
Product Name: KD-Validated MCM3 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01505**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 91.0kDa

Antigen Information

Gene Name	MCM3 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);
Alternative Names	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; HRlf Beta Subunit; EC 3.6.4.12; HCC5; P1.H; RLFb
Gene ID	4172.0
SwissProt ID	P25205
Immunogen	A synthesized peptide derived from human MCM3

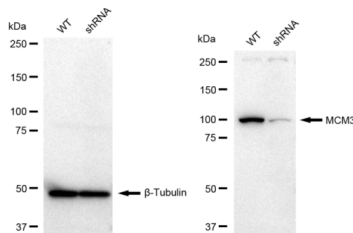
Background

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with and is acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2018]

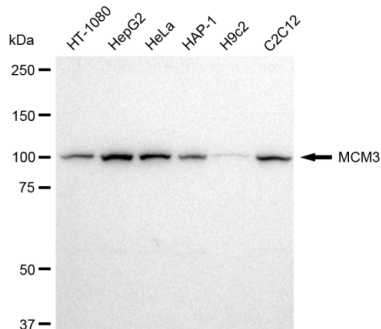
Research Area

Epigenetics and Nuclear Signaling

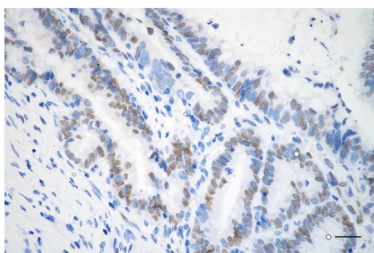
Image Data



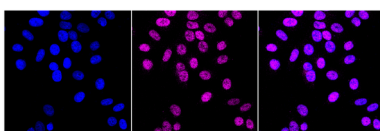
Western blotting analysis using MCM3 antibody (KVA01505). MCM3 expression in wild type (WT) and MCM3 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with MCM3 antibody (KVA01505, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



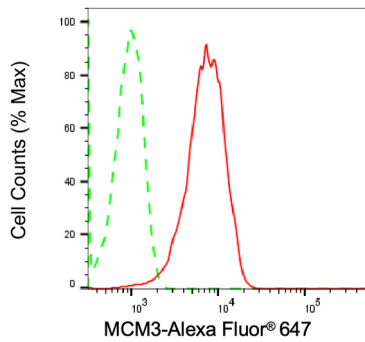
Western blotting analysis using MCM3 antibody (KVA01505). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MCM3 antibody (KVA01505, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using MCM3 antibody (KVA01505, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with MCM3 antibody (KVA01505, 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 µm.



Flow cytometric analysis of MCM3 expression in HepG2 cells using MCM3 antibody (KVA01505, 1:2,000). Green, isotype control; red, MCM3.