

**Tubulin  $\beta$  Polyclonal Antibody**  
Catalog # AP72963**Specification****Tubulin  $\beta$  Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q13509</a>
Reactivity	Human, Mouse, Rat, Pig
Host	Rabbit
Clonality	Polyclonal

**Tubulin  $\beta$  Polyclonal Antibody - Additional Information****Gene ID** 10381**Other Names**

TUBB3; TUBB4; Tubulin beta-3 chain; Tubulin beta-4 chain; Tubulin beta-III

**Dilution**

WB~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Tubulin  $\beta$  Polyclonal Antibody - Protein Information****Name** TUBB3**Synonyms** TUBB4**Function**

Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed: [34996871](http://www.uniprot.org/citations/34996871)). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed: [34996871](http://www.uniprot.org/citations/34996871)). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha- tubulin (PubMed: [34996871](http://www.uniprot.org/citations/34996871)). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed: [20074521](http://www.uniprot.org/citations/20074521)). Binding of NTN1/Netrin-1 to its receptor UNC5C might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed: [28483977](http://www.uniprot.org/citations/28483977)). Plays a role in dorsal root ganglion axon projection towards the spinal cord (PubMed:

href="http://www.uniprot.org/citations/28483977" target="\_blank">28483977</a>).

#### Cellular Location

Cytoplasm, cytoskeleton. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, filopodium {ECO:0000250|UniProtKB:Q9ERD7}

#### Tissue Location

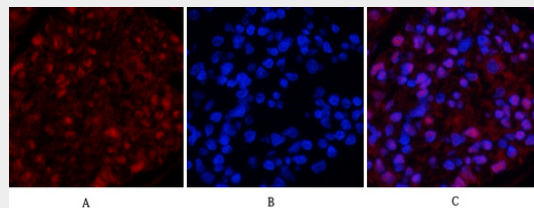
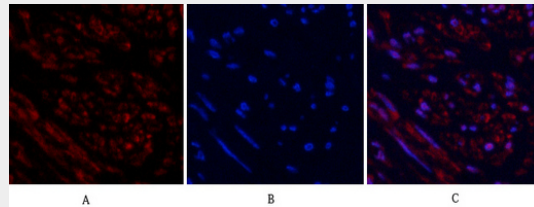
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

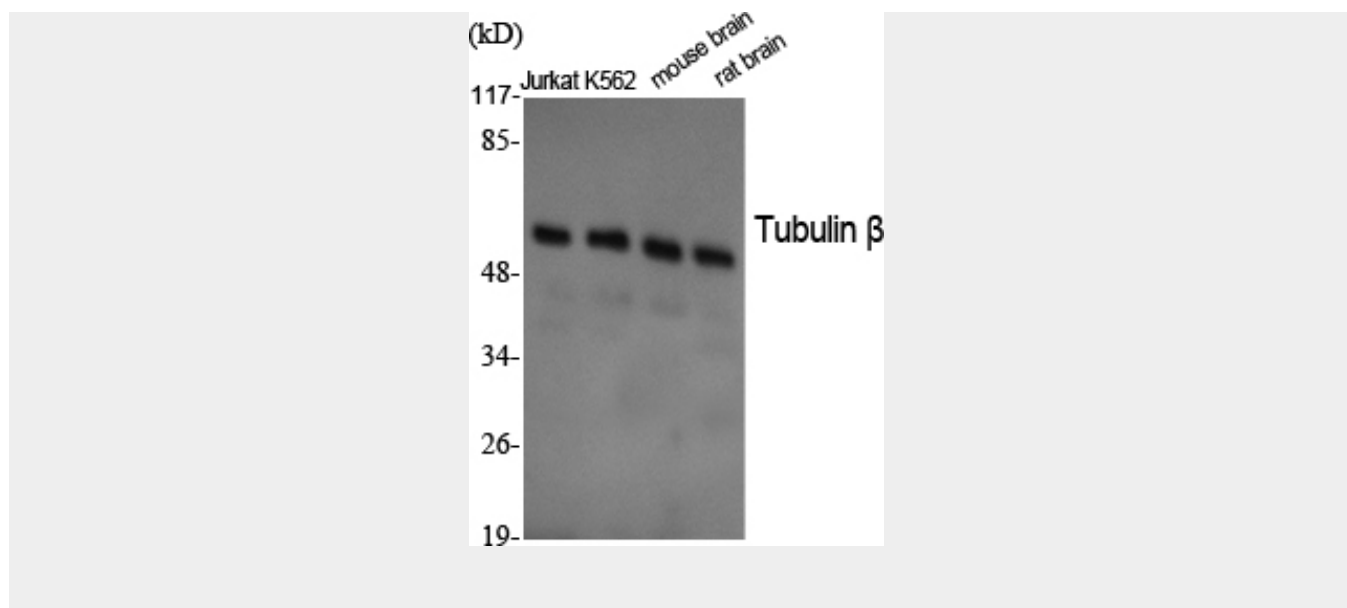
### Tubulin $\beta$ Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Tubulin $\beta$ Polyclonal Antibody - Images





### Tubulin $\beta$ Polyclonal Antibody - 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. TUBB3 plays a critical role in proper axon guidance and maintenance.

### Tubulin $\beta$ Polyclonal Antibody - Citations

- [ADT-OH, a hydrogen sulfide-releasing donor, induces apoptosis and inhibits the development of melanoma in vivo by upregulating FADD.](#)