

## DESCRIPTION

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|---------------------------|---|
| <b>Species Reactivity</b> | Human/Rat   |
| <b>Specificity</b>        | Detects human and rat MAD2L1 in Western blots.  |
| <b>Source</b>             | Polyclonal Goat IgG   |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human MAD2L1<br>Met1-Asp205<br>Accession # Q13257   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                            | <b>Recommended Concentration</b> | <b>Sample</b> |
|----------------------------|----------------------------------|---------------|
| <b>Western Blot</b>        | 1 µg/mL                          | See Below     |
| <b>Immunocytochemistry</b> | 5-15 µg/mL                       | See Below     |

## DATA

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|--|--|
| <p><b>Western Blot</b></p> <p><b>Detection of Human/Rat MAD2L1 by Western Blot.</b> Western blot shows lysates of K562 human chronic myelogenous leukemia cell line and NRK rat normal kidney cells. PVDF membrane was probed with 1 µg/mL of Human/Rat MAD2L1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4005) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for MAD2L1 at approximately 24 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 1.</p> | <p><b>Immunocytochemistry</b></p> <p><b>MAD2L1 in A549 Human Cell Line.</b> MAD2L1 was detected in immersion fixed A549 human lung carcinoma cell line using Goat Anti-Human/Rat MAD2L1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4005) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p> |
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## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.2 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

MAD2L1 (Mitotic arrest deficient protein 2) is a component of the spindle-attachment checkpoint mechanism that monitors kinetochore spindle attachment and leads to the subsequent arrest in early metaphase by its recruitment to unattached kinetochores. The transition from metaphase to anaphase requires the association of the anaphase promoting complex/cyclosome (APC/C) with Cdc20 leading to the ubiquitylation and subsequent degradation of Pds1/Securin. This transition is delayed by the inhibitory association of MAD2L1 with Cdc20. MAD2L1 has also been shown to be a direct E2F target and as such is aberrantly expressed in cells with retinoblastoma pathway defects.