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MCM7 Antibody (monoclonal) (M01)

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

Specification

MCM7 Antibody (monoclonal) (M01) - Product Information

Application	**IF, WB, IHC, E**
Primary Accession	P33993
Other Accession	BC009398
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**81308**

MCM7 Antibody (monoclonal) (M01) - 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

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.

MCM7 Antibody (monoclonal) (M01) - Protocols

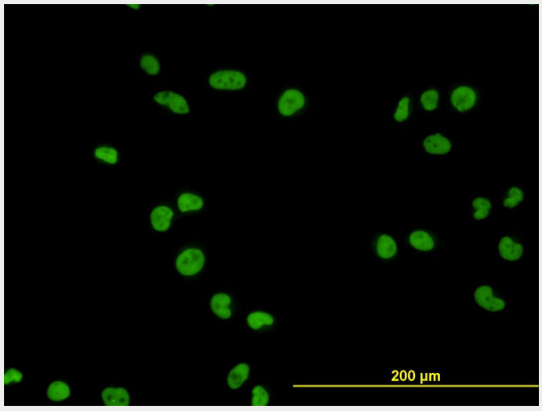
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

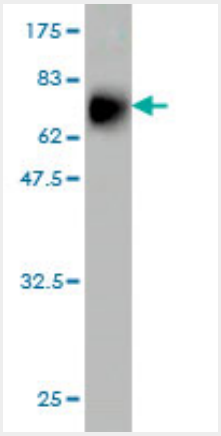
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- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

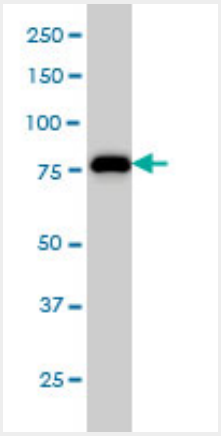
MCM7 Antibody (monoclonal) (M01) - Images



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

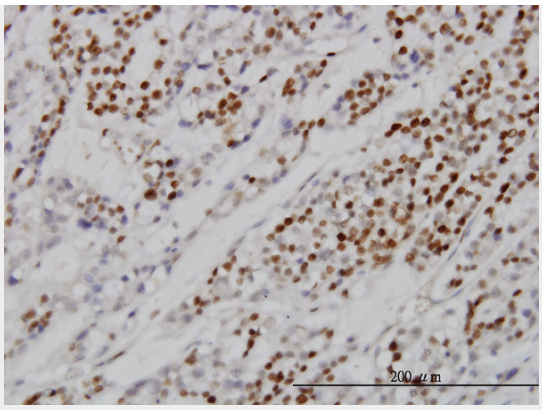


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (68.53 KDa) .

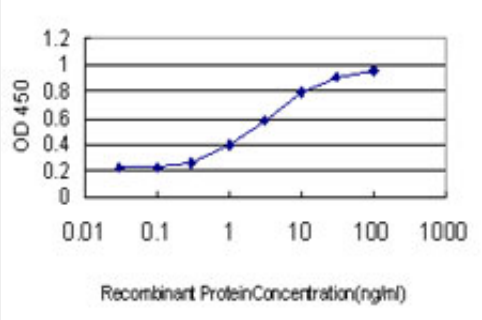


MCM7 monoclonal antibody (M01), clone 6C2 Western Blot analysis of MCM7 expression in Hela S3 NE ((Cat # AT2821a)

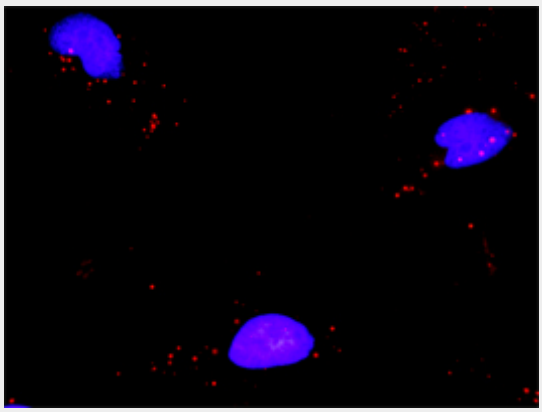
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Immunoperoxidase of monoclonal antibody to MCM7 on formalin-fixed paraffin-embedded human ovary, clear cell carcinoma. [antibody concentration 3 ug/ml]

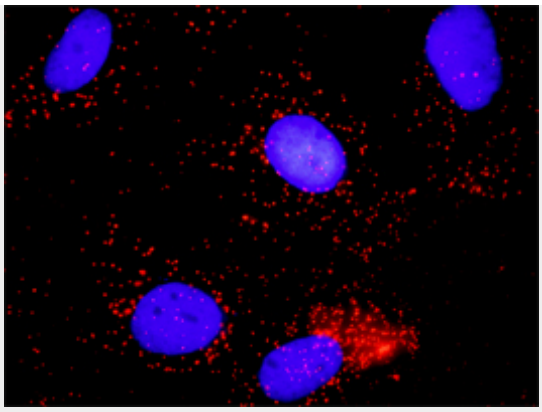


Detection limit for recombinant GST tagged MCM7 is approximately 0.1ng/ml as a capture antibody.



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).

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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).

MCM7 Antibody (monoclonal) (M01) - 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.

MCM7 Antibody (monoclonal) (M01) - 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]