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MCM7 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant MCM7.
Catalog # AT2821a

Product Information

Application	WB, IHC, IF, E
Primary Accession	P33993
Other Accession	BC009398
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6C2
Calculated MW	81308

Additional Information

Gene ID	4176
Other Names	DNA replication licensing factor MCM7, CDC47 homolog, P11-MCM3, MCM7, CDC47, MCM2
Target/Specificity	MCM7 (AAH09398, 1 a.a. ~ 389 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 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	MCM7 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

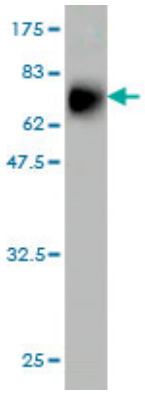
Background

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the 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. The MCM complex consisting of this protein and MCM2, 4 and 6 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. Cyclin D1-dependent kinase, CDK4, is found to associate with this protein, and may regulate the binding of this protein with the tumorsuppressor protein RB1/RB. Alternatively spliced transcript variants encoding distinct isoforms have been reported.

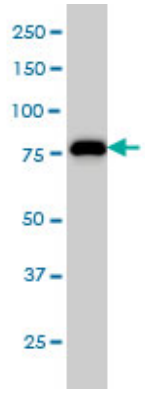
References

1.Etiological role of human papillomavirus infection for inverted papilloma of the bladder.Shigehara K, Sasagawa T, Doorbar J, Kawaguchi S, Kobori Y, Nakashima T, Shimamura M, Maeda Y, Miyagi T, Kitagawa Y, Kadono Y, Konaka H, Mizokami A, Koh E, Namiki M.J Med Virol. 2011 Feb;83(2):277-85.2.Etiologic role of human papillomavirus infection in bladder carcinoma.Shigehara K, Sasagawa T, Kawaguchi S, Nakashima T, Shimamura M, Maeda Y, Konaka H, Mizokami A, Koh E, Namiki M.Cancer. 2010 Nov 29. [Epub ahead of print]3.Minichromosome maintenance proteins 2, 3 and 7 in medulloblastoma: overexpression and involvement in regulation of cell migration and invasion.Lau KM, Chan QK, Pang JC, Li KK, Yeung WW, Chung NY, Lui PC, Tam YS, Li HM, Zhou L, Wang Y, Mao Y, Ng HK.Oncogene. 2010 Jul 26. [Epub ahead of print]4.Validation of different replication markers for the detection of beta-cell proliferation in human pancreatic tissue.Kohler CU, Kreuter A, Rozynkowski MC, Rahmel T, Uhl W, Tannapfel A, Schmidt WE, Meier JJ.Regul Pept. 2010 Jan 14. [Epub ahead of print]

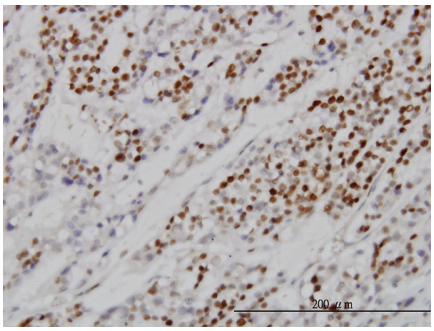
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (68.53 KDa) .

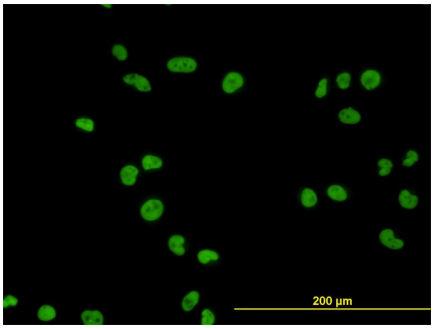


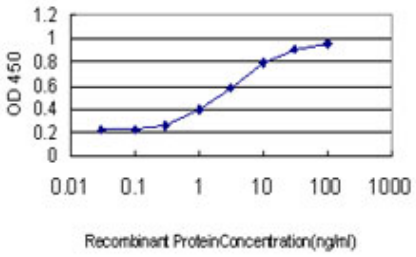
MCM7 monoclonal antibody (M01), clone 6C2 Western Blot analysis of MCM7 expression in Hela S3 NE ((Cat # AT2821a)



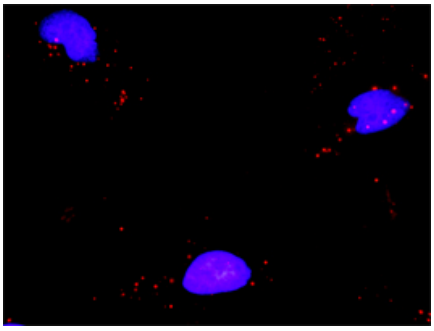
Immunoperoxidase of monoclonal antibody to MCM7 on formalin-fixed paraffin-embedded human ovary, clear cell carcinoma. [antibody concentration 3 ug/ml]

Immunofluorescence of monoclonal antibody to MCM7 on HeLa cell. [antibody concentration 10 ug/ml]

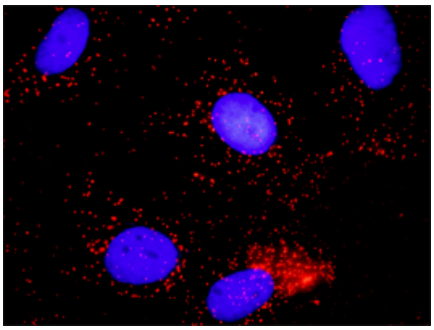




Detection limit for recombinant GST tagged MCM7 is approximately 0.1ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between CDK7 and MCM7 HeLa cells were stained with anti-CDK7 rabbit purified polyclonal 1:1200 and anti-MCM7 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Proximity Ligation Analysis of protein-protein interactions between CDC6 and MCM7. Huh7 cells were stained with anti-CDC6 rabbit purified polyclonal 1:600 and anti-MCM7 mouse monoclonal antibody 1:100. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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