

Rabbit MCM7 Polyclonal Antibody | anti-MCM7 antibody

MCM7 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326052	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

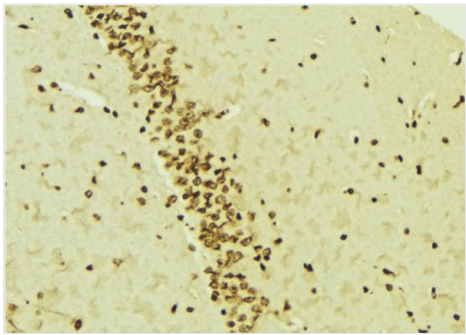
PRODUCT SYNONYMS

MCM7; Polyclonal Antibody; MCM7 Antibody; CDABP0042; CDC 47; CDC47; CDC47 homolog; Cdc47; S. cerevisiae; homolog of; DNA replication licensing factor MCM7; Homolog of S. cerevisiae Cdc47; MCM 2; MCM 7; MCM2; formerly; Mcm7; MCM7 minichromosome maintenance deficient 7; MCM7_HUMAN; Minichromosome Maintenance 7; Minichromosome maintenance; Minichromosome maintenance complex component 7; Minichromosome maintenance deficient 7; Minichromosome maintenance protein 7; P1.1 MCM3; P1.1-MCM3; P1CDC47; P85MCM; PNAS 146; PNAS146; PPP1R104; Protein phosphatase 1; regulatory subunit 104; anti-MCM7 antibody

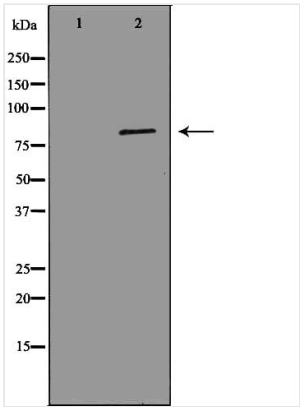
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MCM7 antibody detects endogenous levels of total MCM7
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	543
Applicable Applications for anti-MCM7 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MCM7
Subcellular Location	Nucleus.
Predicted Cross Reactivity	Zebrafish, Bovine, Rabbit, Dog, Xenopus
Similarity	Zebrafish (100%), Bovine (100%), Rabbit (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326052 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of HeLa whole cell lysates, using MCM7 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MCM7 antibody

Description: The minichromosome maintenance (MCM) 2-7 proteins are a family of six related proteins required for the initiation and elongation of DNA replication. MCM2-7 bind together to form the heterohexameric MCM complex that is thought to act as a replicative helicase at the DNA replication fork (1-5). This complex is also a key component of the pre-replication complex (pre-RC) (reviewed in 1). Cdc6 and CDT1 recruit the MCM complex to the origin recognition complex (ORC) during late mitosis/early G1 phase forming the pre-RC and licensing the DNA for replication (reviewed in 2). Phosphorylation of the MCM2, MCM3, MCM4, and MCM6 subunits appears to regulate MCM complex activity and the initiation of DNA synthesis (6-8). MCM proteins are removed during DNA replication, causing chromatin to become unlicensed through inhibition of pre-RC reformation. Licensing of the chromatin permits the DNA to replicate only once per cell cycle, thereby helping to ensure that genetic alterations and malignant cell growth do not occur (reviewed in 3). Studies have shown that the MCM complex is involved in checkpoint control by protecting the structure of the replication fork and assisting in restarting replication by recruiting checkpoint proteins after arrest (reviewed in 3, 9).

Function: 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 S-phase checkpoint activation upon UV-induced damage.

Subunit Structure: Component of the MCM2-7 complex. The complex forms a toroidal hexameric ring with the proposed subunit order MCM2-MCM6-MCM4-MCM7-MCM3-MCM5 (Probable). Interacts with the ATR-ATRIP complex and with RAD17. Interacts with TIPIN. Interacts with MCMBP. Interacts with ANKRD17. Component of the replisome complex composed of at least DONSON, MCM2, MCM7, PCNA and TICRR (PubMed:28191891).

Post-translational Modifications: O-glycosylated (O-GlcNAcylated), in a cell cycle-dependent manner.

Similarity: Belongs to the MCM family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	518830597
NCBI GeneID	4176
NCBI Accession #	NP_001265524.1
NCBI GenBank Nucleotide #	NM_001278595.1
UniProt Accession #	P33993; Q15076; Q96D34; Q96GL1; A4D2A1; A4D2A2; E9PGN9
Molecular Weight	Observed: 81 kDa Predicted: 82 kDa
NCBI Official Full Name	DNA replication licensing factor MCM7 isoform 2

NCBI Official Synonym Full Names	minichromosome maintenance complex component 7
NCBI Official Symbol	MCM7
NCBI Official Synonym Symbols	MCM2; CDC47; P85MCM; P1CDC47; PNAS146; PPP1R104; P1.1-MCM3
NCBI Protein Information	DNA replication licensing factor MCM7
UniProt Protein Name	DNA replication licensing factor MCM7
UniProt Gene Name	MCM7
UniProt Synonym Gene Names	CDC47; MCM2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/mcm7-antibody-immunohistochemistry-western-blot-elisa/326052>