

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 encompassing a sequence within the N-term region of human MCM2. The exact sequence is proprietary.

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 ([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, PubMed:34694004, PubMed:34700328, PubMed: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:32453425). Required for the entry in S phase and for cell division (PubMed:8175912). Plays a role in terminally differentiated hair cells development of the cochlea and induces cells apoptosis (PubMed:26196677).

Cellular Location

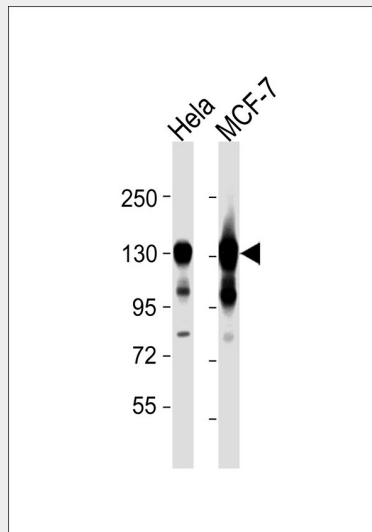
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses. {ECO:0000250|UniProtKB:P55861}

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 Cytometry](#)
- [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 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 102 kDa Blocking/Dilution buffer: 5% NFDN/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.

Kalnina N., et al. Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.

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