



Rabbit Anti-MCM5 antibody

SL2721R

Product Name:	MCM5
Chinese Name:	微小染色体维持缺陷蛋白5抗体
Alias:	CDC 46; CDC46; CDC46 homolog; Cell division cycle 46; DNA replication licensing factor; DNA replication licensing factor MCM 5; DNA replication licensing factor MCM5; MCM 5; MGC5315; Minichromosome maintenance deficient (<i>S. cerevisiae</i>) 5; Minichromosome maintenance deficient 5; Minichromosome maintenance deficient protein 5; P1 CDC46; MCM5 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	82kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MCM5:651-734/734
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The mini-chromosome maintenance (MCM) family of proteins, including MCM2, MCM3, MCM4 (Cdc21), MCM5 (Cdc46), MCM6 (Mis5) and MCM7 (Cdc47), are regulators of DNA replication that act to ensure replication occurs only once in the cell

cycle. Expression of MCM proteins increases during cell growth, peaking at G1 to S phase. The MCM proteins each contain an ATP-binding motif, which is predicted to mediate ATP-dependent opening of double-stranded DNA. MCM proteins are regulated by E2F transcription factors, which induce MCM expression, and by protein kinases, which interact with MCM proteins to maintain the postreplicative state of the cell. MCM2/MCM4 complexes function as substrates for Cdc2/cyclin B in vitro. Cleavage of MCM3, which can be prevented by caspase inhibitors, results in the inactivation during apoptosis of the MCM complex, which is composed of, at least, MCM2–6. A complex composed of MCM4, MCM6 and MCM7 has been shown to be involved in DNA helicase activity, and MCM5 is involved in IFN-induced Stat1 Alpha transcription activation.

Function:

MCM5 (Mini Chromosome Maintenance protein-5) is involved in the control of DNA replication. MCM proteins have DNA dependent ATPase motifs in their central domain which is conserved from yeast to mammals. MCM proteins form a complex which exhibits ATPase and helicase activities. In G0 phase levels of MCM 2 and 5 are lower than that of MCM7 and 3 but increase as the cell enters G1/S phase of the cell cycle. It has been reported that immunocytochemical assessment of Mcm5 expression may be of value in improving the accuracy of cervical smear testing for the detection of malignancy.

Subcellular Location:

Nucleus.

Similarity:

Belongs to the MCM family. Contains 1 MCM domain.

SWISS:

P33992

Gene ID:

4174

Database links:

[Entrez Gene: 4174](#)Human

[Entrez Gene: 17218](#)Mouse

[Omim: 602696](#)Human

[SwissProt: P33992](#)Human

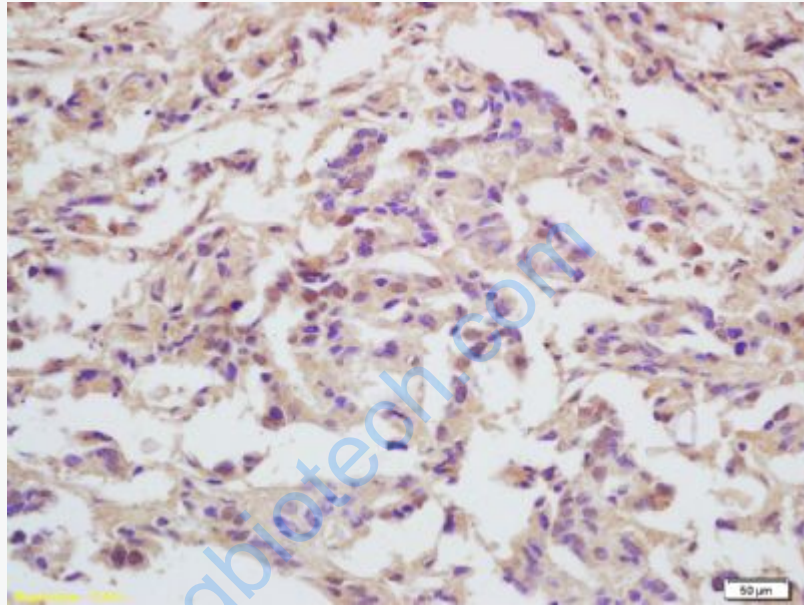
[SwissProt: P49718](#)Mouse

[Unigene: 517582](#)Human

[Unigene: 5048](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MCM5 Polyclonal Antibody, Unconjugated(SL2721R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining