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CDC46 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51338

Product Information

Application	WB, ICC, IHC-P
Primary Accession	P33992
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82286

Additional Information

Gene ID	4174
Other Names	DNA replication licensing factor MCM5, CDC46 homolog, P1-CDC46, MCM5, CDC46
Dilution	WB~~1:1000 ICC~~N/A IHC-P~~N/A
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

Protein Information

Name	MCM5
Synonyms	CDC46
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:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232). 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:32453425).
Cellular Location	Nucleus. Chromosome. Note=Associated with chromatin before the formation of nuclei and detaches from it as DNA replication progresses.

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 (By similarity). Interacts with MCMBP.

References

Hu B.,et al.Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.
Goehring F.,et al.Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.
Mimura S.,et al.Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Dunham I.,et al.Nature 402:489-495(1999).