

Anti-MCM6 Antibody
Catalog # ABO11077**Specification**

Anti-MCM6 Antibody - Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	Q14566
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for DNA replication licensing factor MCM6(MCM6) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

Reconstitution

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

Anti-MCM6 Antibody - Additional Information

Gene ID 4175

Other Names

DNA replication licensing factor MCM6, 3.6.4.12, p105MCM, MCM6

Calculated MW

92889 MW KDa

Application Details

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

Subcellular Localization

Nucleus. Binds to chromatin during G1 and detach from it during S phase.

Protein Name

DNA replication licensing factor MCM6

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 in the middle region of human MCM6(589-605aa ESSEDFIVEQYKHLRQRD), different from the related rat and mouse sequences by one amino acid.

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-MCM6 Antibody - 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](http://www.uniprot.org/citations/16899510), 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: [9305914](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/32453425)).

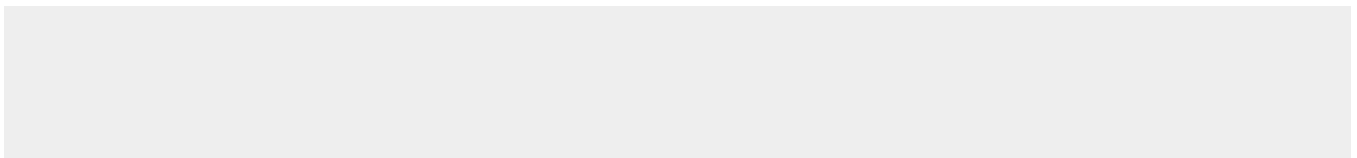
Cellular Location

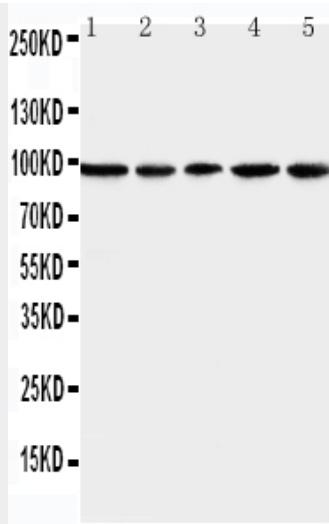
Nucleus. Chromosome. Note= Binds to chromatin during G1 and detaches from it during S phase.

Anti-MCM6 Antibody - Protocols

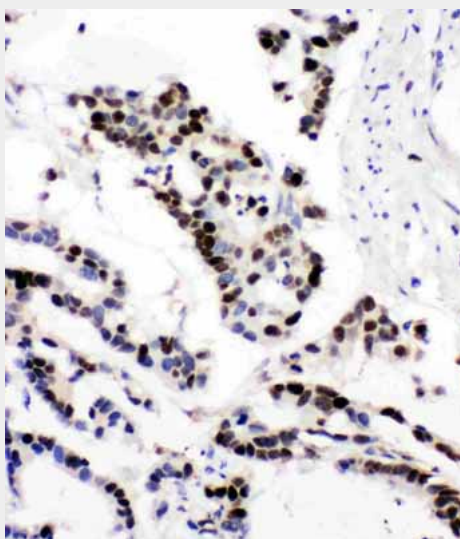
Provided below are standard protocols that you may find useful for product applications.

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

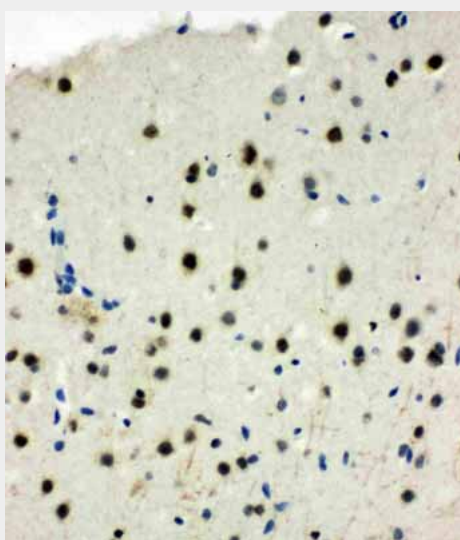
Anti-MCM6 Antibody - Images



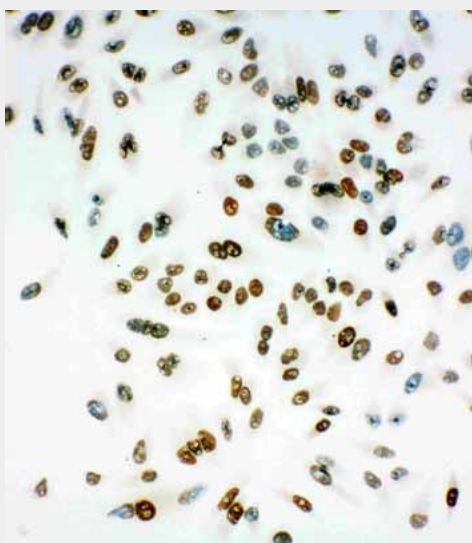
Anti-MCM6 antibody, ABO11077, Western blotting
Lane 1: U87 Cell Lysate
Lane 2: COLO320 Cell Lysate
Lane 3: HELA Cell Lysate
Lane 4: MCF-7 Cell Lysate
Lane 5: JURKAT Cell Lysate



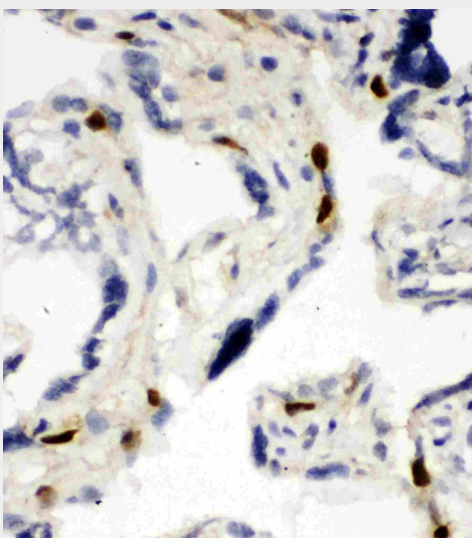
Anti-MCM6 antibody, ABO11077, IHC(P)
IHC(P): Human Intestinal Cancer Tissue



Anti-MCM6 antibody, ABO11077, IHC(P)IHC(P): Rat Brain Tissue



Anti-MCM6 antibody, ABO11077, ICCICC: HELA Cell



Anti-MCM6 antibody, ABO11077, IHC(F)IHC(F): Human Placenta Tissue

Anti-MCM6 Antibody - Background

MCM6 (Minichromosome maintenance, *s. pombe*, homolog of, 6) is a protein that in humans is encoded by the MCM6 gene. MCM6 is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The MCM genes were originally identified in yeast defective in minichromosome maintenance and have since been shown to play roles in the progression of the cell cycle; many are cell division control genes. The MCM6 gene is mapped on 2q21.3. MCM 6 has recently been shown to interact strongly with Cdt1 at defined residues, by mutating these target residues Wei et al. observed lack of Cdt1 recruitment of MCM2-7 to the pre-RC. An approximately 200-kb region surrounding the C/T(-13910) polymorphism in MCM6 intron 13 functioned as an enhancer of the lactase gene promoter in intestinal cell culture.