

MCM4 (pS54) Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51644

Specification

MCM4 (pS54) Antibody - Product Information

Application	WB, E
Primary Accession	P33991
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100 KDa

MCM4 (pS54) Antibody - Additional Information

Gene ID 4173

Other Names

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

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

MCM4 (pS54) 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: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.

MCM4 (pS54) 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](#)

MCM4 (pS54) Antibody - Images

MCM4 (pS54) 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, are likely to contribute differentially to the complex helicase activity.

MCM4 (pS54) Antibody - References

Musahl C., et al. Eur. J. Biochem. 230:1096-1101(1995).
Connelly M.A., et al. Genomics 47:71-83(1998).
Ladenburger E.M., et al. Cytogenet. Cell Genet. 77:268-270(1997).
Hu B., et al. Nucleic Acids Res. 21:5289-5293(1993).
Ishimi Y., et al. J. Biol. Chem. 272:24508-24513(1997).