

# beta Tubulin Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22332a

## **Product Information**

| Application<br>Primary Accession<br>Other Accession | WB, FC, E<br><u>P99024</u><br><u>Q17299, P12456, P09203, Q24560, Q9YHC3, Q27U48, Q25009, O17449,</u><br><u>P36331, O13885, O485B3, O7TMM0, P85108, O68856, O08V41, O06W53</u>                                   |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | <u>P36221, Q13885, Q4R5B3, Q7TMM9, P85108, Q6B856, Q9BVA1, Q9CWF2, Q3KRE8, P32882, P83130, P61858, P61857, Q9NFZ6, P13602, Q2T9S0, P09206, P08841, Q13509, Q60HC2, Q9ERD7, Q4QRB4, Q3ZBU7, P04350, Q4R4X8, </u> |
|                                                     | <u>Q9D6F9, Q3MHM5, P68371, P68</u>                                                                                                                                                                              |
| Reactivity                                          | Mouse                                                                                                                                                                                                           |
| Predicted                                           | Human, Mouse, Rat, Pig, Chicken, Bovine                                                                                                                                                                         |
| Host                                                | Rabbit                                                                                                                                                                                                          |
| Clonality                                           | polyclonal                                                                                                                                                                                                      |
| Isotype                                             | Rabbit IgG                                                                                                                                                                                                      |
| Clone Names                                         | RB57742                                                                                                                                                                                                         |
| Calculated MW                                       | 49671                                                                                                                                                                                                           |

## **Additional Information**

| Gene ID            | 22154                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other Names        | Tubulin beta-5 chain, Tubb5                                                                                                                                                        |
| Target/Specificity | This beta Tubulin antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 298-328 amino acids from the mouse region of mouse beta Tubulin.   |
| Dilution           | WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.                                                                                                                    |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.<br>This antibody is purified through a protein A column, followed by peptide<br>affinity purification. |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.                                            |
| Precautions        | beta Tubulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.                                                                            |

### **Protein Information**

Name

| Function          | Tubulin is the major constituent of microtubules, a cylinder consisting of<br>laterally associated linear protofilaments composed of alpha- and<br>beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin<br>dimers to the microtubule end, where a stabilizing cap forms. Below the cap,<br>tubulin dimers are in GDP-bound state, owing to GTPase activity of<br>alpha-tubulin. |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cellular Location | Cytoplasm, cytoskeleton                                                                                                                                                                                                                                                                                                                                                                                |
| Tissue Location   | Ubiquitously expressed with highest levels in spleen, thymus and immature<br>brain. Expressed in embryonic brain, including throughout the developing<br>cortex and in the subventricular zone. Also found in radial glial cells,<br>intermediate progenitors, migrating neurons and postmitotic neurons<br>(PubMed:23246003). Expressed in skin and developing hair follicle<br>(PubMed:26637975)     |

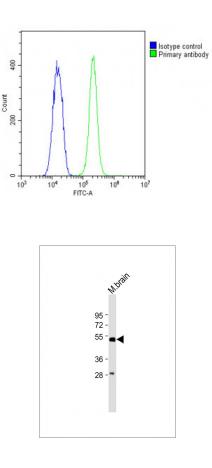
### Background

Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain.

### References

Wang D.,et al.J. Cell Biol. 103:1903-1910(1986). Carninci P.,et al.Science 309:1559-1563(2005). Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009). Lubec G.,et al.Submitted (JUL-2007) to UniProtKB. Lewis S.A.,et al.J. Cell Biol. 101:852-861(1985).

#### Images



Overlay histogram showing C2C12 cells stained with AP22332a(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-beta Tubulin Antibody at 1:2000 dilution + Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.