

**Phospho-MCM2 (S41) Antibody**  
Rabbit mAb  
Catalog # AP92875**Specification****Phospho-MCM2 (S41) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P49736</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
BM28; CCNL1; cdc19; CDCL1 Cyclin like 1; MCM2; Minichromosome maintenance protein 2;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	101896 Da

**Phospho-MCM2 (S41) Antibody - Additional Information**

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.

**Phospho-MCM2 (S41) Antibody - 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](http://www.uniprot.org/citations/32453425)), PubMed:[34694004](http://www.uniprot.org/citations/34694004)), PubMed:[34700328](http://www.uniprot.org/citations/34700328)), PubMed:[35585232](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>). Required for the entry in S phase and for cell division (PubMed:<a href="http://www.uniprot.org/citations/8175912" target="\_blank">8175912</a>). Plays a role in terminally differentiated hair cells development of the cochlea and induces cells apoptosis (PubMed:<a href="http://www.uniprot.org/citations/26196677" target="\_blank">26196677</a>).

#### Cellular Location

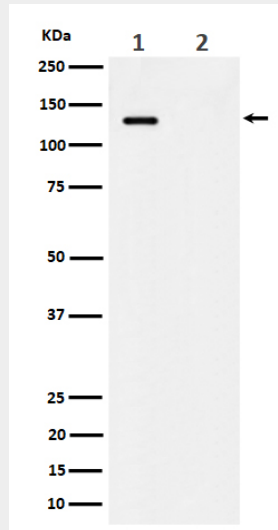
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses. {ECO:0000250|UniProtKB:P55861}

#### Phospho-MCM2 (S41) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Phospho-MCM2 (S41) Antibody - Images



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