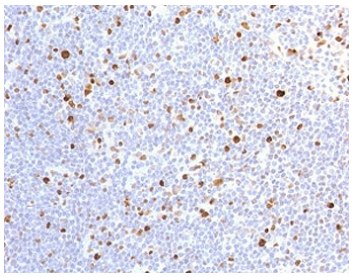
MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R / Minichromosome Maintenance Protein 7 Antibody [clone MMCC7-1R] (V7360)

Catalog No.	Formulation	Size
V7360-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7360-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7360SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7360IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

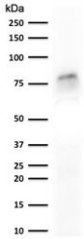
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MMCC7-1R
Purity	Protein A affinity chromatography
UniProt	P33993
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This recombinant MCM7 antibody is available for research use only.



MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R - immunohistochemistry of human lymph node tissue. FFPE human lymph node tissue was stained with MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R to detect Minichromosome maintenance protein 7 / MCM7. HRP-DAB brown chromogenic signal highlights predominantly nuclear staining in scattered lymphoid cells within the lymph node parenchyma, consistent with the nuclear localization of this DNA replication licensing factor in proliferating cells. Hematoxylin counterstain marks cell nuclei (blue). Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 minutes prior to staining.



MCM7 Antibody MCF7 Cell WB. Western blot testing of human MCF7 cell lysate with recombinant MCM7 antibody (clone MMCC7-1R). Expected molecular weight: 80~90 kDa.

Description

Minichromosome maintenance protein 7 (MCM7) is a nuclear DNA replication factor encoded by the MCM7 gene and functions as an essential component of the minichromosome maintenance helicase complex that drives eukaryotic DNA replication. MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R recognizes this replication licensing protein and supports research focused on DNA synthesis, cell cycle progression, and proliferative signaling in normal and malignant cells.

MCM7 belongs to the highly conserved MCM protein family that forms the heterohexameric MCM2-7 helicase complex responsible for unwinding double-stranded DNA at replication forks. During the G1 phase of the cell cycle, MCM complexes assemble at replication origins as part of the pre-replication complex, licensing chromatin for DNA synthesis. Activation of this helicase during S phase enables separation of DNA strands, allowing DNA polymerases and associated replication machinery to copy the genome accurately during cell division.

MCM7 antibody, also referred to as CDC47 antibody and P1-MCM3 antibody in the literature, detects a nuclear protein strongly associated with actively proliferating cells. The protein localizes primarily to chromatin within the nucleus where it participates in replication origin licensing and helicase activation. Because expression of MCM7 correlates with cell cycle activity, the protein is widely used as a marker of cellular proliferation in studies of tissue growth, regeneration, and tumor biology.

Structurally, MCM7 contains conserved ATP-binding and ATP-hydrolysis domains characteristic of the AAA+ ATPase family. These domains provide the energy required for helicase activity, enabling conformational changes within the MCM complex that drive DNA strand separation and replication fork progression. Tight regulation of the MCM helicase system ensures that genomic DNA is replicated only once per cell cycle, helping maintain genomic stability and prevent aberrant DNA duplication.

Elevated expression of MCM7 has been reported in multiple cancers including colorectal carcinoma, breast cancer, lung cancer, and other rapidly proliferating malignancies. Increased levels of MCM proteins reflect heightened DNA replication activity in tumor cells and have made the complex widely studied in cancer biology and cell cycle research. A recombinant rabbit monoclonal antibody such as MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R provides a useful tool for detecting Minichromosome maintenance protein 7 expression and investigating mechanisms that regulate DNA replication and proliferative signaling pathways.

This antibody is part of a broader panel of MCM7 antibodies designed to support detection of proliferation-associated

proteins across multiple research applications.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant MCM7 Antibody Recombinant Rabbit MAb MMCC7-1R may be required due to differences in protocols and secondary/substrate sensitivity.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Amino acids 195-319 from the human protein were used as the immunogen for the recombinant MCM7 antibody.

Storage

Store the recombinant MCM7 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CDC47 antibody, P1-MCM3 antibody, DNA replication licensing factor MCM7 antibody, Minichromosome maintenance protein 7 antibody, MCM7 replication factor antibody

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