

# beta Tubulin Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22332a

## **Product Information**

Application Primary Accession Other Accession	WB, FC, E <u>P99024</u> <u>Q17299, P12456, P09203, Q24560, Q9YHC3, Q27U48, Q25009, O17449,</u> <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. This antibody is purified through a protein A column, followed by peptide 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 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. Expressed in embryonic brain, including throughout the developing cortex and in the subventricular zone. Also found in radial glial cells, intermediate progenitors, migrating neurons and postmitotic neurons (PubMed:23246003). Expressed in skin and developing hair follicle (PubMed:26637975)

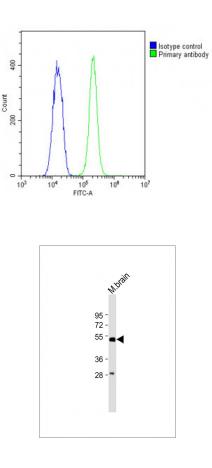
### Background

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'.