

# **MCM4 Polyclonal Antibody**

Catalog # AP70864

# **Specification**

# MCM4 Polyclonal Antibody - Product Information

Application WB
Primary Accession P33991

Reactivity Human, Mouse Host Rabbit

Host Rabbit Clonality Polyclonal

# MCM4 Polyclonal Antibody - Additional Information

**Gene ID 4173** 

**Other Names** 

MCM4; CDC21; DNA replication licensing factor MCM4; CDC21 homolog; P1-CDC21

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

#### -20 C

### MCM4 Polyclonal 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/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/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/25661590" target="\_blank">9305914</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/32453425" target="\_blank">32453425</a>, 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/9305914" target="\_blank">9305914</a>).

#### **Cellular Location**

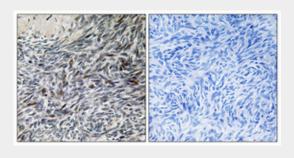
Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

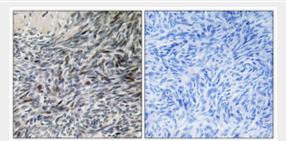
# MCM4 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

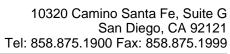
# MCM4 Polyclonal Antibody - Images





## MCM4 Polyclonal Antibody - Background

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	r, are likely to	contribute	differentially t	to the	complex helica	ase activity.
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