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MCM3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MCM3.
Catalog # AT2819a

Specification

MCM3 Antibody (monoclonal) (M01) - Product Information

Application	**IF, WB, E**
Primary Accession	P25205
Other Accession	NM_002388
Reactivity	**Human, Mouse**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Lambda**
Calculated MW	**90981**

MCM3 Antibody (monoclonal) (M01) - Additional Information

Gene ID 4172

Other Names
DNA replication licensing factor MCM3, DNA polymerase alpha holoenzyme-associated protein P1, P1-MCM3, RLF subunit beta, p102, MCM3

Target/Specificity
MCM3 (NP_002379, 699 a.a. ~ 808 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
MCM3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

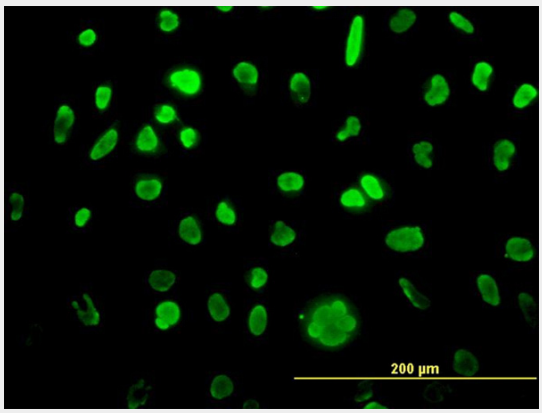
MCM3 Antibody (monoclonal) (M01) - Protocols

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

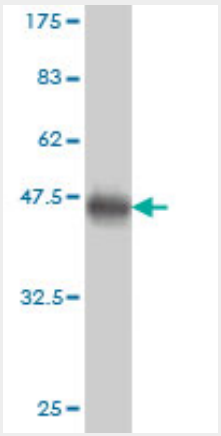
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

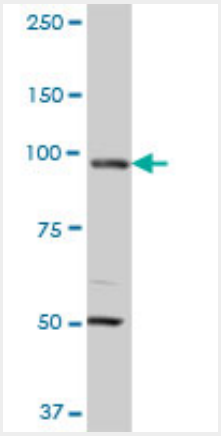
MCM3 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to MCM3 on HeLa cell. [antibody concentration 10 ug/ml]



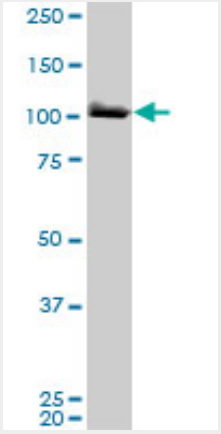
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



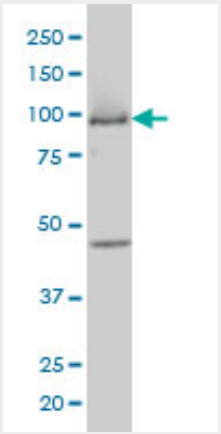
MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in

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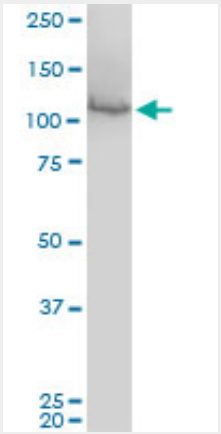
human colon.



MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in HeLa ((Cat # AT2819a)

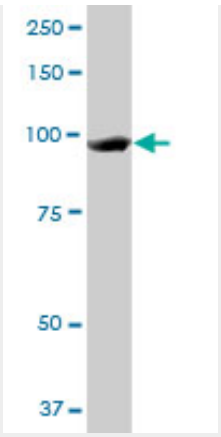


MCM3 monoclonal antibody (M01), clone 4F7 Western Blot analysis of MCM3 expression in COLO 320 HSR ((Cat # AT2819a)

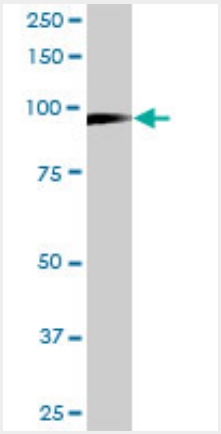


MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in Raw 264.7((Cat # AT2819a)

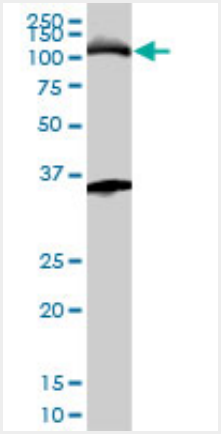
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MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in A-431 ((Cat # AT2819a)

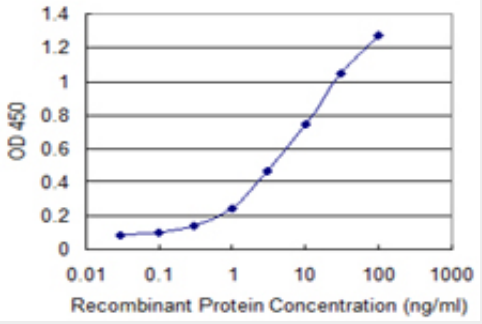


MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in Daoy.



MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in K-562 ((Cat # AT2819a)

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Detection limit for recombinant GST tagged MCM3 is 0.1 ng/ml as a capture antibody.

MCM3 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with, and thus is acetlyated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression.

MCM3 Antibody (monoclonal) (M01) - References

Human cytomegalovirus IE86 protein binds to cellular Mcm3 protein but does not inhibit its binding to the Epstein-Barr virus oriP in U373MG-p220.2 cells. Song YJ, et al. Acta Virol, 2010. PMID 20545442.Centrosome-related genes, genetic variation, and risk of breast cancer. Olson JE, et al. Breast Cancer Res Treat, 2010 May 28. PMID 20508983.Analysis of interaction partners of H4 histone by a new proteomics approach. Saade E, et al. Proteomics, 2009 Nov. PMID 19862764.Minichromosome maintenance protein 3 is a candidate proliferation marker in papillary thyroid carcinoma. Lee YS, et al. Exp Mol Pathol, 2010 Feb. PMID 19818763.Phosphorylation of MCM3 on Ser-112 regulates its incorporation into the MCM2-7 complex. Lin DI, et al. Proc Natl Acad Sci U S A, 2008 Jun 10. PMID 18524952.