

KD-Validated Anti-MCM7 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI2296

Product Information

Application	WB, FC, ICC
Primary Accession	P33993
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB1095
Calculated MW	81308
Gene Name	MCM7
Aliases	MCM7; Minichromosome Maintenance Complex Component 7; P1CDC47; MCM2; P85MCM; CDC47; PNAS146; P1.1-MCM3; DNA Replication Licensing Factor MCM7; CDC47 Homolog; Homolog Of S. Cerevisiae Cdc47; MCM7 Minichromosome Maintenance Deficient 7 (S. Cerevisiae); Minichromosome Maintenance Deficient 7; Minichromosome Maintenance Deficient (S. Cerevisiae) 7; EC 3.6.4.12
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.

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