10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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'.