MCM2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	MCM2, Polyclonal Antibody
Full Product Name	MCM2 Rabbit pAb
Product Gene Name	anti-MCM2 antibody
Product Synonym Names	BM28; CCNL1; CDCL1; cdc19; DFNA70; D3S3194; MITOTIN
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	PBS with 0.02% Sodium Azide, 50% Glycerol, pH 7.3.
Purity/Purification	Affinity Purified
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.
Molecular Weight	120kDa
OMIM	116945
3D Structure	ModBase 3D Structure for P49736
Immunogen	Recombinant protein of human MCM2
Cellular Localization	Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-MCM2 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-MCM2 antibody	WB: 1:500-1:2000 IHC: 1:50-1:200
Related Product Information for anti-MCM2 antibody	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. Required for the entry in S phase and for cell division. Plays a role in terminally differentiated hair cells development of the cochlea and induces cells apoptosis.
Other Notes	Small volumes of anti-MCM2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MCM2 purchase	MBS8544044 is an antibody targeting MCM2. Also known as MCM2 Rabbit pAb. Reactive in Human, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MCM2. It may not necessarily be applicable to this product.

NCBI GI #	33356547

NCBI GeneID	4171
NCBI Accession #	NP_004517.2
UniProt Primary Accession #	P49736
UniProt Related Accession #	P49736
GenBank Nucleotide #	NP_004517.2
NCBI Official Full Name	DNA replication licensing factor MCM2
NCBI Official Synonym Full Names	minichromosome maintenance complex component 2
NCBI Official Symbol	MCM2
NCBI Official Synonym Symbols	BM28; CCNL1; CDCL1; cdc19; DFNA70; D3S3194; MITOTIN
UniProt Protein Name	DNA replication licensing factor MCM2
UniProt Synonym Protein Names	Minichromosome maintenance protein 2 homolog; Nuclear protein BM28
Protein Family	DNA replication licensing factor
UniProt Gene Name	MCM2
UniProt Synonym Gene Names	BM28; CCNL1; CDCL1; KIAA0030
UniProt Entry Name	MCM2_HUMAN
NCBI Protein Information	DNA replication licensing factor MCM2
NCBI Summary for MCM2	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein forms a complex with MCM4, 6, and 7, and has been shown to regulate the helicase activity of the complex. This protein is phosphorylated, and thus regulated by, protein kinases CDC2 and CDC7. Multiple alternatively spliced transcript variants have been found, but the full-length nature of some variants has not been defined. [provided by RefSeq, Oct 2012]
UniProt Comments for MCM2	MCM2: a mini-chromosome maintenance protein, essential for the initiation of eukaryotic genome replication. Allows DNA to undergo a single round of replication per cell cycle. Required for the entry in S phase and for cell division. Protein type: DNA-binding; EC 3.6.4.12 Chromosomal Location of Human Ortholog: 3q21 Cellular Component: microtubule cytoskeleton; nucleoplasm; MCM complex; cytoplasm; chromatin; nuclear origin of replication recognition complex; nucleus Molecular Function: protein binding; DNA helicase activity; DNA binding; histone binding; metal ion binding; DNA replication origin binding; ATP binding Biological Process: DNA unwinding during replication; nucleosome assembly; DNA replication initiation; DNA strand elongation during DNA replication; mitotic cell cycle; cell cycle; DNA replication; G1/S transition of mitotic cell cycle
Research Articles on MCM2	**1.** Depletion of a second MCM (MCM7), which functions in complex with MCM2 during its canonical functions, reveals an overlapping cilia-deficiency phenotype likely unconnected to replication, although MCM7 appears to regulate a distinct subset of genes and pathways. Our data suggests that MCM2 and 7 exert a role in ciliogenesis in post-mitotic tissues.
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