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KD-Validated Anti-MCM7 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2303

Product Information

Application	WB, FC, ICC
Primary Accession	P33993
Reactivity	Rat, Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB930
Calculated MW	81308
Gene Name	MCM7
Aliases	Minichromosome Maintenance Complex Component 7; CDC47; PPP1R104; MCM2; Protein Phosphatase 1, Regulatory Subunit 104; DNA Replication Licensing Factor MCM7; CDC47 Homolog; P1.1-MCM3; MCM7 Minichromosome Maintenance Deficient 7 (S. Cerevisiae); Minichromosome Maintenance Deficient (S. Cerevisiae) 7; Minichromosome Maintenance Deficient 7; Homolog Of S. Cerevisiae Cdc47; EC 3.6.4.12; P1CDC47; PNAS146; P85MCM
Immunogen	A synthesized peptide derived from human MCM7

Additional Information

Gene ID	4176
Other Names	DNA replication licensing factor MCM7, 3.6.4.12, CDC47 homolog, P1.1-MCM3, MCM7 (HGNC:6950), CDC47, MCM2

Protein Information

Name	MCM7 (HGNC:6950)
Synonyms	CDC47, MCM2
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:25661590, 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). Required

	for S-phase checkpoint activation upon UV-induced damage.
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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