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TUBB2B Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11940a

Product Information

Application	WB, IF, IHC-P-Leica, E
Primary Accession	Q9BVA1
Other Accession	P02554, P13602, P32882, Q3KRE8, Q9CWF2, Q6B856, P85108, Q7TMM9, Q4R5B3, Q13885, P09203, NP_821080.1
Reactivity	Human, Mouse, Rat
Predicted	Mouse, Rat, Monkey, Pig, Chicken, Bovine, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31679
Calculated MW	49953
Antigen Region	12-39

Additional Information

Gene ID	347733
Other Names	Tubulin beta-2B chain, TUBB2B
Target/Specificity	This TUBB2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-39 amino acids from the N-terminal region of human TUBB2B.
Dilution	WB~~1:4000 IF~~1:10~50 IHC-P-Leica~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TUBB2B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TUBB2B
Function	Tubulin is the major constituent of microtubules, a cylinder consisting of

laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed:23001566, PubMed:26732629, PubMed:28013290). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin. Plays a critical role in proper axon guidance in both central and peripheral axon tracts (PubMed:23001566). Implicated in neuronal migration (PubMed:19465910).

Cellular Location Cytoplasm, cytoskeleton

Tissue Location High expression in brain.

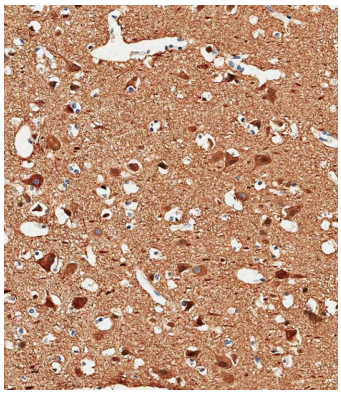
Background

The protein encoded by this gene is a beta isoform of tubulin, which binds GTP and is a major component of microtubules. This gene is highly similar to TUBB2A and TUBB2C. Defects in this gene are a cause of asymmetric polymicrogyria. [provided by RefSeq].

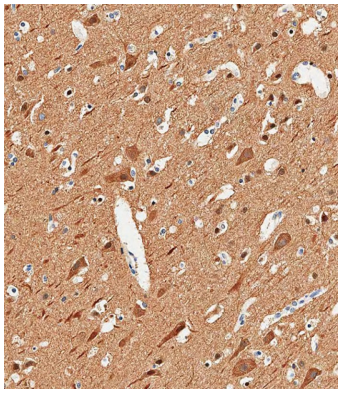
References

Xu, W., et al. Mol. Cancer Ther. 8(12):3318-3330(2009)
Jaglin, X.H., et al. Nat. Genet. 41(6):746-752(2009)
Martins-de-Souza, D., et al. Eur Arch Psychiatry Clin Neurosci 259(3):151-163(2009)
Cucchiarelli, V., et al. Cell Motil. Cytoskeleton 65(8):675-685(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)

Images



Immunohistochemical analysis of paraffin-embedded Human brain tissue using AP11940A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:2000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



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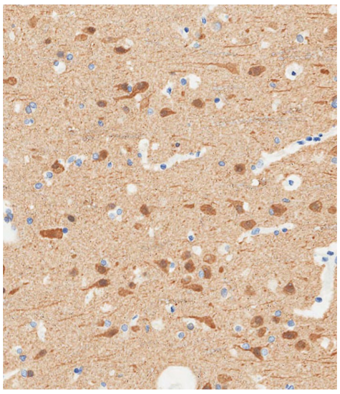

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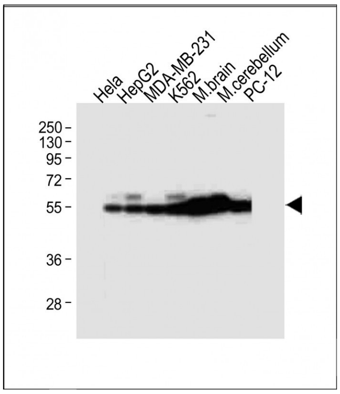
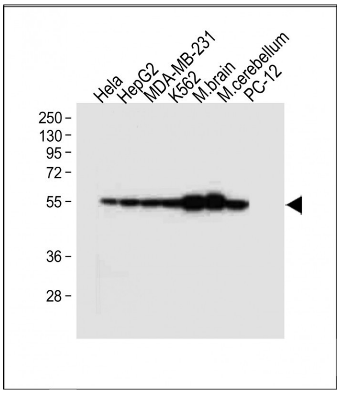


All lanes : Anti-TUBB2B Antibody (N-term) at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: MDA-MB-231 whole cell lysate Lane 4: K562 whole cell lysate Lane 5: Mouse brain tissue lysate Lane 6: Mouse cerebellum tissue lysate Lane 7: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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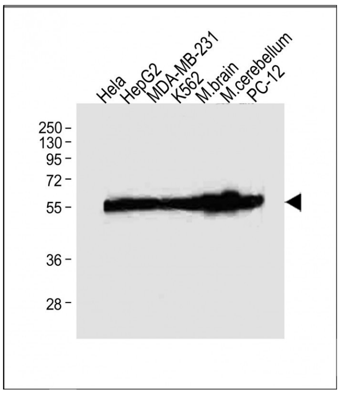

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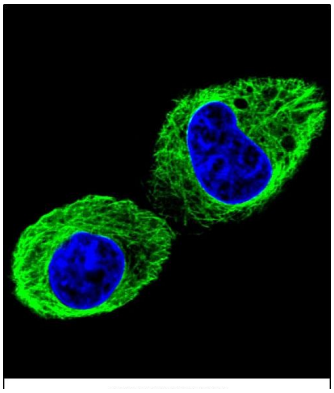
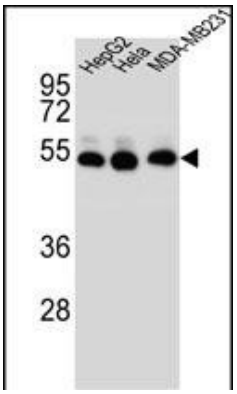
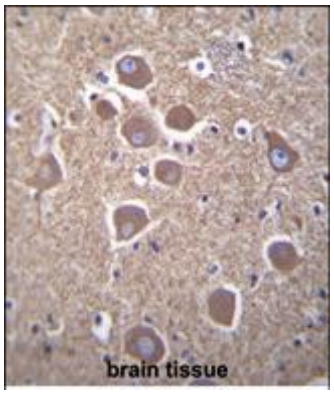
Confocal immunofluorescent analysis of TUBB2B Antibody (N-term)(Cat#AP11940a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).





TUBB2B Antibody (N-term) (Cat. #AP11940a) western blot analysis in HepG2,Hela,MDA-MB231 cell line lysates (35ug/lane).This demonstrates the TUBB2B antibody detected the TUBB2B protein (arrow).



TUBB2B Antibody (N-term) (Cat. #AP11940a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TUBB2B Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.