

## Product datasheet

# Recombinant Human Mad2L1 protein ab113604

1 Image

### Description

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|                                   |   |
|-----------------------------------|---|
| <b>Product name</b>               | Recombinant Human Mad2L1 protein  |
| <b>Purity</b>                     | > 95 % SDS-PAGE.<br>ab113604 was purified using conventional chromatography techniques.   |
| <b>Expression system</b>          | Escherichia coli  |
| <b>Accession</b>                  | <u><a href="#">Q13257</a></u>   |
| <b>Protein length</b>             | Full length protein   |
| <b>Animal free</b>                | No  |
| <b>Nature</b>                     | Recombinant   |
| <b>Species</b>                    | Human   |
| <b>Sequence</b>                   | <b>MGSSHHHHHSSGLVPRGSHMALQLSREQGITLRGSAEI<br/>VAEFFSFGINS<br/>ILYQRGYPSFTFTRVQKYGLTLLVTTDLELIKYLNNVVEQLK<br/>DWLYKCS<br/>VQKLVVVISNIESGEVLERWQFDIECDKTAKDDSAPREKS<br/>QKAIQDEIRS<br/>VIRQITATVTFPLLEVSCSFDLLIYTDKDLVVPEKWEESGP<br/>QFITNSEE VRLRSFTTTIHKVNSMVAYKIPVND</b> |
| <b>Predicted molecular weight</b> | 26 kDa including tags   |
| <b>Amino acids</b>                | 1 to 205  |
| <b>Tags</b>                       | His tag N-Terminus  |

### Specifications

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Our **Abpromise guarantee** covers the use of **ab113604** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

|                          |                               |
|--------------------------|-------------------------------|
| <b>Applications</b>      | SDS-PAGE<br>Mass Spectrometry |
| <b>Mass spectrometry</b> | MALDI-TOF                     |
| <b>Form</b>              | Liquid                        |

### Preparation and Storage

## Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.02% DTT, 0.32% Tris HCl, 20% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

## General Info

### Function

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.

### Sequence similarities

Belongs to the MAD2 family.  
Contains 1 HORMA domain.

### Domain

The protein has two highly different native conformations, an inactive open conformation that cannot bind CDC20 and that predominates in cytosolic monomers, and an active closed conformation. The protein in the closed conformation preferentially dimerizes with another molecule in the open conformation, but can also form a dimer with a molecule in the closed conformation. Formation of a heterotetrameric core complex containing two molecules of MAD1L1 and of MAD2L1 in the closed conformation promotes binding of another molecule of MAD2L1 in the open conformation and the conversion of the open to the closed form, and thereby promotes interaction with CDC20.

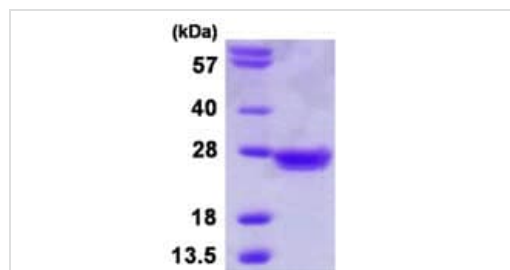
### Post-translational modifications

Phosphorylated on multiple serine residues. The level of phosphorylation varies during the cell cycle and is highest during mitosis. Phosphorylation abolishes interaction with MAD1L1 and reduces interaction with CDC20.

### Cellular localization

Nucleus. Chromosome > centromere > kinetochore. Cytoplasm. 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.

## Images



SDS-PAGE - Recombinant Human Mad2L1 protein  
(ab113604)

15% SDS-PAGE showing ab113604 (3 µg) at approximately 25.7 kDa.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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