

Basic Information

Product Name	Anti-MCM5 Antibody (Clone#4G10)	
Gene Name	MCM5	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2a	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human MCM5 recombinant protein (Position: K206-H723).	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	95 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

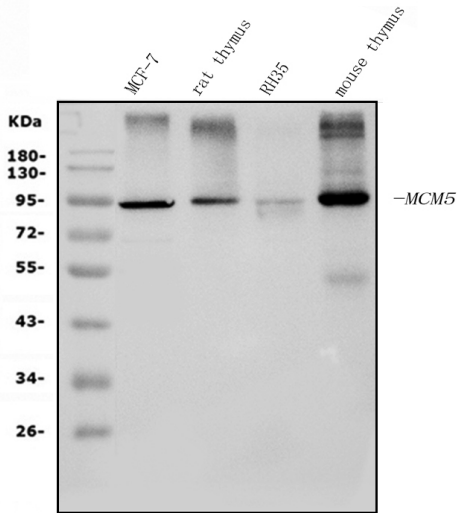
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

DNA replication licensing factor MCM5 is a protein that in humans is encoded by the MCM5 gene. It is mapped to 22q12.3. The protein encoded by this gene is structurally very similar to the CDC46 protein from *S. cerevisiae*, a protein involved in the initiation of DNA replication. The encoded protein is a member of the MCM family of chromatin-binding proteins and can interact with at least two other members of this family. The encoded protein is upregulated in the transition from the G₀ to G₁/S phase of the cell cycle and may actively participate in cell cycle regulation.

Selected Validation Data



Western blot analysis of MCM5 using anti-MCM5 antibody (M03642-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

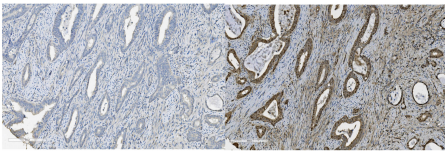
Lane 1: human MCF-7 whole cell lysates,

Lane 2: rat thymus tissue lysates,

Lane 3: rat RH-35 whole cell lysates,

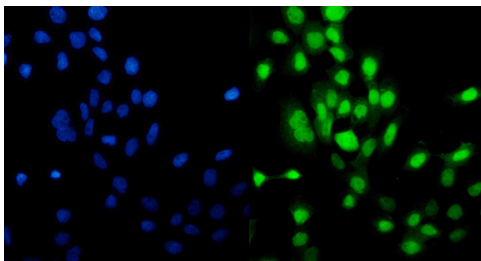
Lane 4: mouse thymus tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-MCM5 antigen affinity purified monoclonal antibody (M03642-2) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for MCM5 at approximately 95 kDa. The expected band size for MCM5 is at 82 kDa.

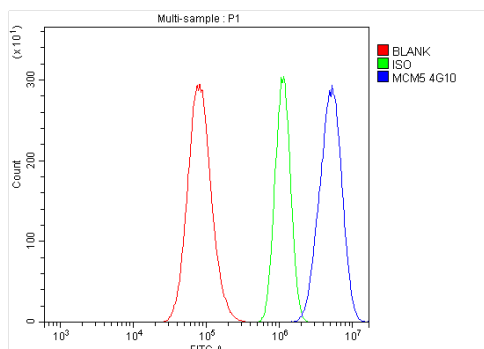


(左图) 阴性对照 (右图) MCM5 4G10(M03642-2)免疫组化石蜡片, 人胆囊腺癌

IHC analysis of MCM5 using anti-MCM5 antibody (M03642-2). MCM5 was detected in a paraffin-embedded section of human gallbladder adenocarcinoma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-MCM5 Antibody (M03642-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of MCM5 using anti-MCM5 antibody (M03642-2). MCM5 was detected in an immunocytochemical section of A431 cells. The section was incubated with mouse anti-MCM5 Antibody (M03642-2) at a dilution of 1:100. Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A549 cells using anti-MCM5 antibody (M03642-2).

Overlay histogram showing A549 cells stained with M03642-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-MCM5 Antibody (M03642-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.