

## Anti-GANP/MCM3AP Antibody Picoband®

Catalog Number: A05445-2

### About MCM3AP

80 kDa MCM3-associated protein is a protein that in humans is encoded by the MCM3AP gene. The minichromosome maintenance protein 3 (MCM3) is one of the MCM proteins essential for the initiation of DNA replication. The protein encoded by this gene is a MCM3 binding protein. It was reported to have phosphorylation-dependent DNA-primase activity, which was up-regulated in antigen immunization induced germinal center. This protein was demonstrated to be an acetyltransferase that acetylates MCM3 and plays a role in DNA replication. The mutagenesis of a nuclear localization signal of MCM3 affects the binding of this protein with MCM3, suggesting that this protein may also facilitate MCM3 nuclear localization. This gene is expressed in the brain or in neuronal tissue. An allelic variant encoding amino acid Lys at 915, instead of conserved Glu, has been identified in patients with mild intellectual disability.

### Overview

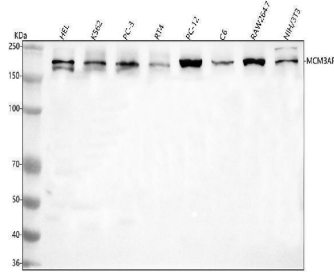
Product Name	Anti-GANP/MCM3AP Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GANP/MCM3AP Antibody Picoband® catalog # A05445-2. Tested in WB, ICC/IF, FCM, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	O60318

### Technical Details

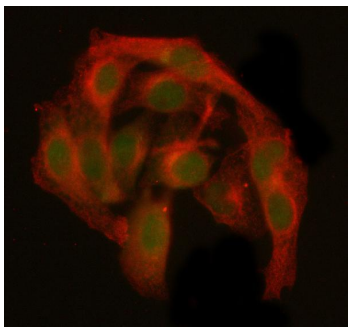
Immunogen	E.coli-derived human GANP/MCM3AP recombinant protein (Position: R1275-H1715). Human MCM3AP shares 80.9% amino acid (aa) sequence identity with mouse MCM3AP.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 ug/ml, -

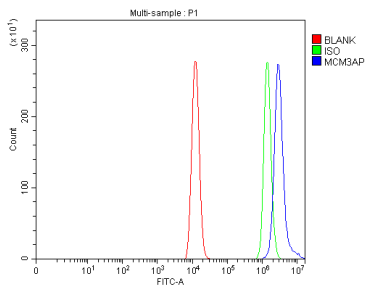
## Anti-GANP/MCM3AP Antibody Picoband® (A05445-2) Images



Western blot analysis of GANP/MCM3AP using anti-GANP/MCM3AP antibody (A05445-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HEL whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human PC-3 whole cell lysates, Lane 4: human RT4 whole cell lysates, Lane 5: rat PC-12 whole cell lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse RAW264.7 whole cell lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GANP/MCM3AP antigen affinity purified polyclonal antibody (Catalog # A05445-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for GANP/MCM3AP at approximately 218 kDa. The expected band size for GANP/MCM3AP is at 218 kDa.



IF analysis of GANP/MCM3AP using anti-GANP/MCM3AP antibody (A05445-2) and anti-Beta Tubulin antibody (M01857-3). GANP/MCM3AP was detected in immunocytochemical section of HELA 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 5 ug/mL rabbit anti-GANP/MCM3AP Antibody (A05445-2) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HEL cells using anti-GANP/MCM3AP antibody (A05445-2). Overlay histogram showing HEL cells stained with A05445-2 (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 rabbit anti-GANP/MCM3AP Antibody (A05445-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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Anti-GANP/MCM3AP Antibody

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