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TUBA4A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13535b

Product Information

Application	WB, IHC-P, E
Primary Accession	P68366
Other Accession	Q5XIF6, P68368, P68367, P81948, NP_005991.1
Reactivity	Human, Mouse, Rat
Predicted	Mouse, Rat, Monkey, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33611
Calculated MW	49924
Antigen Region	417-446

Additional Information

Gene ID	7277
Other Names	Tubulin alpha-4A chain, Alpha-tubulin 1, Testis-specific alpha-tubulin, Tubulin H2-alpha, Tubulin alpha-1 chain, TUBA4A, TUBA1
Target/Specificity	This TUBA4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 417-446 amino acids from the C-terminal region of human TUBA4A.
Dilution	WB~~1:8000 IHC-P~~1:100~500 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	TUBA4A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TUBA4A
Synonyms	TUBA1

Function Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. 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.

Cellular Location Cytoplasm, cytoskeleton.

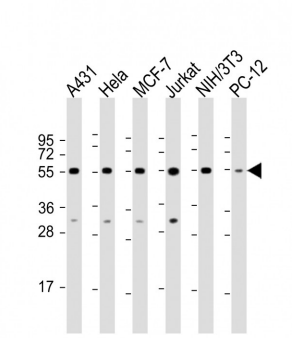
Background

Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulin. The genes encoding these microtubule constituents are part of the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes and they are highly conserved among and between species. This gene encodes an alpha tubulin that is a highly conserved homolog of a rat testis-specific alpha tubulin.

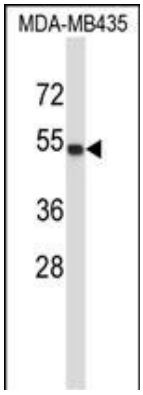
References

Houck, S.A., et al. PLoS ONE 5 (7), E11795 (2010) :
Zhao, J., et al. BMC Med. Genet. 11, 96 (2010) :
Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008)
Petretti, C., et al. EMBO Rep. 7(4):418-424(2006)
Fiore, G., et al. Neurosci. Lett. 394(1):57-62(2006)

Images

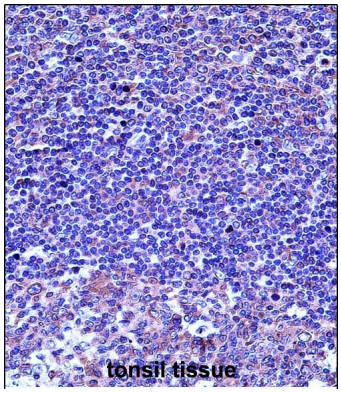


All lanes : Anti-TUBA4A Antibody (C-term) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: Jurkat whole cell lysate Lane 6: NIH/3T3 whole cell lysate Lane 5: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TUBA4A Antibody (C-term) (Cat. #AP13535b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the TUBA4A antibody detected the TUBA4A protein (arrow).

TUBA4A Antibody (C-term) (Cat.



#AP13535b)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TUBA4A Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Frontotemporal Lobar Degeneration Case with an N-Terminal Mutation Exhibits Reduced TUBA4A Levels in the Brain and TDP-43 Pathology
- Dysregulation of a novel miR-1825/TBCB/TUBA4A pathway in sporadic and familial ALS.
- Novel Variant Associated With Familial Frontotemporal Dementia

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