For Research Use Only

MCM6 Monoclonal antibody

Catalog Number:67989-1-lg Featured Product



Basic Information

Catalog Number: GenBank Accession Number: 67989-1-lg BC032374 GeneID (NCBI): Size: 1000 µg/ml **UNIPROT ID:** Source:

Mouse Q14566 Full Name: Isotype: lgG1 minichromosome maintenance

complex component 6 Immunogen Catalog Number: AG4354 Calculated MW:

821 aa, 93 kDa

Observed MW: 105 kDa

Purification Method:

2E12H1

Protein G purification CloneNo.:

Recommended Dilutions: WB 1:20000-1:100000 IHC 1:50-1:500 IF/ICC 1:2000-1:8000

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA Species Specificity: Human, Rat, Mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A431 cells, HeLa cells, HEK-293 cells, COLO 320 cells, HepG2 cells, MCF-7 cells, Jurkat cells, PC-12 cells, NIH/3T3 cells

IHC: human cervical cancer tissue,

IF/ICC: HepG2 cells,

Background Information

The MCM genes were firstly identified in yeast defective in minichromosome maintenance and have since been shown to have roles in the progression of the cell cycle, and most of them are cell division control genes[PMID: 18096807]. MCM2-7 complex are suggested to be 'DNA licensing factors' which bind to the DNA after mitosis and enable DNA replication before being removed during S phase. Mini-chromosome maintenance 6 (MCM6) is one component of the MCM2-7 complex which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells[PMID: 9305914]. MCM6 single subunit forms homohexamer and contains an ATP-dependent and replication fork stimulated 3' to 5' DNA unwinding activity along with intrinsic DNA-dependent ATPase and ATP-binding activities [PMID:21336027]. The calculated molecular weight of MCM6 is 92 kDa, but the modified MCM6 is about 105 kDa.

Storage

Storage:

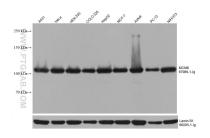
Store at -20°C. Stable for one year after shipment.

Storage Buffer

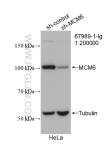
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

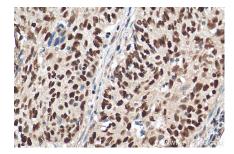
Selected Validation Data



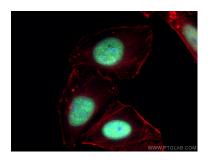
Various lysates were subjected to SDS PAGE followed by western blot with 67989-1-lg (MCM6 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-lg) as loading control.



WB result of MCM6 antibody (67989-1-lg; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCM6 transfected HeLa cells.



Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 67989-1-1g (MCM6 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using MCM6 antibody (67989-1-Ig, Clone: 2E12H1) at dilution of 1:4000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CoraLite® 594 Beta Actin antibody (CL594-66009, Clone: 2D4H5, red).