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MCM3 Antibody (monoclonal) (M01)

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

Product Information

Application	WB, IF, E
Primary Accession	P25205
Other Accession	NM_002388
Reactivity	Human, Mouse
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Lambda
Clone Names	4F7
Calculated MW	90981

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 IF~~1:50~200 E~~N/A
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.

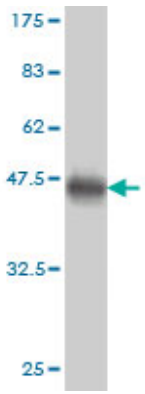
Background

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.

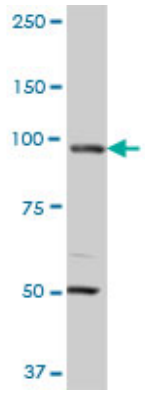
References

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.

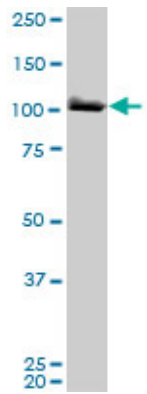
Images



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

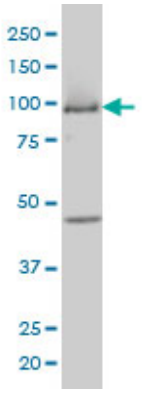


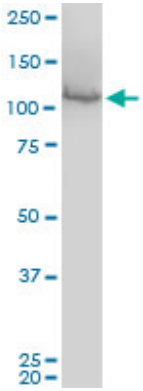
MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in human colon.



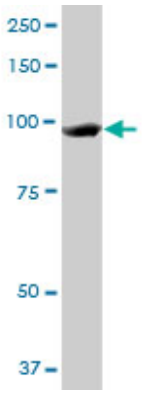
MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in HeLa ((Cat # AT2819a)

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

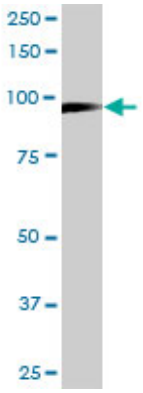




MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in Raw 264.7((Cat # AT2819a)

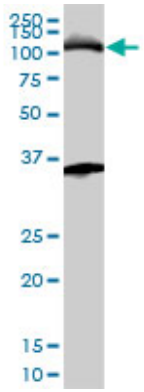


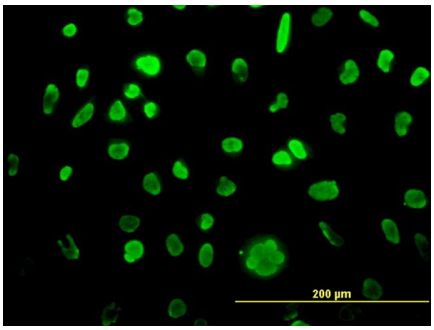
MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in A-431 ((Cat # AT2819a)



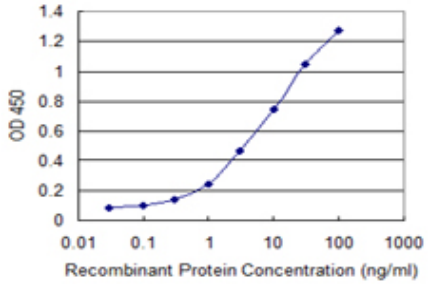
MCM3 monoclonal antibody (M01), clone 4F7. Western Blot analysis of MCM3 expression in Daoy.

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





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



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

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