

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1256

Specification

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody - Product Information

Application WB, ICC Primary Accession P25205

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 91 kDa , observed, 100 kDa

Gene Name KDa MCM3

Aliases

MCM3; Minichromosome Maintenance
Complex Component 3; DNA Polymerase
Alpha Holoenzyme-Associated Protein P1;
DNA Replication Licensing Factor MCM3;
RLF Subunit Beta; P1-MCM3; P102; MCM3
Minichromosome Maintenance Deficient 3

(S. Cerevisiae); Minichromosome

Maintenance Deficient (S. Cerevisiae) 3; MCM3 Minichromosome Maintenance Deficient 3; Replication Licensing Factor,

Beta Subunit; Minichromosome

Maintenance Deficient 3; Cervical Cancer Proto-Oncogene 5; DNA Replication Factor MCM3; HRIf Beta Subunit; EC 3.6.4.12;

HCC5; P1.H; RLFB

Immunogen A synthesized peptide derived from human

MCM3

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody - Additional Information

Gene ID **4172**

Other Names

DNA replication licensing factor MCM3, 3.6.4.12, DNA polymerase alpha holoenzyme-associated protein P1, P1-MCM3, RLF subunit beta, p102, MCM3 (<a href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=6945"

target=" blank">HGNC:6945)

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody - Protein Information

Name MCM3 (HGNC:6945)

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 (Probable).

Cellular Location

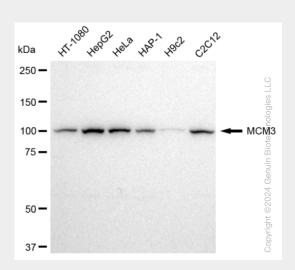
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody - Protocols

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

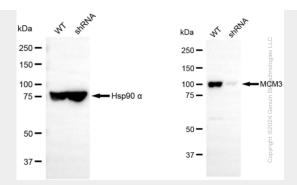
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-MCM3 Rabbit Monoclonal Antibody - Images

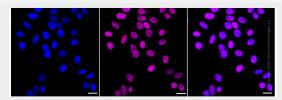


Western blotting analysis using anti-MCM3 antibody (Cat#AGI1256). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MCM3 antibody (Cat#AGI1256, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-MCM3 antibody (Cat#AGI1256). MCM3 expression in wild type (WT) and MCM3 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-MCM3 antibody (Cat#AGI1256, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with MCM3 antibody (Cat#AGI1256, 1:1,000). Nuclei were stained blue with DAPI; MCM3 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 μ m.