

MCM2 Antibody (aa1-50)

Rabbit Polyclonal Antibody Catalog # ALS14771

Specification

MCM2 Antibody (aa1-50) - Product Information

Application IF, WB, IHC
Primary Accession P49736
Reactivity Human, Mouse
Host Rabbit
Clonality Polyclonal
Calculated MW 102kDa KDa

MCM2 Antibody (aa1-50) - 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

MCM2 Antibody detects endogenous levels of total MCM2 protein.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

MCM2 Antibody (aa1-50) is for research use only and not for use in diagnostic or therapeutic procedures.

MCM2 Antibody (aa1-50) - 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}

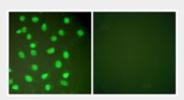
Volume 50 µl

MCM2 Antibody (aa1-50) - Protocols

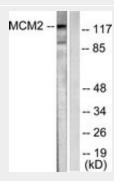
Provided below are standard protocols that you may find useful for product applications.

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

MCM2 Antibody (aa1-50) - Images

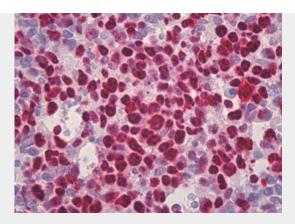


Immunofluorescence of HepG2 cells, using MCM2 Antibody.



Western blot of extracts from 293 cells, using MCM2 Antibody.





Anti-MCM2 antibody IHC of human tonsil.

MCM2 Antibody (aa1-50) - 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 (aa1-50) - 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).