

## Mouse MDC1 Monoclonal Antibody | anti-Mdc1 antibody

MDC1 Antibody: ATTO 594

|                               |                      |                                                       |                                                         |
|-------------------------------|----------------------|-------------------------------------------------------|---------------------------------------------------------|
| CATALOG #<br><b>AAA102921</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Mouse, Human, Chimpanzee, Bovine</b> | APPLICATIONS<br><b>Western Blot, Immunofluorescence</b> |
|-------------------------------|----------------------|-------------------------------------------------------|---------------------------------------------------------|

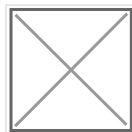
### PRODUCT SYNONYMS

MDC1; Monoclonal Antibody; MDC1 Antibody: ATTO 594; Nuclear factor with BRCT domains1; mediator of DNA damage checkpoint 1; anti-Mdc1 antibody

### PRODUCT SPECIFICATIONS

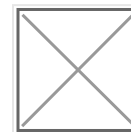
|                                                |                                             |
|------------------------------------------------|---------------------------------------------|
| Host                                           | Mouse                                       |
| Reactivity                                     | Mouse, Human, Chimpanzee, Bovine            |
| Clonality                                      | Monoclonal                                  |
| Isotype                                        | IgG1                                        |
| Clone Number                                   | P2B11                                       |
| Form/Format                                    | Protein G Purified                          |
| Concentration                                  | 1mg/mL (varies by lot)                      |
| Sequence Length                                | 1708                                        |
| Applicable Applications for anti-Mdc1 antibody | WB (Western Blot), IF (Immunofluorescence)  |
| Conjugate                                      | ATTO 594                                    |
| Storage Buffer                                 | PBS pH7.4, 50% glycerol, 0.09% sodium azide |
| Preparation and Storage                        | -20 degree C                                |

### IMAGES



#### WB (Western Blot)

Western Blot analysis of Mouse Cortex and Cerebellum showing detection of 184 kDa MDC1 protein using Mouse Anti-MDC1 Monoclonal Antibody, Clone P2B11. Lane 1: MW ladder. Lane 2: Mouse Cortex. Lane 3: Mouse Cerebellum. Load: 10 ug. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody at 1:1000 for 2 hours RT. Secondary Antibody: Goat Anti-Mouse at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 184 kDa.



#### WB (Western Blot)

Western Blot analysis of Human Embryonic kidney epithelial cell line (HEK293T) lysate showing detection of 184 kDa MDC1 protein using Mouse Anti-MDC1 Monoclonal Antibody, Clone P2B11. Lane 1: MW ladder. Lane 2: 293Trap cell lysates. Load: 30 ug. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody at 1:1000 for 2 hours RT. Secondary Antibody: Goat Anti-Mouse HRP: IgG at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 184 kDa.

### ADDITIONAL INFORMATION

#### Related Product Information for anti-Mdc1 antibody

**Background Info:** Detects ~184kDa. This antibody recognizes MDC1 at or around the N-terminus

**Scientific Background:** MDC1, mediator of DNA damage checkpoint protein 1, plays a role in checkpoint mediated cell cycle arrest in response to DNA damage, within S phase and G2/M. It is also thought to act as a scaffold protein during recruitment of DNA repair and signal transduction proteins to discrete foci of DNA damage that are marked by phosphorylation of histone H2A.X on S139.

|                                                  |                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for anti-Mdc1 antibody | <a href="#">Oxidative Stress</a>                                                                                                                                                                                                                                                                          |
| References                                       | 1. Lou Z., et al. (2004) J Biol Chem. 279(45): 46359-46362. 2. Luo K., Yuan J, Lou Z. (2011) J Biol Chem. 286(32): 28192-28199. 3. Strauss C., Halevy T., Macarov M., Argaman L., and Goldbery M. (2011) DNA Repair (Amst.). 10(8): 806-814. 4. Wilson K.A., et al. (2011) Mol Cancer Res. 9(6): 766-781. |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------|
| NCBI GI #                        | <a href="#">132626693</a>                                                                         |
| NCBI GeneID                      | <a href="#">240087</a>                                                                            |
| NCBI Accession #                 | <a href="#">NP_001010833.2</a>                                                                    |
| NCBI GenBank Nucleotide #        | <a href="#">NM_001010833.2</a>                                                                    |
| UniProt Accession #              | <a href="#">Q5PSV9</a> ; <a href="#">Q52KG1</a> ; <a href="#">Q5U4D3</a> ; <a href="#">Q6ZQH7</a> |
| Molecular Weight                 | 184,670 Da                                                                                        |
| NCBI Official Full Name          | mediator of DNA damage checkpoint protein 1                                                       |
| NCBI Official Synonym Full Names | mediator of DNA damage checkpoint 1                                                               |
| NCBI Official Symbol             | Mdc1                                                                                              |
| NCBI Official Synonym Symbols    | Nfbd1; AA413496; mKIAA0170; 6820401C03                                                            |
| NCBI Protein Information         | mediator of DNA damage checkpoint protein 1; mediation of DNA damage checkpoint 1                 |
| UniProt Protein Name             | Mediator of DNA damage checkpoint protein 1                                                       |
| UniProt Gene Name                | <b>Mdc1</b>                                                                                       |
| UniProt Synonym Gene Names       | Kiaa0170                                                                                          |
| UniProt Entry Name               | MDC1_MOUSE                                                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/mdc1-antibody-clone-p2b11-western-blot-immunofluorescence-elisa/102921>