

KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1713**Specification****KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	Q13509
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 50 kDa , observed , 55 kDa KDa
Gene Name	TUBB3
Aliases	TUBB3; Tubulin Beta 3 Class III; CFEOM3A; Beta-4; CFEOM3; Class III Beta-Tubulin; Tubulin Beta-3 Chain; Tubulin Beta-4 Chain; Tubulin Beta-III; Tubulin, Beta 3; FEOM3; TUBB4; Fibrosis Of Extraocular Muscles, Congenital, 3; CDCBM1; CDCBM A synthesized peptide derived from human beta Tubulin III
Immunogen	

KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody - Additional Information

Gene ID	10381
Other Names	
Tubulin beta-3 chain, Tubulin beta-4 chain, Tubulin beta-III, TUBB3, TUBB4	

KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody - 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

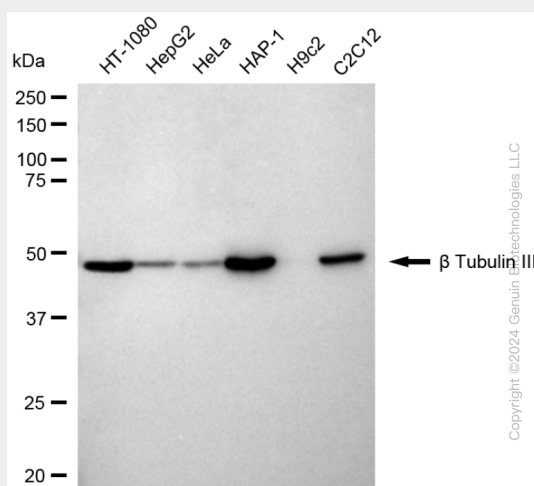
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

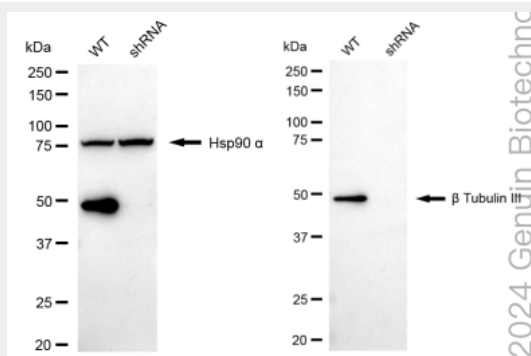
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-Tubulin Beta 3 Class III Rabbit Monoclonal Antibody - Images

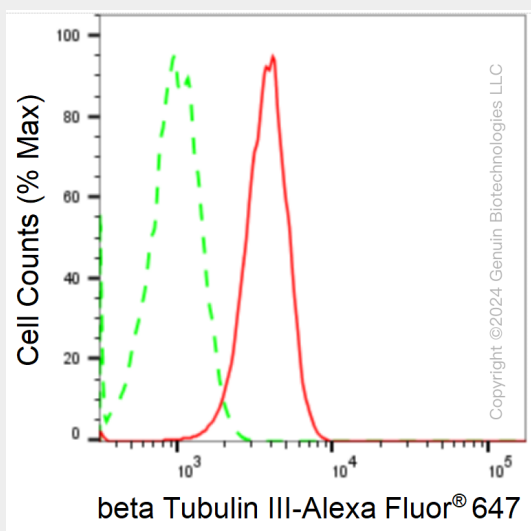


Western blotting analysis using anti-beta Tubulin III antibody (Cat#AGI1713). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-beta Tubulin III antibody (Cat#AGI1713, 1:10,000) and HRP-conjugated goat anti-rabbit

secondary antibody respectively.



Western blotting analysis using anti-beta Tubulin III antibody (Cat#AGI1713). beta Tubulin III expression in wild type (WT) and beta Tubulin III shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-beta Tubulin III antibody (Cat#AGI1713, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of beta Tubulin III expression in HT-1080 cells using anti-beta Tubulin III antibody (Cat#AGI1713, 1:2,000). Green, isotype control; red, beta Tubulin III.