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Anti-MCM4 Rabbit Monoclonal Antibody

Catalog # ABO15863

Product Information

Application	WB, IHC, IP, FC
Primary Accession	P33991
Host	Rabbit
Isotype	IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-MCM4 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

Additional Information

Gene ID	4173
Other Names	DNA replication licensing factor MCM4, 3.6.4.12, CDC21 homolog, P1-CDC21, MCM4 (HGNC:6947), CDC21
Calculated MW	96558
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 IP 1:50 FC 1:100
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 24M40
Immunogen	A synthesized peptide derived from human MCM4
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	MCM4 (HGNC:6947)
Synonyms	CDC21

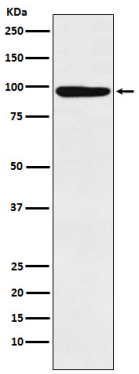
Function

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:16899510, PubMed:25661590, PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232, PubMed:9305914). 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:16899510, PubMed:25661590, PubMed:32453425, PubMed:9305914).

Cellular Location

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

Images



Western blot analysis of MCM4 expression in Molt-4 cell lysate.

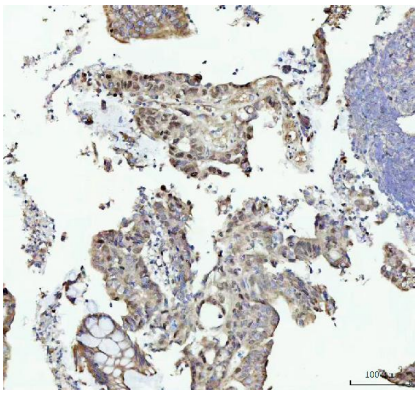
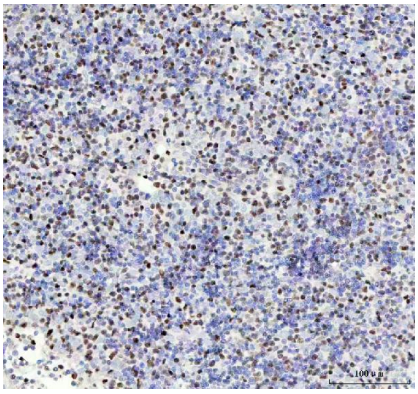


Figure 2. IHC analysis of MCM4 using anti-MCM4 antibody (M02301).
MCM4 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-MCM4 Antibody (M02301) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Figure 3. IHC analysis of MCM4 using anti-MCM4 antibody (M02301).
MCM4 was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-MCM4 Antibody (M02301) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at



37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.