10320 Camino Santa Fe, Suite G
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MDC1 Antibody
MDC1 Antibody, Clone P2B11
Catalog # ASM10145

Specification

MDC1 Antibody - Product Information

Application	**WB**
Primary Accession	Q5PSV9
Other Accession	NP_001010833.2
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Chimpanzee, Bovine**
Clonality	**Monoclonal**
Format	**ATTO 488**

Description
Mouse Anti-Mouse MDC1 Monoclonal IgG1

Target/Specificity
Detects ~184kDa. This antibody recognizes MDC1 at and around the N-terminus.

Other Names
Nuclear factor with BRCT domains1 Antibody, mediator of DNA damage checkpoint 1 Antibody

Immunogen
GST-tagged recombinant protein corresponding to mouse MDC1 at and around the N-terminus

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
0.5 µg/ml of SMC-197 was sufficient for detection of MDC1 in 10 µg of HeLa cell lysate by ECL immunoblot analysis.

Cellular Localization
Nucleus

MDC1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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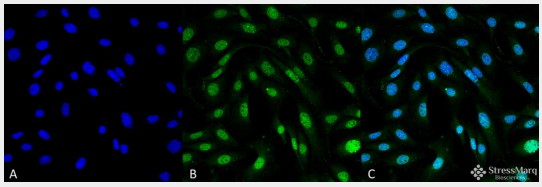
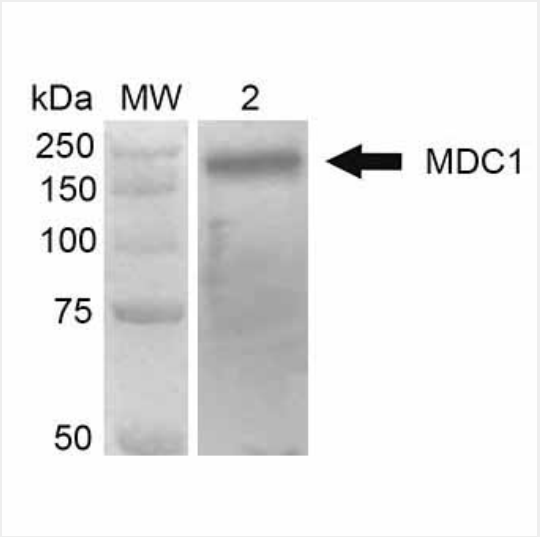
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MDC1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-MDC1 Monoclonal Antibody, Clone P2B11 (ASM10145). Tissue: Fibroblast cell line (NIH 3T3). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody (ASM10145) 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 analysis of Human 293Trap cell lysates showing detection of 184 kDa MDC1 protein using Mouse Anti-MDC1 Monoclonal Antibody, Clone P2B11 (ASM10145). Lane 1: MW ladder. Lane 2: 293Trap cell lysates. Load: 30 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody (ASM10145) 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.

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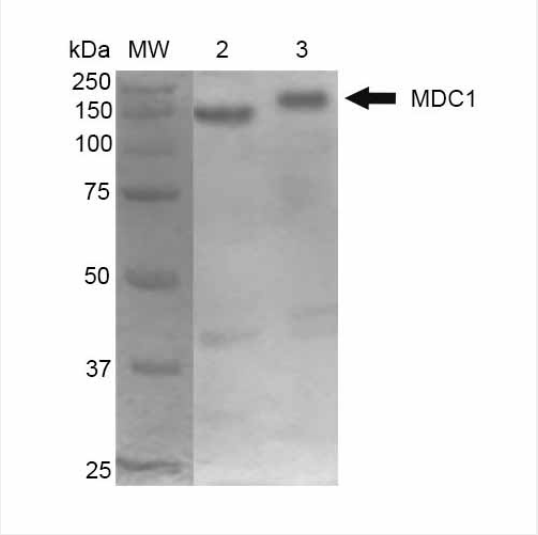

Western Blot analysis of Mouse Cortex and Cerebellum showing detection of 184 kDa MDC1 protein using Mouse Anti-MDC1 Monoclonal Antibody, Clone P2B11 (ASM10145). Lane 1: MW ladder. Lane 2: Mouse Cortex. Lane 3: Mouse Cerebellum. Load: 10 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-MDC1 Monoclonal Antibody (ASM10145) 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.

MDC1 Antibody - 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.

MDC1 Antibody - 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.