

# beta Tubulin Antibody (HRP conjugated)

Rabbit mAb Catalog # AP90057

#### **Specification**

# beta Tubulin Antibody (HRP conjugated) - Product Information

Application WB
Primary Accession Q13509
Reactivity Rat

Clonality Monoclonal

**Other Names** 

beta-4; CFEOM3A; MC1R; TBB3; TUBB3; TUBB4; Tubulin beta-3 chain; tubulin beta-4; Tubulin

beta-4 chain; Tubulin beta-III; tubulin, beta 3; tubulin, beta, 4, beta tubulin;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 50433 Da

### beta Tubulin Antibody (HRP conjugated) - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

beta Tubulin

Description Microtubules are constituent parts of the

mitotic apparatus, cilia, flagella, and elements of the cytoskeleton. They consist principally of 2 soluble proteins, alpha- and beta-tubulin, each of about 55,000 kDa.

Antibodies against beta Tubulin are useful as loading controls for Western Blotting. However it should be noted that levels of beta-Tubulin may not be stable in certain

cells. For example, expression of

beta-Tubulin in adipose tissue is very low and therefore beta-Tubulin should not be used as loading control for these tissues. Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short

term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### beta Tubulin Antibody (HRP conjugated) - Protein Information

Name TUBB3

**Synonyms** TUBB4

Storage Condition and Buffer

**Function** 



Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha- tubulin (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed:<a href="http://www.uniprot.org/citations/20074521" target="\_blank">20074521</a>). 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:<a href="http://www.uniprot.org/citations/28483977" target="\_blank">28483977</a>). Plays a role in dorsal root ganglion axon projection towards the spinal cord (PubMed:<a 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**

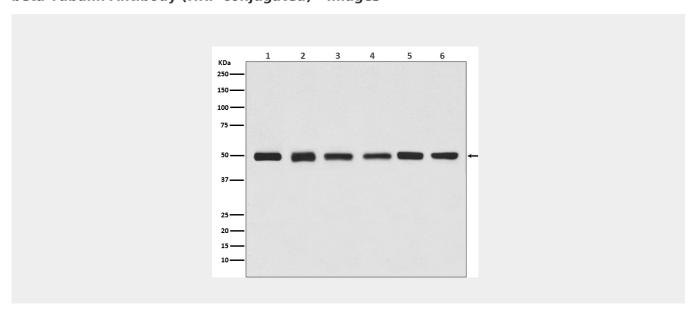
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

#### beta Tubulin Antibody (HRP conjugated) - 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

### beta Tubulin Antibody (HRP conjugated) - Images









Western blot analysis of beta Tubulin expression in (1) Jurkat cell lysate, (2) Human kidney lysate, (3) 3T3 cell lysate, (4) Mouse brain lysate, (5) C6 cell lysate, (6) Rat heart lysate.