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# beta III Tubulin Rabbit mAb (HRP)

Catalog # AP78587

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | Q13509 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Monoclonal Antibody |
| **Isotype** | IgG |
| **Conjugate** | HRP |
| **Immunogen** | A synthesized peptide derived from human beta Tubulin |
| **Purification** | Affinity Chromatography |
| **Calculated MW** | 50433 |

## Additional Information

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| **Gene ID** | 10381 |
| **Other Names** | TUBB3 |
| **Dilution** | WB~~1/500-1/1000 |
| **Format** | Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

## Protein Information

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| **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).

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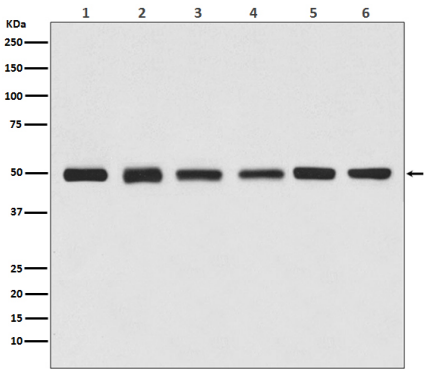
| **Cellular Location** | Cytoplasm, cytoskeleton. Cell projection, growth cone {ECO:0000250\|UniProtKB:Q9ERD7}. Cell projection, lamellipodium {ECO:0000250\|UniProtKB:Q9ERD7}. Cell projection, filopodium {ECO:0000250\|UniProtKB:Q9ERD7} |
| **Tissue Location** | Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues. |

## Images

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