

MCM5 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP10094a

Specification

MCM5 Antibody (N-term) Blocking peptide - Product Information

Primary Accession [P33992](#)
Other Accession [NP_006730.2](#)

MCM5 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 4174

Other Names

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

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 (N-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:16899510, PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232). 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=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

MCM5 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MCM5 Antibody (N-term) Blocking peptide - Images**MCM5 Antibody (N-term) Blocking peptide - Background**

The protein encoded by this gene 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 (N-term) Blocking peptide - References

Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press :Saade, E., et al. Proteomics 9(21):4934-4943(2009)Snyder, M., et al. J. Biol. Chem. 284(20):13466-13472(2009)Stalinska, L., et al. Histol. Histopathol. 24(3):299-308(2009)Enjuanes, A., et al. Cancer Res. 68(24):10178-10186(2008)