

MCM7 Antibody

Rabbit mAb Catalog # AP92157

Product Information

Application Primary Accession Reactivity Clonality Other Names	WB, IF, FC, ICC <u>P33993</u> Human Monoclonal CDC47; MCM2; Mcm7; Minichromosome Maintainence 7; P1CDC47; P85MCM; PNAS146;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	81308

Additional Information

Dilution Purification Immunogen	WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:50 Affinity-chromatography A synthesized peptide derived from human MCM7
Description	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.
Storage Condition and Buffer	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

Name	MCM7 (<u>HGNC:6950</u>)
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: <u>25661590</u> , PubMed: <u>32453425</u> , PubMed: <u>34694004</u> , PubMed: <u>34700328</u> , PubMed: <u>35585232</u> , PubMed: <u>9305914</u>). 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: <u>32453425</u>). Required for S-phase checkpoint activation upon UV-induced damage.

Images



Western blot analysis of MCM7 expression in HeLa cell lysate.

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