

Phospho-MCM2 (S41) Antibody

Rabbit mAb

Catalog # AP92875

Product Information

Application	WB, IHC
Primary Accession	P49736
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	BM28; CCNL1; cdc19; CDCL1 Cyclin like 1; MCM2; Minichromosome maintenance protein 2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	101896

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-MCM2 (S41)
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.

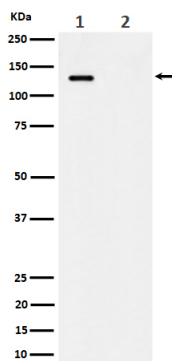
Protein Information

Name	MCM2 (HGNC:6944)
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: 32453425 , PubMed: 34694004 , PubMed: 34700328 , PubMed: 35585232). 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 the entry in S phase and for cell division (PubMed: 8175912). Plays a role in terminally differentiated hair cells development of the cochlea and induces cells apoptosis (PubMed: 26196677).

Cellular Location

Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.
{ECO:0000250|UniProtKB:P55861}

Images



Western blot analysis of Phospho-MCM2 (S41) expression in (1) HeLa cell lysate; (2) HeLa cell treated with alkaline phosphatase lysate.

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