

# TUBB3 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI15018

#### **Product Information**

Application WB Primary Accession Q13509

Other Accession <u>NM 006086, NP 006077</u>

**Reactivity** Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast

**Predicted** Human, Mouse, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 50433

## **Additional Information**

**Gene ID** 10381

Alias Symbol CFEOM3A, MC1R, TUBB4, beta-4, CDCBM

Other Names Tubulin beta-3 chain, Tubulin beta-4 chain, Tubulin beta-III, TUBB3, TUBB4

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 ul of distilled water. Final anti-TUBB3 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

**Precautions**TUBB3 antibody - C-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

## **Protein Information**

Name TUBB3

Synonyms TUBB4

**Function** Tubulin is the major constituent of microtubules, protein filaments

consisting of alpha- and beta-tubulin heterodimers (PubMed:34996871, PubMed:38305685, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871, PubMed:38305685, PubMed:38609661). Below the cap, alpha-beta tubulin heterodimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:38609661). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed: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:<u>28483977</u>). Plays a role in dorsal root ganglion axon projection towards the spinal cord

(PubMed: 28483977).

**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}

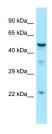
**Tissue Location** Expression is primarily restricted to central and peripheral nervous system.

Greatly increased expression in most cancerous tissues.

## References

Ranganathan S., et al. Biochim. Biophys. Acta 1395:237-245(1998).
Banerjee A., et al. Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).
Martin J., et al. Nature 432:988-994(2004).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

## **Images**



WB Suggested Anti-TUBB3 Antibody Titration: 1.0 μg/ml

Positive Control: Fetal Brain

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.