

## Basic Information

<b>Product Name</b>	Anti-MCM5 Antibody	
<b>Gene Name</b>	MCM5	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human MCM5 recombinant protein (Position: K206-H723).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	95 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(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.	

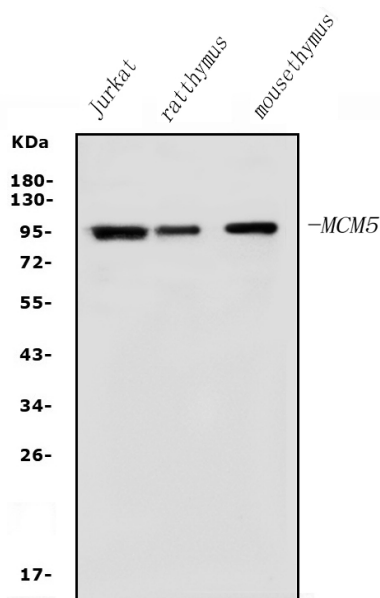
## Storage

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 G<sub>0</sub> to G<sub>1</sub>/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 (A03642). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

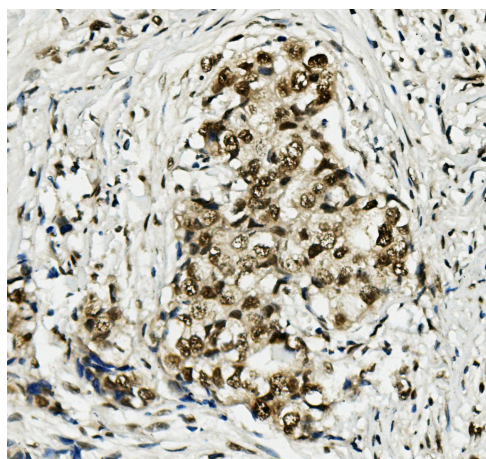
Lane 1: human Jurkat whole cell lysates,

Lane 2: rat thymus tissue lysates,

Lane 3: mouse thymus tissue lysates.

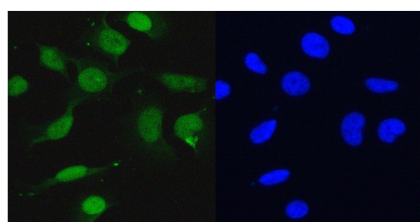
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-MCM5 antigen affinity purified polyclonal antibody (A03642) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.



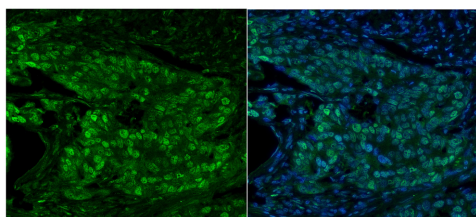
IHC analysis of MCM5 using anti-MCM5 antibody (A03642).

MCM5 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-MCM5 Antibody (A03642) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

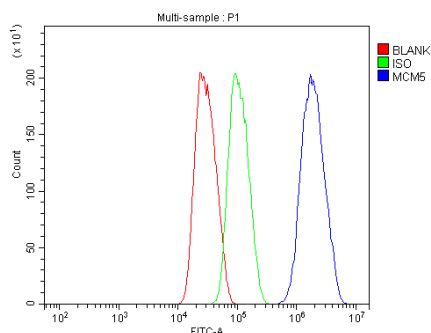


ICC/IF analysis of MCM5 using anti-MCM5 antibody (A03642).

MCM5 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-MCM5 Antibody (A03642) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IF analysis using anti- MCM5 antibody (A03642). detected in paraffin-embedded section of human mammary cancer tissue. The tissue section were stained using the Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).



Flow Cytometry analysis of HepG2 cells using anti-MCM5 antibody (A03642).

Overlay histogram showing HepG2 cells stained with A03642 (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 rabbit anti-MCM5 Antibody (A03642) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.