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Anti-MCM5 Antibody

Catalog # ABO10968

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Nucleus.
Source	Eukaryota
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 EIQHRMQRKVLYRLK), 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 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	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 (PubMed:40940420). 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

Background

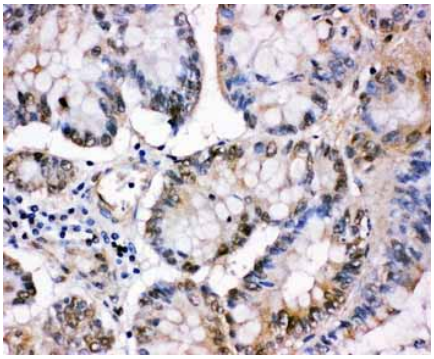
MCM5(MINICHROMOSOME MAINTENANCE, S. CEREVISIAE, HOMOLOG OF, 5),also known as CDC46, is a protein that in humans is encoded by the MCM5 gene. MCM5 is structurally very similar to the CDC46 protein from S. cerevisiae, a protein involved in the initiation of DNA replication. And MCM5 is a member of the 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.

Images



Anti-MCM5 antibody, ABO10968, Western blottingLane 1: Rat Testis Tissue Lysate Lane 2: Rat Brain Tissue Lysate Lane3: JURKAT Cell Lysate

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



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