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Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11)

Catalog # ABO14897

Specification

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Product Information

Application	**WB, IF, ICC, FC**
Primary Accession	P07437
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Additional Information

Gene ID 203068

Other Names
Tubulin beta chain, Tubulin beta-5 chain, TUBB, TUBB5

Calculated MW
55 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
 Immunocytochemistry/Immunofluorescence,2 µg/ml,Human
 Flow Cytometry, 1-3 µg/1x10^6 cells, Human

Subcellular Localization
cytoskeleton

Tissue Specificity
Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Beta Tubulin, identical to the related mouse and rat sequences.

Cross Reactivity

No cross-reactivity with other proteins.

Storage	**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.**

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Protein Information

Name TUBB

Synonyms TUBB5

Function
Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin.

Cellular Location
Cytoplasm, cytoskeleton

Tissue Location
Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Images

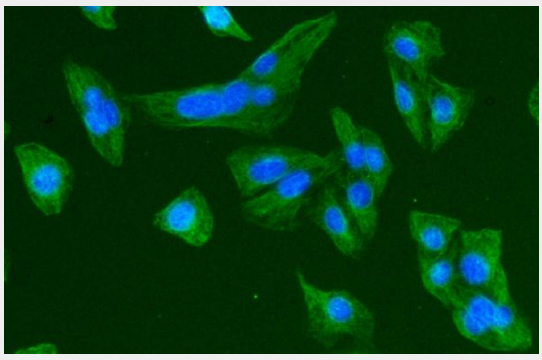

Figure 3. IF analysis of Tubulin beta using anti-Tubulin beta antibody (M05613-4).

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Tubulin beta was detected in immunocytochemical section of U2OS 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 2 µg/mL mouse anti-Tubulin beta Antibody (M05613-4) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 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.

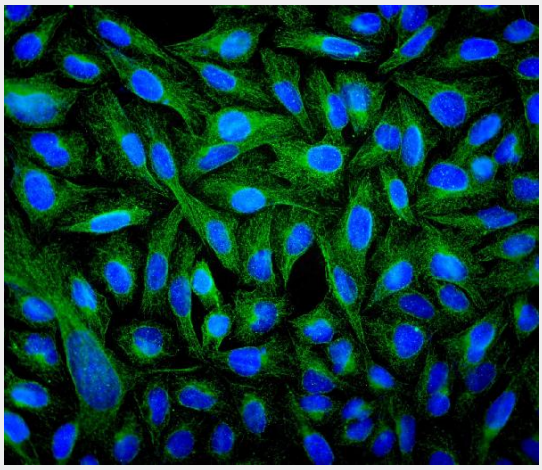

Figure 4. IF analysis of Tubulin beta using anti-Tubulin beta antibody (M05613-4).
Tubulin beta was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 µg/mL mouse anti-Tubulin beta Antibody (M05613-4) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 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.

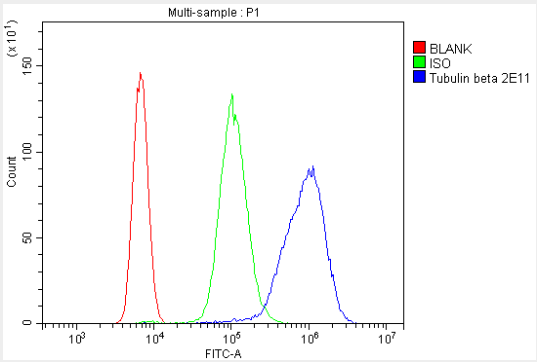

Figure 5. Flow Cytometry analysis of U937 cells using anti-Tubulin beta antibody M05613-4).
Overlay histogram showing U937 cells stained with M05613-4 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Tubulin beta Antibody (M05613-4, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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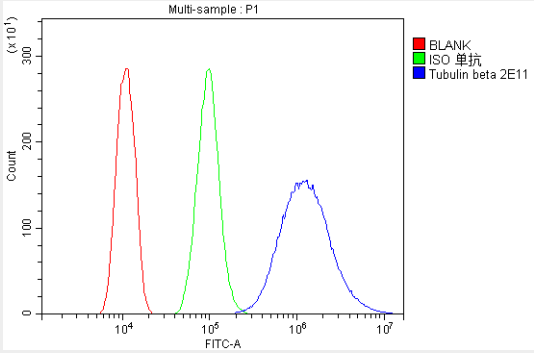

Figure 6. Flow Cytometry analysis of HEPA1-6 cells using anti-Tubulin beta antibody M05613-4). Overlay histogram showing HEPA1-6 cells stained with M05613-4 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Tubulin beta Antibody (M05613-4, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-Beta Tubulin TUBB Antibody Picoband™ (monoclonal, 2E11) - Background

Tubulin beta chain is a protein that in humans is encoded by the TUBB gene. This gene encodes a beta tubulin protein. This protein forms a dimer with alpha tubulin and acts as a structural component of microtubules. Mutations in this gene cause cortical dysplasia, complex, with other brain malformations 6. Alternative splicing results in multiple splice variants. There are multiple pseudogenes for this gene on chromosomes 1, 6, 7, 8, 9, and 13.