

**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:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>, PubMed:<a href="http://www.uniprot.org/citations/34694004" target="\_blank">34694004</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">34700328</a>, PubMed:<a href="http://www.uniprot.org/citations/35585232" target="\_blank">35585232</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:<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

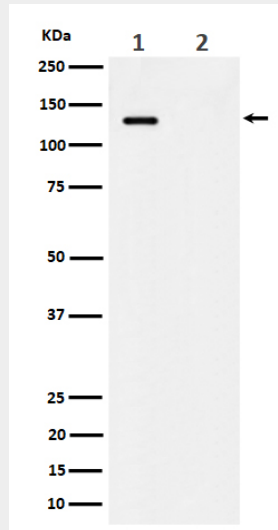
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses. {ECO:0000250|UniProtKB:P55861}

#### 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.