

MCM2 Antibody (clone 2B3)
Mouse Monoclonal Antibody
Catalog # ALS16187**Specification**

MCM2 Antibody (clone 2B3) - Product Information

Application	IHC, WB
Primary Accession	P49736
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Calculated MW	102kDa KDa

MCM2 Antibody (clone 2B3) - Additional Information**Gene ID** 4171**Other Names**

DNA replication licensing factor MCM2, 3.6.4.12, Minichromosome maintenance protein 2 homolog, Nuclear protein BM28, MCM2, BM28, CCNL1, CDCL1, KIAA0030

Target/Specificity

Human MCM2

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

MCM2 Antibody (clone 2B3) is for research use only and not for use in diagnostic or therapeutic procedures.

MCM2 Antibody (clone 2B3) - 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}

Volume

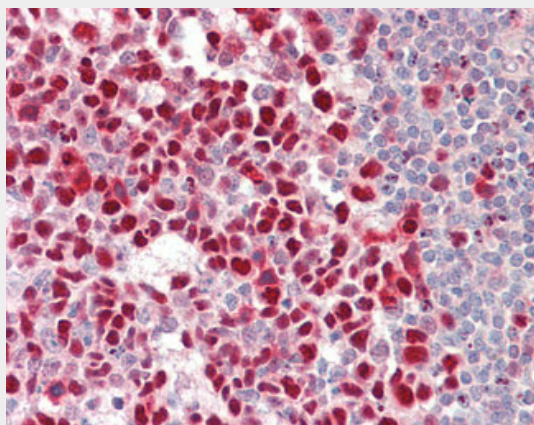
50 µl

MCM2 Antibody (clone 2B3) - Protocols

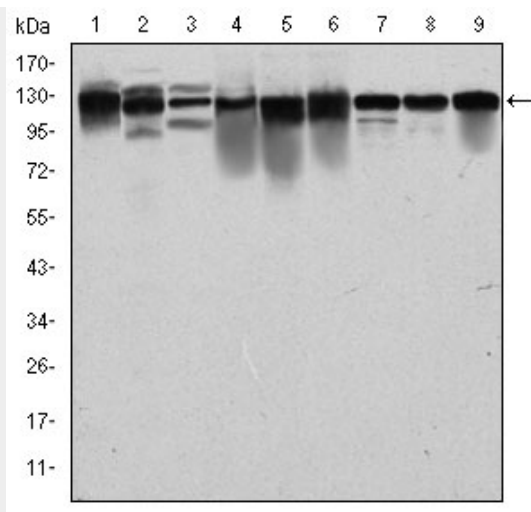
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MCM2 Antibody (clone 2B3) - Images



Anti-MCM2 antibody IHC staining of human tonsil.



Western blot using MCM2 mouse monoclonal antibody against PC-12 (1), Cos7 (2), NIH/3T3 (3),...

MCM2 Antibody (clone 2B3) - 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 (clone 2B3) - 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).