

**Anti-MCM4 Rabbit Monoclonal Antibody**  
Catalog # ABO15863**Specification****Anti-MCM4 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IP, FC
Primary Accession	<a href="#">P33991</a>
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.

**Anti-MCM4 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 4173

**Other Names**

DNA replication licensing factor MCM4, 3.6.4.12, CDC21 homolog, P1-CDC21, MCM4 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=6947](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6947) target="\_blank">HGNC:6947</a>), CDC21

**Calculated MW**

97 kDa KDa

**Application Details**

WB 1:1000-1:5000<br>IHC 1:50-1:200<br>IP 1:50<br>FC 1:100

**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.

**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.

**Anti-MCM4 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/16899510" target="\_blank">16899510</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">25661590</a>, PubMed:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>, PubMed:<a href="http://www.uniprot.org/citations/34694004" target="\_blank">34694004</a>, PubMed:<a href="http://www.uniprot.org/citations/34700328" target="\_blank">34700328</a>, PubMed:<a href="http://www.uniprot.org/citations/35585232" target="\_blank">35585232</a>, PubMed:<a href="http://www.uniprot.org/citations/9305914" target="\_blank">9305914</a>). 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:<a href="http://www.uniprot.org/citations/16899510" target="\_blank">16899510</a>, PubMed:<a href="http://www.uniprot.org/citations/25661590" target="\_blank">25661590</a>, PubMed:<a href="http://www.uniprot.org/citations/32453425" target="\_blank">32453425</a>, PubMed:<a href="http://www.uniprot.org/citations/9305914" target="\_blank">9305914</a>).

### Cellular Location

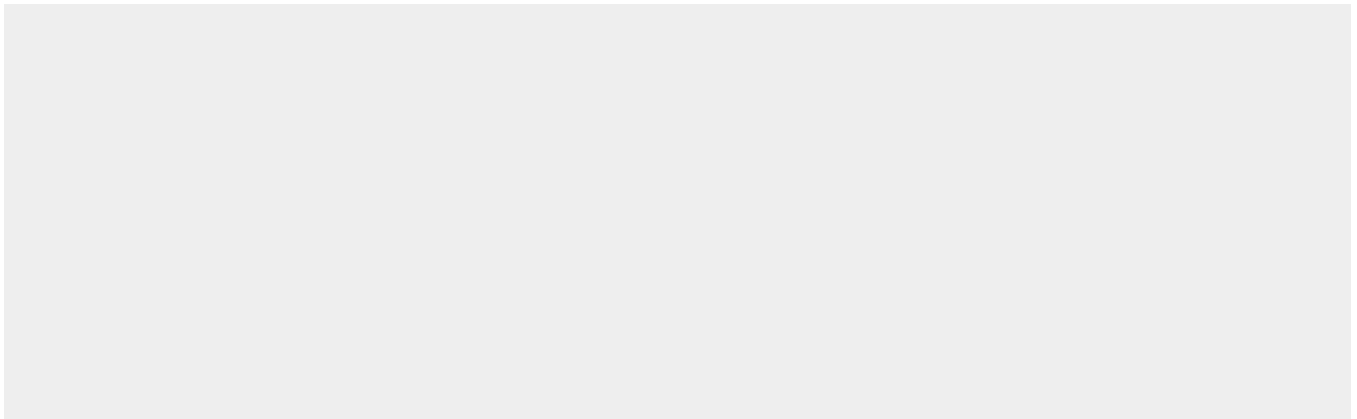
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

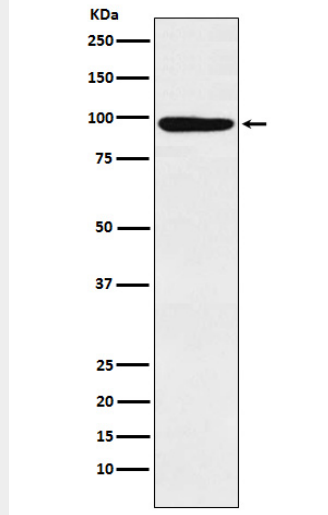
### Anti-MCM4 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-MCM4 Rabbit Monoclonal Antibody - Images





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

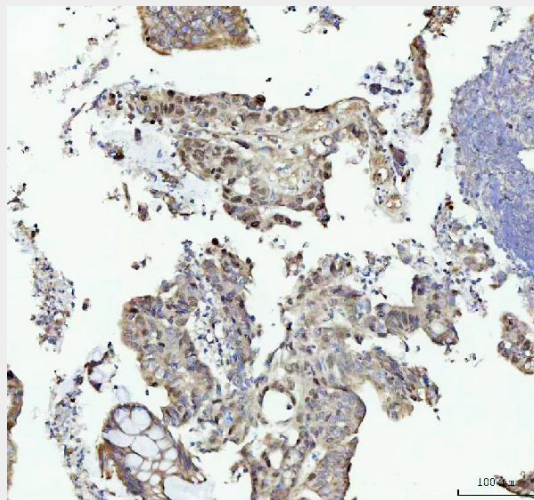


Figure 2. IHC analysis of MCM4 using anti-MCM4 antibody (M02301). MCM4 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat 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.

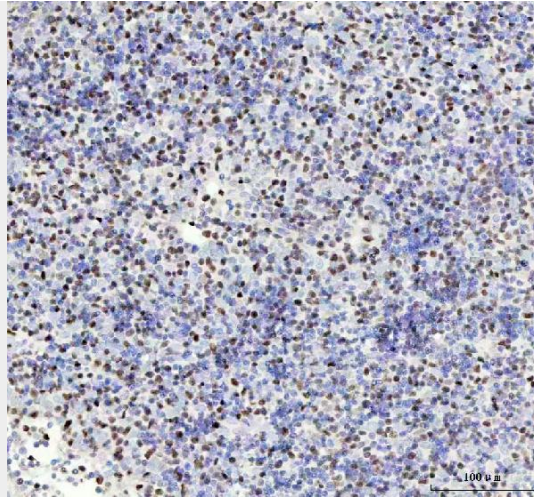


Figure 3. IHC analysis of MCM4 using anti-MCM4 antibody (M02301).

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.