Anti-MCM7 Antibody

Catalog Number: *PB9261*

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

Basic Information

Product Name	Anti-MCM7 Antibody
Gene Name	MCM7
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, IF, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human MCM7 recombinant protein (Position: D526-V719). Human MCM7 shares 94% amino acid (aa) sequence identity with mouse MCM7.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	81 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 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℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

MCM7(Minichromosome Maintenance, s. Cerevisiae, homolog of, 7), also called CDC47, FORMERLY, is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The MCM7 gene is mapped to 7q22.1. MCM7 plays a pivotal role in the G1/S phase transition, orchestrating the correct assembly of replication forks on chromosomal DNA and ensuring that all the genome is replicated once and not more than once at each cell cycle. The MCM7 gene contains 15 exons. The miRNAs MIR106B, MIR93, and MIR25 are clustered in a 5-prime to 3-prime orientation within intron 13. It has been found that MCM7 and the precursors of microRNAs (miRNAs) MIR106B, MIR93, and MIR25, all of which arise from intron 13 of the MCM7 gene, were overexpressed

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com Phone: 027-67845390/1/2 Email: boster@boster.com

with almost perfect correlation in 5 of 10 human gastric tumors.

Selected Validation Data

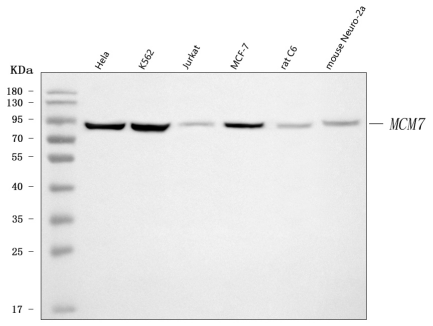

Figure 1. Western blot analysis of MCM7 using anti-MCM7 antibody (PB9261). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human MCF-7 whole cell lysates,
Lane 5: rat C6 whole cell lysates,
Lane 6: mouse Neuro-2a whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MCM7 antigen affinity purified polyclonal antibody (PB9261) 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 MCM7 at approximately 81 kDa. The expected band size for MCM7 is at 81 kDa.

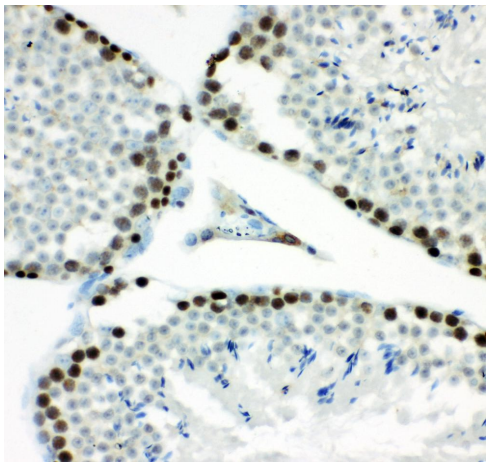

Figure 2. IHC analysis of MCM7 using anti-MCM7 antibody (PB9261). MCM7 was detected in a paraffin-embedded section of mouse testis tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-MCM7 Antibody (PB9261) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

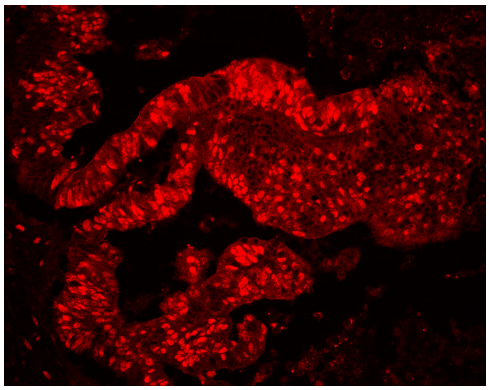

Figure 5. IF analysis of MCM7 using anti-MCM7 antibody (PB9261) MCM7 was detected in paraffin-embedded section of human colon cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/mL rabbit anti- MCM7 Antibody (PB9261) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

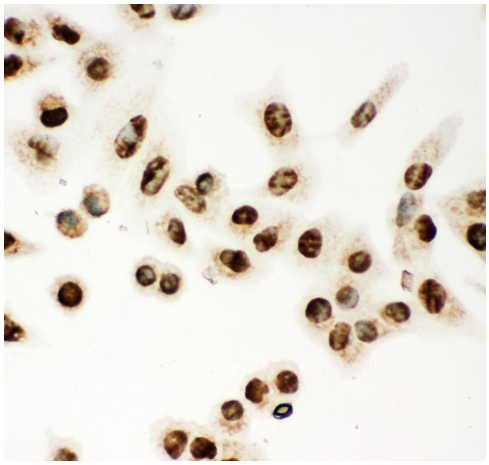

Figure 7. IHC analysis of MCM7 using anti-MCM7 antibody (PB9261). MCM7 was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1µg/ml rabbit anti-MCM7 Antibody (PB9261) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

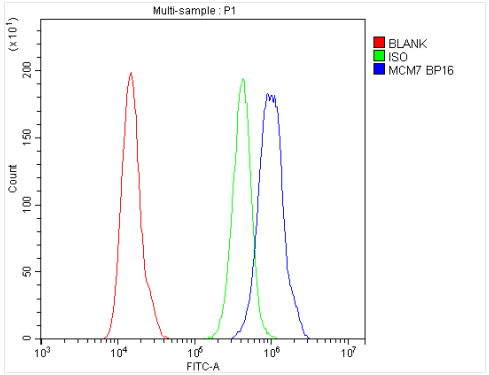

Figure 9. Flow Cytometry analysis of A431 cells using anti-MCM7 antibody (PB9261).
Overlay histogram showing A431 cells stained with PB9261 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MCM7 Antibody (PB9261) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.

Product datasheet

Anti-MCM7 Antibody

Catalog Number: *PB9261*

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com