

### Phospho-MCM2 (S41) Antibody

Rabbit mAb Catalog # AP92875

## **Specification**

### Phospho-MCM2 (S41) Antibody - Product Information

Application WB, IHC
Primary Accession P49736
Reactivity Rat

Clonality Monoclonal

**Other Names** 

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



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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**

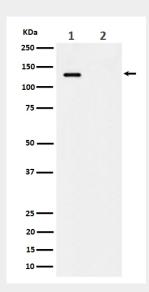
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses. {ECO:0000250|UniProtKB:P55861}

## Phospho-MCM2 (S41) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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.