

## MCM3 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant MCM3.

Catalog # AT2820a

### Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">P25205</a>
<b>Other Accession</b>	<a href="#">NM_002388</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2b Kappa
<b>Clone Names</b>	30
<b>Calculated MW</b>	90981

### Additional Information

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<b>Gene ID</b>	4172
<b>Other Names</b>	DNA replication licensing factor MCM3, DNA polymerase alpha holoenzyme-associated protein P1, P1-MCM3, RLF subunit beta, p102, MCM3
<b>Target/Specificity</b>	MCM3 (NP_002379, 699 a.a. ~ 808 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	MCM3 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

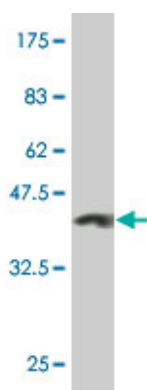
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The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component 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 acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression.

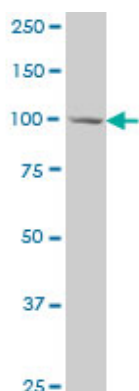
## References

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.

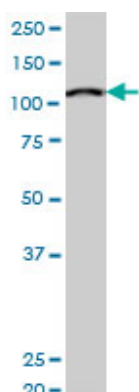
## Images



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

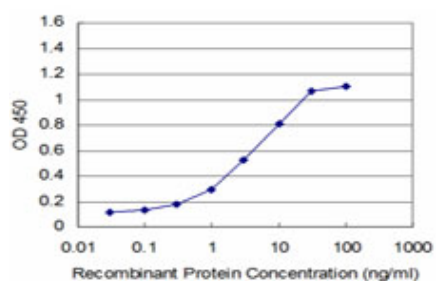
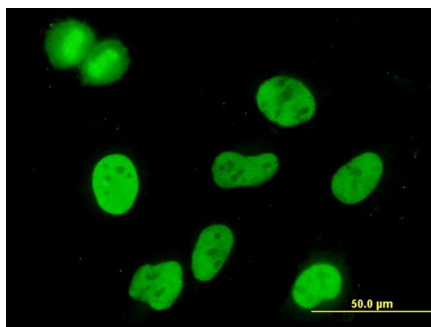


MCM3 monoclonal antibody (M03), clone 3E1 Western Blot analysis of MCM3 expression in HeLa ( (Cat # AT2820a )



MCM3 monoclonal antibody (M03), clone 3E1. Western Blot analysis of MCM3 expression in HeLa S3 NE ( (Cat # AT2820a )

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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.