

# Anti-Beta3-tubulin Antibody

Mouse monoclonal antibody to Beta3-tubulin Catalog # AP61570

#### **Product Information**

Application WB
Primary Accession Q13509
Other Accession Q9ERD7

**Reactivity** Human, Mouse, Rat

HostMouseClonalityMonoclonalCalculated MW50433

#### **Additional Information**

**Gene ID** 10381

Other Names TUBB4; Tubulin beta-3 chain; Tubulin beta-4 chain; Tubulin beta-III

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence of human

Beta3-tubulin. The exact sequence is proprietary.

**Dilution** WB~~WB (1/2000 - 1/5000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **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:28483977). 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}

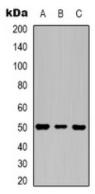
**Tissue Location** Expression is primarily restricted to central and peripheral nervous system.

Greatly increased expression in most cancerous tissues.

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence of human Beta3-tubulin. The exact sequence is proprietary.

### **Images**



Western blot analysis of Beta3-tubulin expression in Hela (A), mouse brain (B), rat brain (C) whole cell lysates.

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