

# MCM7 Antibody

Rabbit mAb

Catalog # AP91495

## Product Information

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<b>Application</b>	WB, IHC, IF, FC, ICC, IP, IHF
<b>Primary Accession</b>	<a href="#">P33993</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	CDC47 homolog; P1.1-MCM3; MCM7; CDC47; MCM2; P1CDC47; P85MCM; PNAS146; PPP1R104;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	81308

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human MCM7
<b>Description</b>	Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. 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.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

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<b>Name</b>	MCM7 ( <a href="#">HGNC:6950</a> )
<b>Synonyms</b>	CDC47, MCM2
<b>Function</b>	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: <a href="#">25661590</a> , PubMed: <a href="#">32453425</a> , PubMed: <a href="#">34694004</a> , PubMed: <a href="#">34700328</a> , PubMed: <a href="#">35585232</a> , PubMed: <a href="#">9305914</a> ). 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

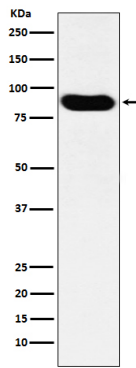
in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity (PubMed:[32453425](#)). Required for S-phase checkpoint activation upon UV-induced damage.

### Cellular Location

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

### Images

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Western blot analysis of MCM7 expression in HeLa cell lysate.

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