

## Anti-Bub1 Antibody Picoband®

Catalog Number: A00776-2

### About Bub1

BUB1, also known as mitotic checkpoint serine/threonine kinase, is an enzyme that in humans is encoded by the BUB1 gene. It is mapped to 2q13. BUB1 is first identified in genetic screens of *Saccharomyces cerevisiae*. The protein is bound to kinetochores and plays a key role in the establishment of the mitotic spindle checkpoint and chromosome congression. The mitotic checkpoint kinase is evolutionary conserved in organisms as diverse as *Saccharomyces cerevisiae* and humans. Loss-of-function mutations or absence of BUB1 has been reported to result in aneuploidy, chromosomal instability (CIN) and premature senescence. The protein kinase BUB1 possesses versatile and distinct functions during the cell cycle, mainly in the SAC and chromosome alignment during metaphase.

### Overview

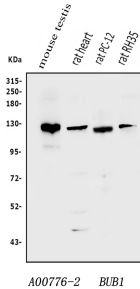
Product Name	Anti-Bub1 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Bub1 Antibody Picoband® catalog # A00776-2. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01mg NaN <sub>3</sub> .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	O08901

### Technical Details

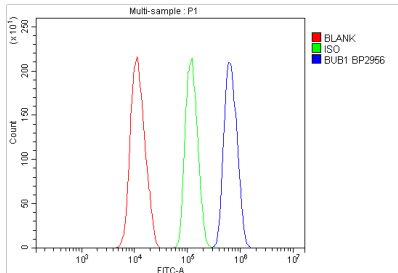
Immunogen	E.coli-derived mouse Bub1 recombinant protein (Position: D40-K257).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

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

## Anti-Bub1 Antibody Picoband® (A00776-2) Images



Western blot analysis of Bub1 using anti-Bub1 antibody (A00776-2). 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 50ug of sample under reducing conditions. Lane 1: mouse testis tissue lysates, Lane 2: rat heart tissue lysates, Lane 3: rat PC-12 whole cell lysates, Lane 4: rat RH35 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Bub1 antigen affinity purified polyclonal antibody (Catalog # A00776-2) at 0.25 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 1:10000 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 Bub1 at approximately 122KD. The expected band size for Bub1 is at 122KD.



Flow Cytometry analysis of HEPA1-6 cells using anti-Bub1 antibody (A00776-2). Overlay histogram showing HEPA1-6 cells stained with A00776-2 (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-Bub1 Antibody (A00776-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-Bub1 Antibody

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