Product Name: KD-Validated Tubulin Beta 3 Class III Recombinant Rabbit Monoclonal Antibody

Catalog #: KVAb01830

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:2,000-1:10,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:250-1:500
Molecular Weight	Calculated MW: 50.4kDa

Antigen Information

Gene Name	TUBB3
Alternative Names	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
Gene ID	10381.0
SwissProt ID	Q13509
Immunogen	A synthesized peptide derived from human beta Tubulin III

Background

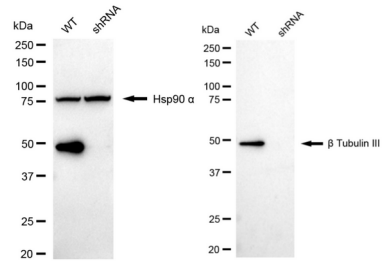
This gene encodes a class III member of the beta tubulin protein family. Beta tubulins are one of two core protein families (alpha

and beta tubulins) that heterodimerize and assemble to form microtubules. This protein is primarily expressed in neurons and may be involved in neurogenesis and axon guidance and maintenance. Mutations in this gene are the cause of congenital fibrosis of the extraocular muscles type 3. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Oct 2010]

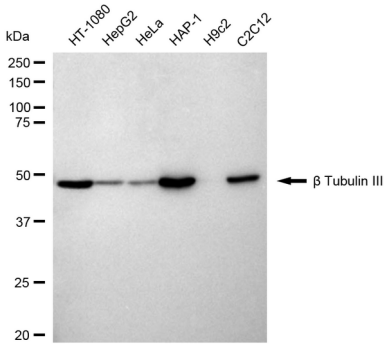
Research Area

Neuroscience,Signal Transduction,Tags & Cell Markers

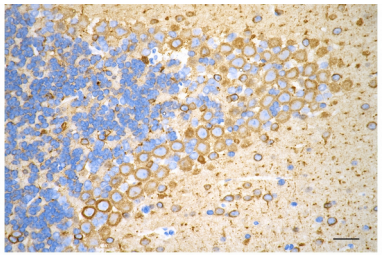
Image Data



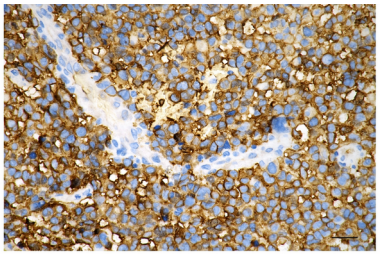
Western blotting analysis using beta Tubulin III antibody (KVAb01830). beta Tubulin III expression in wild type (WT) and beta Tubulin III shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with beta Tubulin III antibody (KVAb01830, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



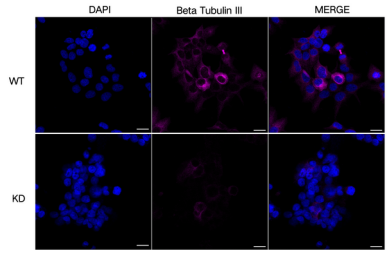
Western blotting analysis using beta Tubulin III antibody (KVAb01830). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with beta Tubulin III antibody (KVAb01830, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



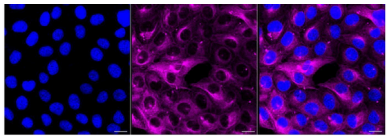
Immunohistochemistry was performed on paraffin-embedded mouse brain using beta tubulin III antibody (KVAb01830, 1:500). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



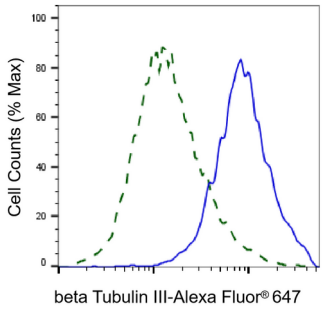
Immunohistochemistry was performed on paraffin-embedded human glioblastoma using tubulin III antibody (KVAb01830, 1:500). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



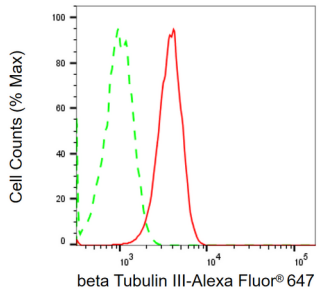
Immunocytochemical staining of Hela cells using Beta Tubulin III antibody (KVAb01830, 1:1,000), Top panel: wild-type (WT); Bottom panal: Beta Tubulin III shRNA knockdown (KD). Nuclei were stained blue with DAPI; Beta Tubulin III was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.



Immunocytochemical staining of HT-1080 cells with beta Tubulin III antibody (KVAb01830, 1:1,000) . Nuclei were stained blue with DAPI; beta Tubulin III was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Validation of beta Tubulin III knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with beta Tubulin III antibody (KVAb01830, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of beta Tubulin III expression in HT-1080 cells using beta Tubulin III antibody (KVAb01830, 1:2,000). Green, isotype control; red, beta Tubulin III.