

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1871

Specification

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC, ICC <u>P33992</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 82 kDa, observed, 82 kDa KDa MCM5 MCM5; Minichromosome Maintenance Complex Component 5; CDC46; DNA Replication Licensing Factor MCM5; CDC46 Homolog; P1-CDC46; MCM5 Minichromosome MaintenanceDeficient 5, Cell Division Cycle 46 (S. Cerevisiae); Minichromosome Maintenance Deficient (S. Cerevisiae) 5 (Cell Division Cycle 46); MCM5 Minichromosome Maintenance Deficient 5, Cell Division Cycle 46; Minichromosome Maintenance Deficient 5 (Cell Division Cycle 46): EC 3.6.4.12:
Immunogen	MGORS8 A synthesized peptide derived from human MCM5

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4174 Other Names DNA replication licensing factor MCM5 {ECO:0000303|Ref.3}, 3.6.4.12, CDC46 homolog, P1-CDC46, MCM5, CDC46

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody - Protein Information

Name MCM5

Synonyms CDC46

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:16899510, PubMed:<a



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

Cellular Location

Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody - Protocols

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

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

KD-Validated Anti-MCM5 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-MCM5 antibody (Cat#AGI1871). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MCM5 antibody (Cat#AGI1871, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-MCM5 antibody (Cat#AGI1871). MCM5 expression in wild-type (WT) and MCM5 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-MCM5 antibody (Cat#AGI1871, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of MCM5 expression in HepG2 cells using anti-MCM5 antibody (Cat#AGI1871, 1:2,000). Green, isotype control; red, MCM5.



Immunocytochemical staining of HepG2 cells with anti-MCM5 antibody (Cat#AGI1871, 1:1,000). Nuclei were stained blue with DAPI; MCM5 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.