

## **Product datasheet for TA326902**

## **MCM2 Rabbit Polyclonal Antibody**

## **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

**Reactivity:** WB: 1:500-1:2000 Human, Mouse

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Recombinant protein of human MCM2

Formulation: Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50%

glycerol, pH7.3

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** minichromosome maintenance complex component 2

Database Link: NP 004517

Entrez Gene 17216 MouseEntrez Gene 4171 Human

P49736



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Background:

The minichromosome maintenance (MCM) 2-7 proteins are a family of six related proteins required for the initiation and elongation of DNA replication. MCM2-7 bind together to form the heterohexameric MCM complex that is thought to act as a replicative helicase at the DNA replication fork. This complex is also a key component of the pre-replication complex (pre-RC) (reviewed in 1). Cdc6 and CDT1 recruit the MCM complex to the origin recognition complex (ORC) during late mitosis/early G1 phase forming the pre-RC and licensing the DNA for replication. Phosphorylation of the MCM2, MCM3, MCM4, and MCM6 subunits appears to regulate MCM complex activity and the initiation of DNA synthesis. MCM proteins are removed during DNA replication, causing chromatin to become unlicensed through inhibition of pre-RC reformation. Licensing of the chromatin permits the DNA to replicate only once per cell cycle, thereby helping to ensure that genetic alterations and malignant cell growth do not occur. Studies have shown that the MCM complex is involved in checkpoint control by protecting the structure of the replication fork and assisting in restarting replication by recruiting checkpoint proteins after arrest.

Synonyms: BM28; CCNL1; cdc19; CDCL1; D3S3194; MITOTIN

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Cell cycle, DNA replication