

### MCM2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51335

## **Specification**

### **MCM2 Antibody - Product Information**

Application WB
Primary Accession P49736
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 125 KDa
Antigen Region 21 - 80

## MCM2 Antibody - Additional Information

#### **Gene ID 4171**

#### **Other Names**

DNA replication licensing factor MCM2, Minichromosome maintenance protein 2 homolog, Nuclear protein BM28, MCM2, BM28, CCNL1, CDCL1, KIAA0030

## **Target/Specificity**

KLH conjugated synthetic peptide derived from human MCM2

### **Dilution**

WB~~ 1:4000

#### **Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

## **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

## **MCM2 Antibody - Protein Information**

## Name MCM2 (<u>HGNC:6944</u>)

### **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



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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**

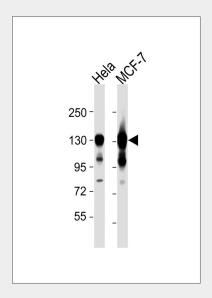
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses. {ECO:0000250|UniProtKB:P55861}

## **MCM2 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 Cytomety
- Cell Culture

## MCM2 Antibody - Images



All lanes : Anti-MCM2 Antibody at 1:4000 dilution Lane 1: Hela whole cell lysates Lane 2: MCF-7 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 102 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## MCM2 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. Required for the entry in S phase and for cell division.

# **MCM2 Antibody - References**

Todorov I.T.,et al.J. Cell Sci. 107:253-265(1994).

Nomura N.,et al.DNA Res. 1:27-35(1994).

Mimura S.,et al.Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.

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Mincheva A.,et al.Cytogenet. Cell Genet. 65:276-277(1994).