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Anti-MCM6 Antibody

Catalog # ABO11077

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.

Additional Information

Gene ID	4175
Other Names	DNA replication licensing factor MCM6, 3.6.4.12, p105MCM, MCM6
Calculated MW	92889
Application Details	Immunocytochemistry , 0.5-1 □g/ml, Human, Mouse, Rat Immunohistochemistry(Frozen Section), 0.5-1 □g/ml, Human, Rat, Mouse Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus. Binds to chromatin during G1 and detach from it during S phase.
Source	Eukaryota
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 ESEDFIVEQYKHLRQRD), 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 r˚Constitution, 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.

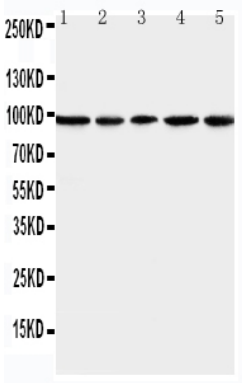
Protein Information

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, PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232, 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.

Background

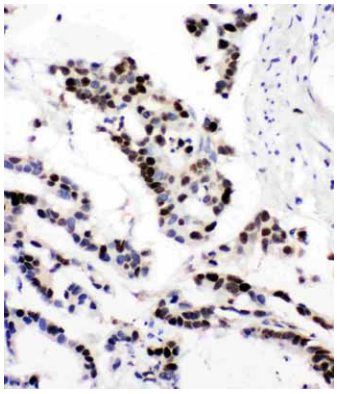
MCM6(Minichromosome maintenance, s. pombe, homolog of, 6) is a protein that in humans is encoded by the MCM6 gene. MCM6 is one of the highly conserved mini-chromosome maintenance proteins(MCM) that are essential for the initiation of eukaryotic genome replication. The MCM genes were originally identified 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 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.

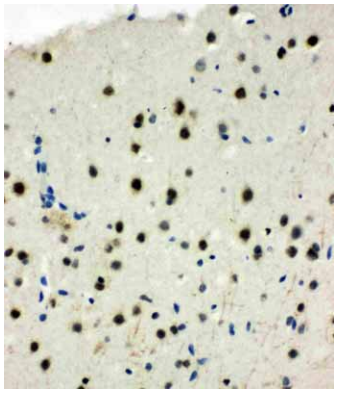
Images



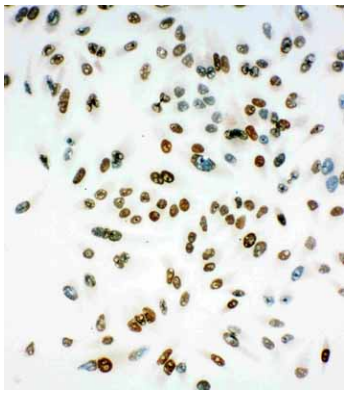
Anti-MCM6 antibody, ABO11077, Western blottingLane 1: U87 Cell LysateLane 2: COLO320 Cell LysateLane 3: HELA Cell LysateLane 4: MCF-7 Cell LysateLane 5: JURKAT Cell Lysate

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

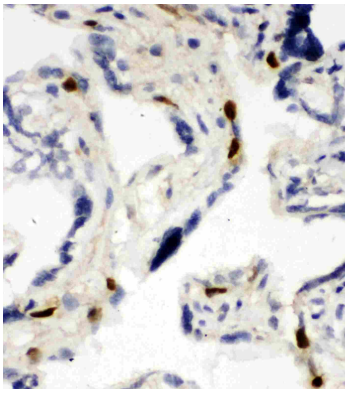




Anti-MCM6 antibody, ABO11077, IHC(P)IHC(P): Rat Brain Tissue



Anti-MCM6 antibody, ABO11077, ICCICC: HELA Cell



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.