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MCM6 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14743a

Specification

MCM6 Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q14566
Other Accession	Q2KIZ8, NP_005906.2
Reactivity	**Human**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**92889**
Antigen Region	**80-109**

MCM6 Antibody (N-term) - Additional Information

Gene ID 4175

Other Names
DNA replication licensing factor MCM6, p105MCM, MCM6

Target/Specificity
This MCM6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 80-109 amino acids from the N-terminal region of human MCM6.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MCM6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MCM6 Antibody (N-term) - Protein Information

Name MCM6 (HGNC:6949)

Function Acts as a component of the MCM2-7 complex (MCM complex) which is the replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. Core component of CDC45-MCM-GINS (CMG) helicase, the molecular machine that unwinds template DNA during replication, and around which the replisome is built (PubMed:16899510, PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232, PubMed:9305914). The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity (PubMed:32453425).

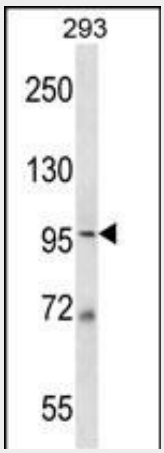
Cellular Location
Nucleus. Chromosome. Note=Binds to chromatin during G1 and detaches from it during S phase.

MCM6 Antibody (N-term) - 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

MCM6 Antibody (N-term) - Images



MCM6 Antibody (N-term) (Cat. #AP14743a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the MCM6 antibody detected the MCM6 protein (arrow).

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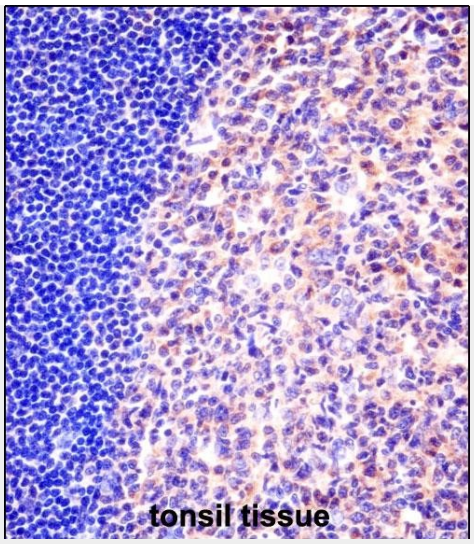

MCM6 Antibody (N-term) (AP14743a)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MCM6 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

MCM6 Antibody (N-term) - 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 7 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. The phosphorylation of the complex by CDC2 kinase reduces the helicase activity, suggesting a role in the regulation of DNA replication.

MCM6 Antibody (N-term) - References

Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press :
Timpson, N.J., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1341-1348(2010)
Wei, Z., et al. J. Biol. Chem. 285(17):12469-12473(2010)
Upton, J., et al. N. Z. Med. J. 123 (1308), 123 (2010) :
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :