

**Datasheet for 200-301-G12****Mdc1 Antibody****Overview**

<b>Description:</b>	Anti-Mdc1 (MOUSE) Monoclonal Antibody - 200-301-G12
<b>Item No.:</b>	200-301-G12
<b>Size:</b>	100 µg
<b>Applications:</b>	IF, WB
<b>Reactivity:</b>	Human, Mouse, Bovine, Chimpanzee
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	Nuclear factor with BRCT domains1, mediator of DNA damage checkpoint 1, Kiaa0170
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	P2B11
<b>Format:</b>	IgG1

**Target Details**

<b>Gene Name:</b>	Mdc1
<b>Reactivity:</b>	Human, Mouse, Bovine, Chimpanzee
<b>Immunogen Type:</b>	Recombinant Protein
<b>Immunogen:</b>	MDC1 Antibody was produced in mice by repeated immunizations with a recombinant protein corresponding to mouse MDC1 at and around the N-terminus region.

**Purity/Specificity:** Anti-MDC1 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with MDC1 from Human, Mouse, Chimpanzee, and Bovine based on 100% homology with the immunizing sequence. This antibody recognizes MDC1 at and around the N-terminus. Cross-reactivity with MDC1 from other sources has not been determined. Oxidative Stress research.

**Relevant Links:**

- [NCBI - NP\\_001010833.2](#)
- [GeneID - 240087](#)
- [UniProtKB - Q5PSV9](#)

## Application Details

**Tested Applications:** IF, WB

**Application Note:** Anti-MDC1 Antibody is suitable for use in WB and IF microscopy. Expect a band approximately ~184kDa corresponding to specific lysates. Specific conditions for reactivity should be optimized by the end user.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**IF:** 1:100

**WB:** 1:2000

## Formulation

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

**Concentration:** 1mg/mL by UV absorbance at 280 nm

**Buffer:** 1X PBS, pH 7.4

**Preservative:** 0.09% (w/v) Sodium Azide

**Stabilizer:** 50% (v/v) Glycerol

## Shipping & Handling

**Shipping Condition:** Wet 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



### Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-MDC1 Monoclonal Antibody.

Tissue: mouse fibroblast NIH/3T3 cell line.

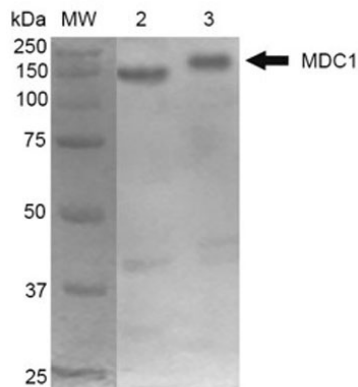
Fixation: 4% Formaldehyde for 15 min at RT.

Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody at 1:100 for 60 min at RT.

Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT.

Counterstain: DAPI (blue) nuclear stain at 1:5000 for 5 min RT.

Localization: Nucleus. Magnification: 60X.



### Western Blot

Western Blot of Anti-MDC1.

Load: 10 µg. Lane 1: MW ladder. Lane 2: Mouse Cortex. Lane 3: Mouse Cerebellum.

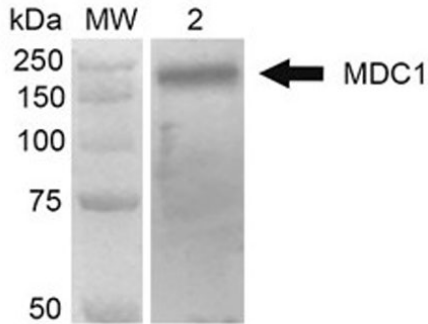
Block: 5% Skim Milk in 1X TBST.

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.

**Western Blot**

Western Blot of Anti-MDC1.

Load: 30 µg. Lane 1: MW ladder. Lane 2: Human Embryonic kidney epithelial cell line (HEK293T) cell lysates.

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.

**Disclaimer**

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 5199, Limerick, Pennsylvania, USA.