

MCM7 Rabbit mAb

Catalog # AP78131

Product Information

Application WB, IF, FC, ICC

Primary Accession P33993
Reactivity Human
Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human MCM7

Purification Affinity Chromatography

Calculated MW 81308

Additional Information

Gene ID 4176

Other Names MCM7

Dilution WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<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

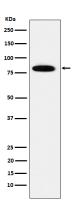
differentially to the complex helicase activity (PubMed: 32453425). Required

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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