

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

## Specification

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### MCM6 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q14566</a>
Other Accession	<a href="#">Q2KIZ8</a> , <a href="#">NP_005906.2</a>
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

WB~~1:1000  
IHC-P~~1:10~50

#### 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**

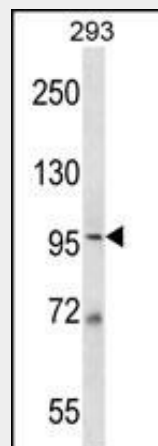
Nucleus. Chromosome. Note= Binds to chromatin during G1 and detaches from it during S phase.

#### **MCM6 Antibody (N-term) - Protocols**

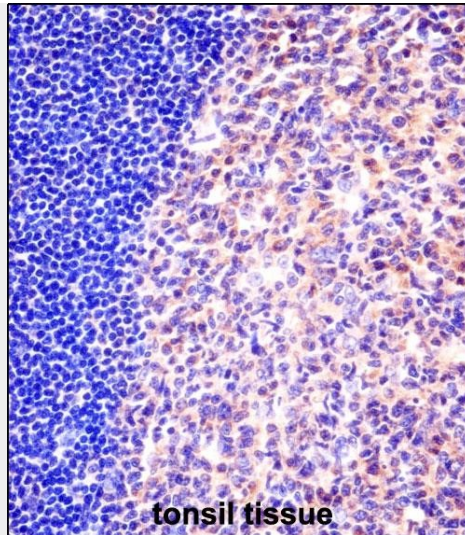
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).



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) :