

# MCM4 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI11013

## **Product Information**

WB
<u>P33991</u>
<u>NM_182746</u> , <u>NP_877423</u>
Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine
Human, Mouse, Rat, Rabbit, Bovine
Rabbit
Polyclonal
96558

## **Additional Information**

Gene ID	4173
Alias Symbol Other Names	CDC21, CDC54, hCdc21, P1-CDC21 DNA replication licensing factor MCM4, 3.6.4.12, CDC21 homolog, P1-CDC21, MCM4, CDC21
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-MCM4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	MCM4 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	MCM4 ( <u>HGNC:6947</u> )
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: <u>16899510</u> , PubMed: <u>25661590</u> , PubMed: <u>32453425</u> , PubMed: <u>34694004</u> , PubMed: <u>34700328</u> , PubMed: <u>35585232</u> , PubMed: <u>9305914</u> ). 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: <u>16899510</u> , PubMed: <u>25661590</u> , PubMed: <u>32453425</u> , PubMed: <u>9305914</u> ).
Cellular Location	Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

#### References

Ishimi,Y., et al., (2003) J. Biol. Chem. 278 (27), 24644-24650Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

#### Images

90 kDa	
60 kDa	WB Suggested Anti-MCM4 Antibody Titration: 2.5µg/ml
42 kDa	ELISA Titer: 1:62500
32 kDa	Positive Control: Jurkat cell lysate
23 kDa	MCM4 is strongly supported by BioGPS gene expression
	data to be expressed in Human Jurkat cells

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