 antibody shows strong nuclear and cytoplasmic staining of tumor cells in cancerous human kidney tissue. Tissue was formalin-fixed and paraffin embedded. Brown color indicates presence of protein, blue color shows cell nuclei. *Personal Communication, Kenneth Wester, [www.proteinatlas.org](http://www.proteinatlas.org), Uppsala, Sweden.*

e-mail: [info@rockland-inc.com](mailto:info@rockland-inc.com)



**Figure 1.** Immunoblotting. Affinity Purified Rabbit anti-MAD2L2 was used at a 1:500 dilution to detect human MAD2L2 by western blot. Both HeLa whole cell lysate (lane 1) and nuclear lysate (lane 2) were probed using this antibody. This antibody clearly detects a ~20 kDa band corresponding to human MAD2L2 (predicted molecular weight is 24 kDa). Approximately 20 µg of each lysate was loaded on a 10% SDS-PAGE. Primary antibody was reacted with the membrane at room temperature for 1 h. After subsequent washing, a 1:2,000 dilution of HRP conjugated Gt-a-Rabbit IgG was used for visualization. Exposure time was 30 sec.

**Purity and Specificity:** This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase.

**Immunogen:** This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to aa 3-14 of Human MAD2L2. MAD2L2 is also known as MAD2B, REV7 and mitotic arrest deficient-like 2 protein.

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**Relevant Link(s):** GenBank [NM\\_006341](#) (Human) SwissProt [Q9UI95](#) (Human)  
 Locus Link [10459](#) (Human) Unigene [19400](#) (Human)  
 Omim [604094](#) (Human)

**Protein sequence:** Human sequence, 211 amino acids, predicated MW 24.3 kDa.

1	MTTLTRQDLN	FGQVVADVLC	EFLEVAVHLI	LYVREVPVVG	IFQKRKKYNV	PVQMSCHPEL
61	NQYIQDTLHC	VKPLLEKNDV	EKVVVVILDK	EHRPVEKFVF	EITQPPLLSI	SSDSLSSHVE
121	QLLRAFILKI	SVCDAVLHDN	PPGCTFTVLV	HTREAATRNM	EKIQVIKDFP	WILADEQDVH
181	MHDPRLIPLK	TMTSDILKMQ	LYVEERAHKG	S		

### General References:

Chen J, Fang G. (2001) MAD2B is an inhibitor of the anaphase-promoting complex. *Genes Dev.* **15**(14):1765-70.

Nelson K.K., Schlondorff J., Blobel C.P. (1999) Evidence for an interaction of the metalloprotease-disintegrin tumour necrosis factor alpha convertase (TACE) with mitotic arrest deficient 2 (MAD2), and of the metalloprotease-disintegrin MDC9 with a novel MAD2-related protein, MAD2-beta. *Biochem. J.* **343**:673-680.

Cahill D.P., da Costa L.T., Carson-Walter E.B., Kinzler K.W., Vogelstein B., Lengauer C. (1999) Characterization of MAD2B and other mitotic spindle checkpoint genes. *Genomics* **58**:181-187.

Murakumo Y., Roth T., Ishii H., Rasio D., Numata S., Croce C.M., Fishel R. (2000) A human REV7 homolog that interacts with the polymerase zeta catalytic subunit hREV3 and the spindle assembly checkpoint protein hMAD2. *J. Biol. Chem.* **275**:4391-4397.

### Related Products:

[#600-401-461](#) Affinity Purified Anti-Human MAD2L1 (Rabbit)  
[#600-401-470](#) Affinity Purified Anti-Human MAD2L2 (Rabbit)  
[#W09-000-364](#) HeLa Whole Cell Lysate  
[#W09-001-367](#) HeLa Cell Nuclear Extract  
[#611-703-127](#) Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10  
[#611-132-122](#) IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10  
[#MB-070](#) Blocking Buffer for Fluorescent Western Blotting  
[#KIA-003](#) **MaxTag**<sup>™</sup> Anti-RABBIT IgG Kit for Immunoblotting  
[#MB-070](#) Blocking Buffer for Fluorescent Western Blotting

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 326, Gilbertsville, Pennsylvania, USA.