



E91056

## MCM2 Polyclonal Antibody

**Catalog Number:** E91056

**Amount:** 100ul

**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 (1-5). 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 (reviewed in 2). Phosphorylation of the MCM2, MCM3, MCM4, and MCM6 subunits appears to regulate MCM complex activity and the initiation of DNA synthesis (6-8). 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 (reviewed in 3). 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 (reviewed in 3,9).

**Species:** Rabbit

**Isotype:** IgG

**Storage/Stability:** Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** MCM2;BM28;CCNL1;CDCL1;D3S3194;KIAA0030;MGC10606;MITOTIN;cdc19

**Immunogen:** Recombinant protein of human MCM2

**Purification:** Affinity purification

**Reactivity:** H M R

**Applications:** WB IHC

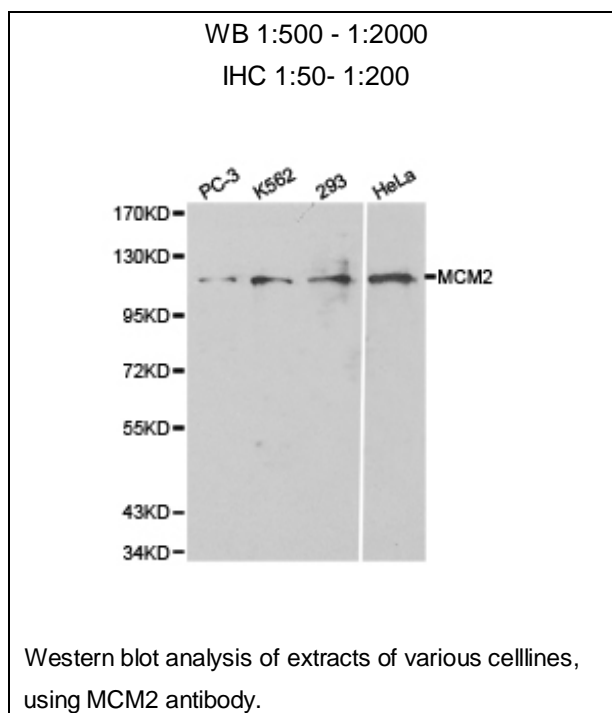
**Molecular Weight:** 102kDa

**Swiss-Prot No. :** P49736

**Gene ID:** 4171

**References:** 1. Lei, M. and Tye, B.K. (2001) J Cell Sci 114, 1447-54. 2. Lygerou, Z. and Nurse, P. (2000) Science 290, 2271-3. 3. Forsburg, S.L. (2004) MicrobiolMolBiol Rev 68, 109-31. 4. Tye, B.K. and Sawyer, S. (2000) J BiolChem 275, 34833-6. 5. Labib, K. et al. (2000) Science 288, 1643-7. 6. Charych, D.H. et al. (2008) J Cell Biochem 104, 1075-86. 7. Masai, H. et al. (2006) J BiolChem 281, 39249-61. 8. Lin, D.I. et al. (2008) ProcNatlAcadSci USA 105, 8079-84. 9. Bailis, J.M. et al. (2008) Mol Cell Biol 28, 1724-38.

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