

## Anti-IMP4 Antibody Picoband®

Catalog Number: A10469-1

### About IMP4

U3 small nucleolar ribonucleoprotein protein IMP4 is a protein that in humans is encoded by the IMP4 gene. The protein encoded by this gene, along with IMP3 and MPP10, is part of the 60-80S U3 small nucleolar ribonucleoprotein (U3 snoRNP) complex. This complex is necessary for the early cleavage steps of pre-18S ribosomal RNA processing. Several transcript variants encoding different isoforms have been found for this gene.

### Overview

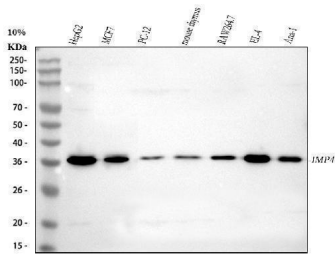
Product Name	Anti-IMP4 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-IMP4 Antibody Picoband® catalog # A10469-1. Tested in ELISA, IF, ICC, WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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	Q96G21

### Technical Details

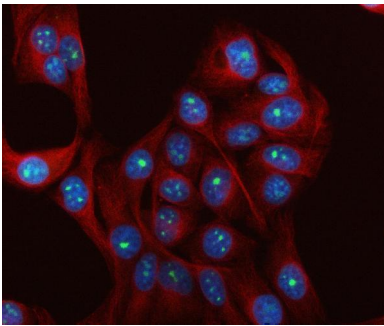
Immunogen	E.coli-derived human IMP4 recombinant protein (Position: L2-K236). Human IMP4 shares 97.9% amino acid sequence identity with both mouse and rat IMP4.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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, -

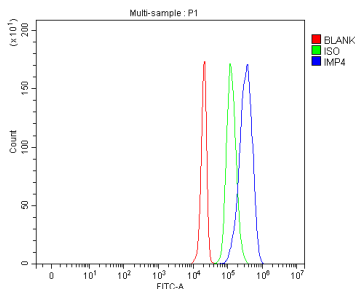
## Anti-IMP4 Antibody Picoband® (A10469-1) Images



Western blot analysis of IMP4 using anti-IMP4 antibody (A10469-1). 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 HepG2 whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: rat PC-12 whole cell lysates, Lane 4: mouse thymus tissue lysates, Lane 5: mouse RAW264.7 whole cell lysates, Lane 6: mouse EL-4 whole cell lysates, Lane 7: mouse Ana-1 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-IMP4 antigen affinity purified polyclonal antibody (Catalog # A10469-1) 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 IMP4 at approximately 36 kDa. The expected band size for IMP4 is at 34 kDa.



IF analysis of IMP4 using anti-IMP4 antibody (A10469-1) and anti-Beta Tubulin antibody (M01857-3). IMP4 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-IMP4 Antibody (A10469-1) 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. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HepG2 cells using anti-IMP4 antibody (A10469-1). Overlay histogram showing HepG2 cells stained with A10469-1 (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-IMP4 Antibody (A10469-1, 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-IMP4 Antibody

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