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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

Dilution	**WB~~1:1000**
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.**
Storage Condition and Buffer	**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

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.

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

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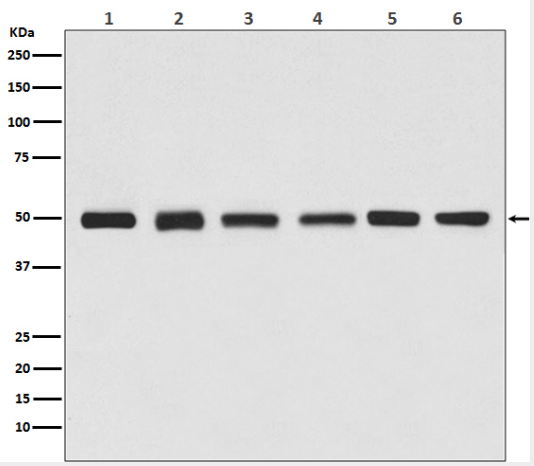

Western blot analysis of beta Tubulin expression in (1) Jurkat cell lysate, (2) Human kidney lysate, (3) 3T3 cell lysate, (4) Mouse brain lysate, (5) C6 cell lysate, (6) Rat heart lysate.