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KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1256

Product Information

Application	WB, ICC
Primary Accession	P25205
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 2490
Calculated MW	90981
Gene Name	MCM3
Aliases	MCM3; Minichromosome Maintenance Complex Component 3; DNA Polymerase Alpha Holoenzyme-Associated Protein P1; DNA Replication Licensing Factor MCM3; RLF Subunit Beta; P1-MCM3; P102; MCM3 Minichromosome Maintenance Deficient 3 (S. Cerevisiae); Minichromosome Maintenance Deficient (S. Cerevisiae) 3; MCM3 Minichromosome Maintenance Deficient 3; Replication Licensing Factor, Beta Subunit; Minichromosome Maintenance Deficient 3; Cervical Cancer Proto-Oncogene 5; DNA Replication Factor MCM3; HRlf Beta Subunit; EC 3.6.4.12; HCC5; P1.H; RLFB
Immunogen	A synthesized peptide derived from human MCM3

Additional Information

Gene ID	4172
Other Names	DNA replication licensing factor MCM3, 3.6.4.12, DNA polymerase alpha holoenzyme-associated protein P1, P1-MCM3, RLF subunit beta, p102, MCM3 (HGNC:6945)

Protein Information

Name	MCM3 (HGNC:6945)
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: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). Required for the entry in S phase and for cell division

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

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