

#### **TUBA4A Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13535b

### **Specification**

#### **TUBA4A Antibody (C-term) - Product Information**

Application IHC-P, WB,E Primary Accession P68366

Other Accession <u>Q5XIF6</u>, <u>P68368</u>, <u>P68367</u>, <u>P81948</u>, <u>NP 005991.1</u>

Reactivity
Predicted

Human, Mouse, Rat
Bovine, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 417-446

### TUBA4A Antibody (C-term) - 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**

IHC-P~~1:25 WB~~1:8000

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

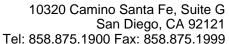
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

TUBA4A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### TUBA4A Antibody (C-term) - 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**

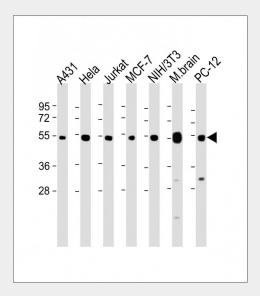
Cytoplasm, cytoskeleton.

## **TUBA4A Antibody (C-term) - Protocols**

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

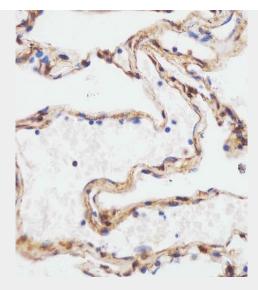
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **TUBA4A Antibody (C-term) - Images**



All lanes: Anti-TUBA4A Antibody (C-term) at 1:8000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: Mouse brain 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.





AP13535B staining TUBA4A in human lung tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

# TUBA4A Antibody (C-term) - 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.

### **TUBA4A Antibody (C-term) - 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)

#### **TUBA4A Antibody (C-term) - Citations**

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