

MCM6 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14743a**Specification**

MCM6 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q14566](#)**MCM6 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 4175**Other Names**

DNA replication licensing factor MCM6, p105MCM, MCM6

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.

MCM6 Antibody (N-term) Blocking Peptide - 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:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232, PubMed:16899510, 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MCM6 Antibody (N-term) Blocking Peptide - Images

MCM6 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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) :