

## Anti-MCL1 Antibody Picoband®

Catalog Number: A00712-2

### About MCL1

MCL1, also known as myeloid cell leukemia 1, is a protein that in humans is encoded the MCL1 gene. It is mapped to 1q21.3. MCL1 is a potent multidomain antiapoptotic protein of the BCL2 family that heterodimerizes with other BCL2 family members to protect against apoptotic cell death. MCL1 as an attractive candidate for regulation of hematopoietic stem cell homeostasis that is highly expressed in hematopoietic stem cells and regulated by growth factor signals. MCL1 is a critical and specific regulator essential for ensuring the homeostasis of early hematopoietic progenitors. During mitotic arrest, MCL1 protein levels decline markedly, through a posttranslational mechanism, potentiating cell death. Phosphorylation of MCL1 directs its interaction with the tumor suppressor protein FBW7, which is the substrate-binding component of a ubiquitin ligase complex.

### Overview

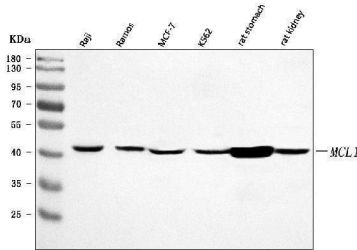
Product Name	Anti-MCL1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MCL1 Antibody Picoband® catalog # A00712-2. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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	Q07820

### Technical Details

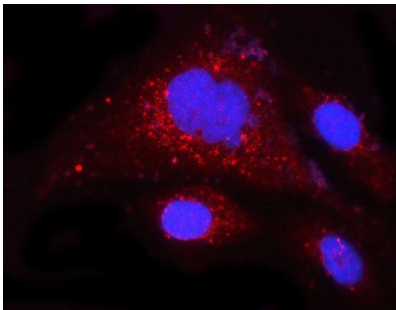
Immunogen	E.coli-derived human MCL1 recombinant protein (Position: E109-E325).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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 µg/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human Flow Cytometry (Fixed), 1-3 µg /1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 µg/ml, -

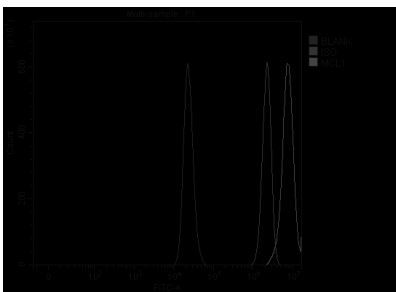
## Anti-MCL1 Antibody Picoband® (A00712-2) Images



Western blot analysis of MCL1 using anti-MCL1 antibody (A00712-2). 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 Raji whole cell lysates, Lane 2: human Ramos whole cell lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat stomach tissue lysates, Lane 6: rat kidney tissue 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-MCL1 antigen affinity purified polyclonal antibody (Catalog # A00712-2) 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 MCL1 at approximately 40 kDa. The expected band size for MCL1 is at 28,37,40 kDa.



IF analysis of MCL1 using anti-MCL1 antibody (A00712-2). MCL1 was detected in an immunocytochemical section of PC3 cells. 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-MCL1 Antibody (A00712-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 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.



Flow Cytometry analysis of RT4 cells using anti-MCL1 antibody (A00712-2). Overlay histogram showing RT4 cells stained with A00712-2 (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-MCL1 Antibody (A00712-2, 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-MCL1 Antibody

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