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alpha-Tubulin Rabbit pAb, Loading Control

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Catalog # AP50880

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q71U36
Reactivity	Rat, Human, Mouse
Predicted	Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50136
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Tubulin-alpha 1
Epitope Specificity	375-448/451
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	bs-0159P is one synthetic peptide derived from human Tubulin-alpha 1. Tubulin is a major cytoskeleton that has five distinct forms, designated alpha, beta, gamma, delta and epsilon tubulin. The alpha and beta tubulins form a heterodimer that polymerize into the cylindrical microtubule fibers. Both alpha and beta tubulin bind GTP. Only beta tubulin hydrolyzes GTP to GDP. This hydrolysis is a process that is linked to tubulin polymerization and microtubule formation. The alpha tubulin isomer can be modified by addition of a C-terminal tyrosine residue. This modification may influence polymerization rates. The gamma tubulin isomer is localized to centrosomes which compose the heart of the microtubule organizing center from which microtubule fibers emanate.

Additional Information

Gene ID	7846
Other Names	Tubulin alpha-1A chain, 3.6.5.-, Alpha-tubulin 3, Tubulin B-alpha-1, Tubulin alpha-3 chain, Detyrosinated tubulin alpha-1A chain, TUBA1A, TUBA3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 g/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	TUBA1A
Synonyms	TUBA3
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. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:P68369}
Tissue Location	Expressed at a high level in fetal brain.

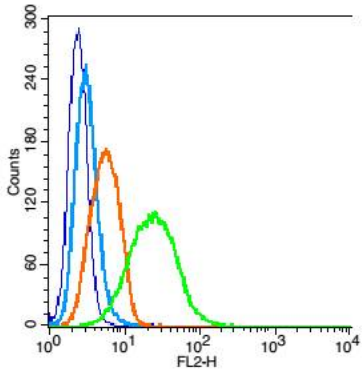
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References

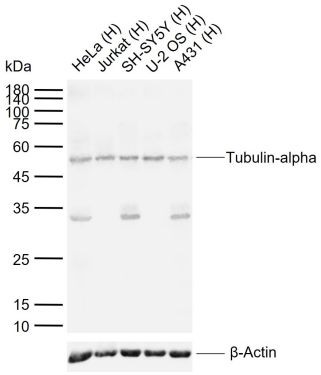
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Lubec G.,et al.Submitted (DEC-2008) to UniProtKB.
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Images

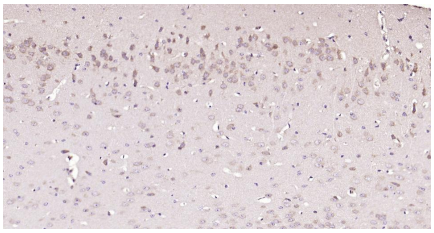


Blank control: RSC96 Cells (blue). Primary Antibody:Rabbit Anti- Tubulin-alpha 1 antibody(AP50880), Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol
The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (AP50880,1 µg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.



Sample:
Lane 1: Human HeLa cell lysates
Lane 2: Human Jurkat cell lysates
Lane 3: Human SH-SY5Y cell lysates
Lane 4: Human U-2 OS cell lysates
Lane 5: Human A431 cell lysates
Primary: Anti-Tubulin-alpha (AP50880) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 50 kDa
Observed band size: 52 kDa



Paraformaldehyde-fixed, paraffin embedded Mouse Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Tubulin-alpha Polyclonal Antibody, Unconjugated (AP50880) at 1:200 overnight at 4°C, followed by conjugation to the AP50880-HRP and DAB (C-0010) staining.

Citations

- Aspirin potentiates celecoxib-induced growth inhibition and apoptosis in human non-small cell lung cancer by targeting GRP78 activity
- C1GALT1C1/COSMC is a novel prognostic biomarker for hepatocellular carcinoma
- Ascending aortic adventitial remodeling and fibrosis are ameliorated with Apelin-13 in rats after TAC via suppression of the miRNA-122 and LGR4-β-catenin signaling.

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