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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:<a

href="http://www.uniprot.org/citations/32453425" target="_blank">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}

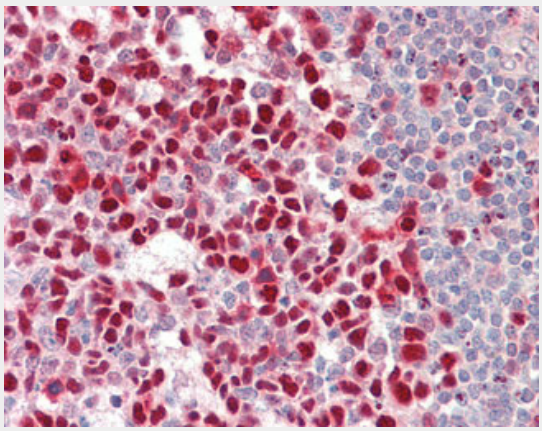
Volume
50 µl

MCM2 Antibody (clone 2B3) - Protocols

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

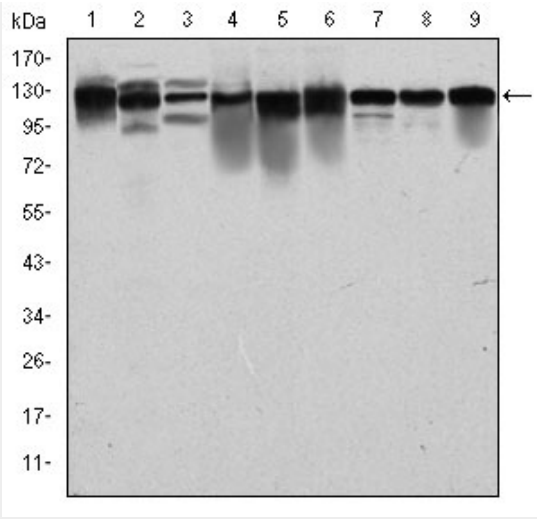
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MCM2 Antibody (clone 2B3) - Images



Anti-MCM2 antibody IHC staining of human tonsil.

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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.
Kalnine N.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
Mincheva A.,et al.Cytogenet. Cell Genet. 65:276-277(1994).