

Anti-MCM5 Antibody
Catalog # ABO10968**Specification**

Anti-MCM5 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P33992
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for DNA replication licensing factor MCM5(MCM5) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MCM5 Antibody - Additional Information

Gene ID 4174

Other Names

DNA replication licensing factor MCM5, 3.6.4.12, CDC46 homolog, P1-CDC46, MCM5, CDC46

Calculated MW

82286 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus.

Protein Name

DNA replication licensing factor MCM5

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human MCM5(720-734aa EIQRHMQRKVLRLK), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the MCM family.

Anti-MCM5 Antibody - 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

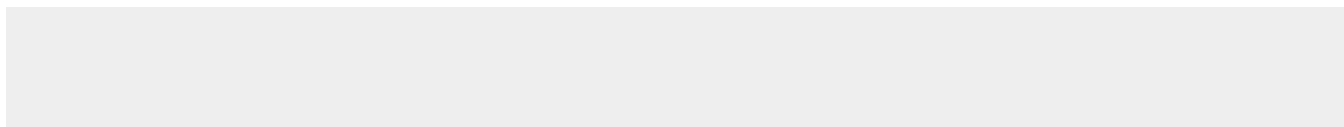
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

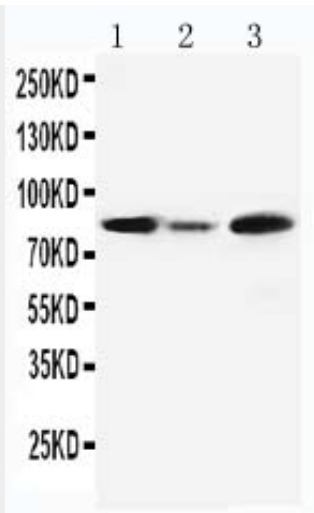
Anti-MCM5 Antibody - Protocols

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

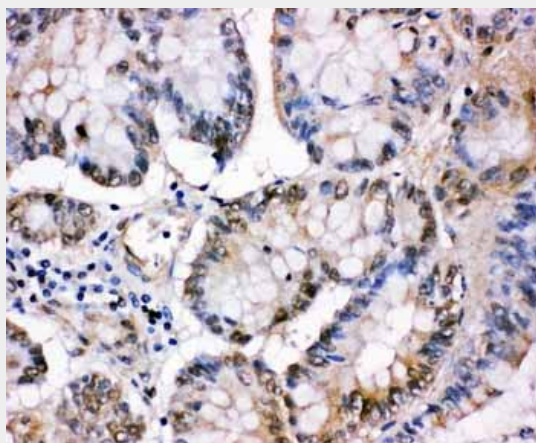
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-MCM5 Antibody - Images





Anti-MCM5 antibody, ABO10968, Western blotting Lane 1: Rat Testis Tissue Lysate Lane 2: Rat Brain Tissue Lysate Lane 3: JURKAT Cell Lysate



Anti-MCM5 antibody, ABO10968, IHC(P) IHC(P): Human Intestinal Cancer Tissue

Anti-MCM5 Antibody - Background

MCM5 (MINICHROMOSOME MAINTENANCE, *S. CEREVISIAE*, HOMOLOG OF, 5), also known as CDC46, is a protein that in humans is encoded by the MCM5 gene. MCM5 is structurally very similar to the CDC46 protein from *S. cerevisiae*, a protein involved in the initiation of DNA replication. And MCM5 is a member of the MCM family of chromatin-binding proteins and can interact with at least two other members of this family. The MCM5 gene is mapped on 22q12.3. The MCM5 gene contains 16 exons. 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.