

Product Name: KD-Validated MCM7 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00247**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,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
Molecular Weight	Calculated MW: 81.3kDa

Antigen Information

Gene Name	MCM7 Minichromosome Maintenance Complex Component 7; CDC47; PPP1R104; MCM2; Protein Phosphatase 1, Regulatory Subunit 104; DNA Replication Licensing Factor MCM7; CDC47
Alternative Names	Homolog; P1.1-MCM3; MCM7 Minichromosome Maintenance Deficient 7 (S. Cerevisiae); Minichromosome Maintenance Deficient (S. Cerevisiae) 7; Minichromosome Maintenance Deficient 7; Homolog Of S. Cerevisiae Cdc47; EC 3.6.4.12; P1CDC47; PNAS146; P85MCM
Gene ID	4176.0
SwissProt ID	P33993
Immunogen	A synthesized peptide derived from human MCM7

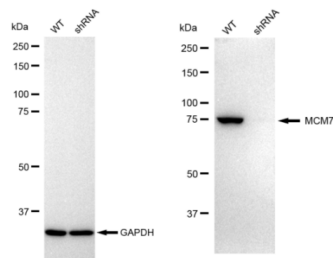
Background

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the 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. The MCM complex consisting of this protein and MCM2, 4 and 6 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. Cyclin D1-dependent kinase, CDK4, is found to associate with this protein, and may regulate the binding of this protein with the tumorsuppressor protein RB1/RB. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

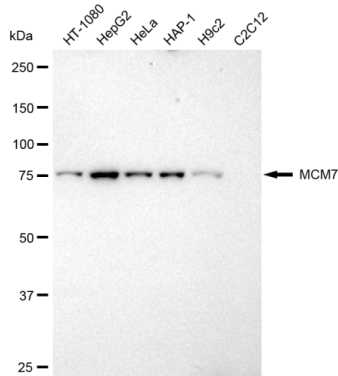
Research Area

Epigenetics and Nuclear Signaling

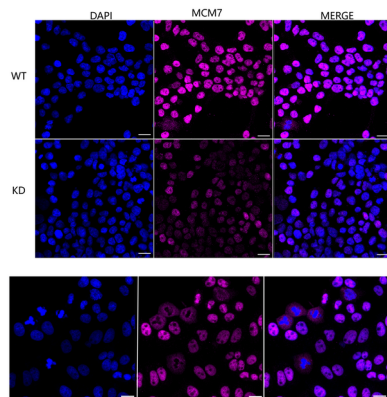
Image Data



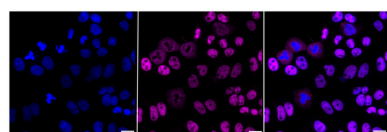
Western blotting analysis using MCM7 antibody (KVA00247). MCM7 expression in wild type (WT) and MCM7 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. GAPDH serves as a loading control. The blot was incubated with MCM7 antibody (KVA00247, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



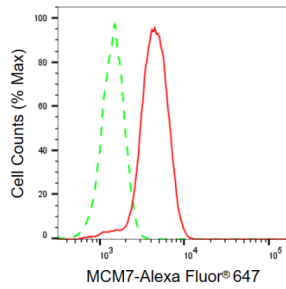
Western blotting analysis using MCM7 antibody (KVA00247). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MCM7 antibody (KVA00247, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using MCM7 antibody (KVA00247, 1:1,000), Top panel: wild-type (WT); Bottom panel: MCM7 shRNA knockdown (KD). Nuclei were stained blue with DAPI; MCM7 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with MCM7 antibody (KVA00247, 1:1,000). Nuclei were stained blue with DAPI; MCM7 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 MCM7 expression in HepG2 cells using MCM7 antibody (KVA00247, 1:2,000). Green, isotype control; red, MCM7.