

## Anti-Alpha Tubulin/TUBA1C Antibody Picoband®

Catalog Number: A03989-2

### About Alpha Tubulin/TUBA1C

Tubulin alpha-1C chain is a protein that in humans is encoded by the TUBA1C gene. TUBA1C is an  $\alpha$ -tubulin isoform involved in mitosis, and its dysregulation has been implicated in tumor progression. There is still no clear understanding of its role in bladder urothelial carcinoma (BLCA).

### Overview

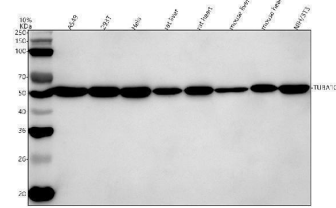
Product Name	Anti-Alpha Tubulin/TUBA1C Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Alpha Tubulin/TUBA1C Antibody Picoband® catalog # A03989-2. Tested in WB, IHC, ICC/IF, FCM applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this 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	Flow Cytometry, IF, IHC, 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	Q9BQE3

### Technical Details

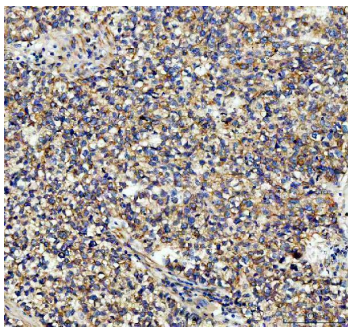
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TUBA1C.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
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, 0.1-0.25 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human

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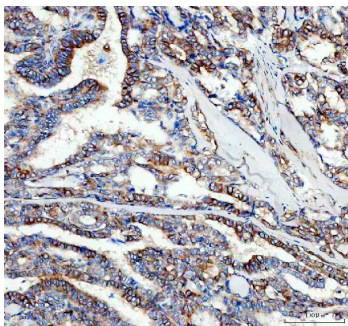
## Anti-Alpha Tubulin/TUBA1C Antibody Picoband® (A03989-2) Images



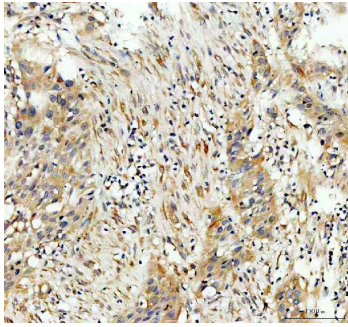
Western blot analysis of Tubulin Alpha using anti-Tubulin Alpha antibody (A03989-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human HeLa whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: rat heart tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse heart tissue 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-Tubulin Alpha antigen affinity purified polyclonal antibody (Catalog # A03989-2) 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 1:5000 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 Tubulin Alpha at approximately 55 kDa. The expected band size for Tubulin Alpha is at 50 kDa.



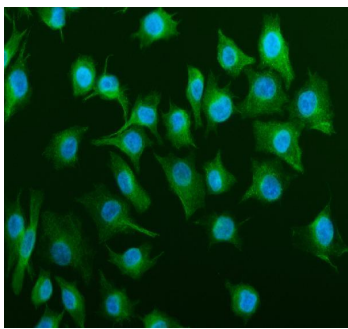
IHC analysis of Tubulin Alpha using anti-Tubulin Alpha antibody (A03989-2). Tubulin Alpha was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tubulin Alpha Antibody (A03989-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



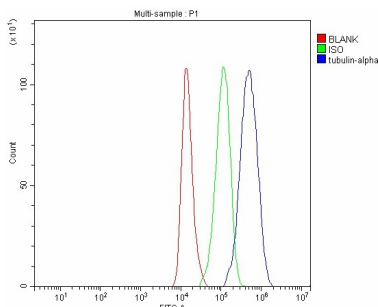
IHC analysis of Tubulin Alpha using anti-Tubulin Alpha antibody (A03989-2). Tubulin Alpha was detected in a paraffin-embedded section of human thyroid cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tubulin Alpha Antibody (A03989-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of Tubulin Alpha using anti-Tubulin Alpha antibody (A03989-2). Tubulin Alpha was detected in a paraffin-embedded section of human urothelial carcinoma with squamous differentiation tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tubulin Alpha Antibody (A03989-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IF analysis of Tubulin Alpha using anti-Tubulin Alpha antibody (A03989-2). Tubulin Alpha was detected in an immunocytochemical section of A549 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-Tubulin Alpha Antibody (A03989-2) overnight at 4°C. DyLight@488 Conjugated Goat Anti-Rabbit IgG (BA1127) 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 293T cells using anti-Tubulin Alpha antibody (A03989-2). Overlay histogram showing 293T cells stained with A03989-2 (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-Tubulin Alpha Antibody (A03989-2, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-Alpha Tubulin/TUBA1C Antibody

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