

**MCM5 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9078b****Specification**

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**MCM5 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [P33992](#)  
Other Accession [NP\\_006730](#)

**MCM5 Antibody (C-term) Blocking Peptide - Additional Information**

**Gene ID** 4174

**Other Names**

DNA replication licensing factor MCM5, CDC46 homolog, P1-CDC46, MCM5, CDC46

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP9078b](/products/AP9078b) was selected from the C-term region of human MCM5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**MCM5 Antibody (C-term) Blocking Peptide - Protein Information**

**Name** MCM5

**Synonyms** CDC46

**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: [32453425](http://www.uniprot.org/citations/32453425), PubMed: [34694004](http://www.uniprot.org/citations/34694004), PubMed: [34700328](http://www.uniprot.org/citations/34700328), PubMed: [35585232](http://www.uniprot.org/citations/35585232), PubMed: [16899510](http://www.uniprot.org/citations/16899510)). 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:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>).

**Cellular Location**

Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

**MCM5 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**MCM5 Antibody (C-term) Blocking Peptide - Images****MCM5 Antibody (C-term) Blocking Peptide - Background**

MCM5 is structurally very similar to the CDC46 protein from *S. cerevisiae*, a protein involved in the initiation of DNA replication. The encoded protein is a member of the MCM family of chromatin-binding proteins and can interact with at least two other members of this family. The encoded protein is upregulated in the transition from the G0 to G1/S phase of the cell cycle and may actively participate in cell cycle regulation.

**MCM5 Antibody (C-term) Blocking Peptide - References**

Saade,E., et.al., Proteomics 9 (21), 4934-4943 (2009) Snyder,M., et.al., J. Biol. Chem. 284 (20), 13466-13472 (2009)