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beta II Tubulin Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22337a

Product Information

Application	WB, IF, FC, E
Primary Accession	Q7TMM9
Other Accession	Q13885, Q4R5B3, P85108
Reactivity	Human, Rat, Mouse
Predicted	Human, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB57744
Calculated MW	49907

Additional Information

Gene ID	22151
Other Names	Tubulin beta-2A chain, Tubb2a, Tubb2
Target/Specificity	This beta II Tubulin antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 194-225 amino acids from the mouse region of mouse beta II Tubulin.
Dilution	WB~~1:2000 IF~~1:25 FC~~1:25 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	beta II Tubulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Tubb2a
Synonyms	Tubb2
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.

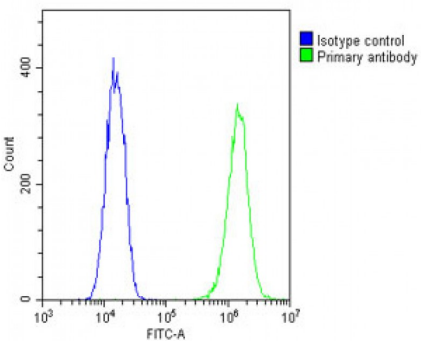
Background

Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain (By similarity).

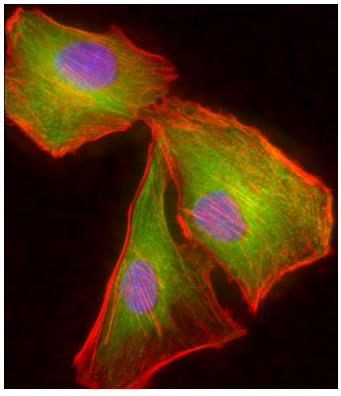
References

Carninci P.,et al.Science 309:1559-1563(2005).
Lubec G.,et al.Submitted (JAN-2009) to UniProtKB.
Janke C.,et al.Science 308:1758-1762(2005).
Rogowski K.,et al.Cell 137:1076-1087(2009).
Yoshida K.,et al.Biochem. Biophys. Res. Commun. 389:506-511(2009).

Images

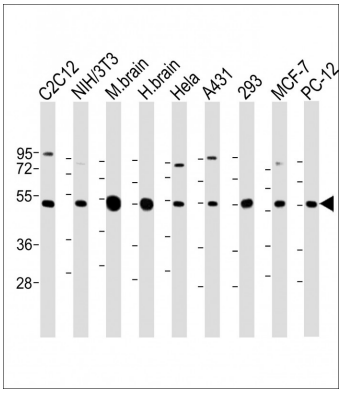


Overlay histogram showing C2C12 cells stained with AP22337a(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized C2C12 (mouse myoblast cell line) cells labeling beta II Tubulin with AP22337a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoskeleton staining on C2C12 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (OI17558410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).

All lanes : Anti-beta II Tubulin Antibody at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lane 3: Mouse brain lysate Lane 4: Human brain lysate Lane 5: Hela whole cell lysate Lane 6: A431 whole cell lysate Lane 7: 293 whole cell lysate Lane 8: MCF-7 whole cell lysate Lane 9: 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.