

# MCM4 (phospho Ser54) Polyclonal Antibody

Catalog # AP67286

### Specification

# MCM4 (phospho Ser54) Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P <u>P33991</u> Human, Mouse, Monkey Rabbit Polyclonal

### MCM4 (phospho Ser54) Polyclonal Antibody - Additional Information

Gene ID 4173

**Other Names** MCM4; CDC21; DNA replication licensing factor MCM4; CDC21 homolog; P1-CDC21

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

## MCM4 (phospho Ser54) Polyclonal Antibody - Protein Information

Name MCM4 (<u>HGNC:6947</u>)

Synonyms CDC21

#### 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/16899510" target="\_blank">16899510</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">25661590</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">32453425</a>, 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/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/34700328" target="\_blank">3585232</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">34700328</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">34700328</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">3585232</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">33585232</a>, PubMed:<a href="http://www.uniprot.org/citations/35585232" target="\_blank">3305914</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/16899510" target="\_blank">16899510</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">25661590</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">25661590</a>, PubMed:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>, PubMed:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>, PubMed:<a

#### **Cellular Location**

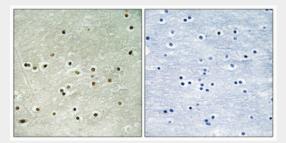
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

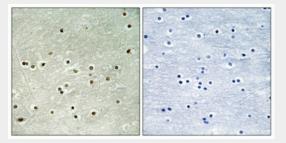
### MCM4 (phospho Ser54) Polyclonal Antibody - Protocols

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

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

### MCM4 (phospho Ser54) Polyclonal Antibody - Images





## MCM4 (phospho Ser54) Polyclonal Antibody - Background

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. 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.