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alpha Tubulin Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22120a

Product Information

Application	WB, FC, IF, E
Primary Accession	P68363
Other Accession	P68362, Q71U36, P68369, A5A6J1, P02550, P68370, P81947, P68361, Q4R538, P68360, P05213, Q5R1W4, Q2XVP4, Q6P9V9, Q8T6A5, P02552, P18258, P41383, Q13748, Q32KN8, P91910, Q94572, P05214, Q68FR8, P18288, P50719, P02553, P36220
Reactivity	Human
Predicted	Bovine, Chicken, Human, Mouse, Pig, Rat, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55989
Calculated MW	50152

Additional Information

Gene ID	10376
Other Names	Tubulin alpha-1B chain, Alpha-tubulin ubiquitous, Tubulin K-alpha-1, Tubulin alpha-ubiquitous chain, TUBA1B
Target/Specificity	This alpha Tubulin antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 408-439 amino acids from human alpha Tubulin.
Dilution	WB~~1:1000-1:2000 FC~~1:25 IF~~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	alpha Tubulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TUBA1B

Function	Tubulin is the major constituent of microtubules, protein filaments consisting of alpha- and beta-tubulin heterodimers (PubMed:38305685, PubMed:34996871, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:38305685, PubMed:34996871, PubMed:38609661). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:38609661).
Cellular Location	Cytoplasm, cytoskeleton

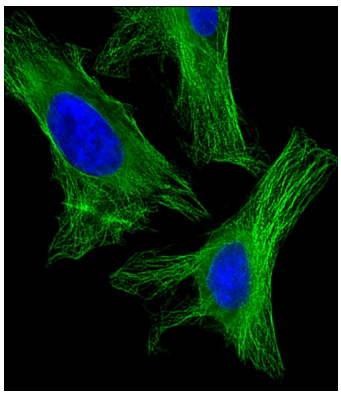
Background

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.

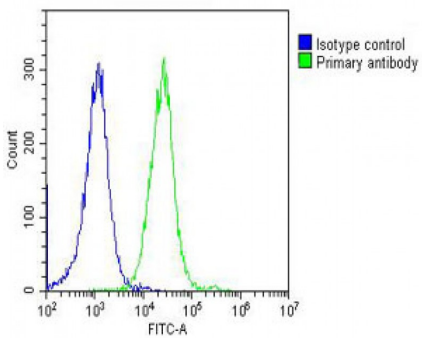
References

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de Hostos E.L.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Li Q.,et al.Submitted (FEB-2006) to the EMBL/GenBank/DDBJ databases.
Lubec G.,et al.Submitted (DEC-2008) to UniProtKB.
Bienvenut W.V.,et al.Submitted (MAR-2009) to UniProtKB.

Images

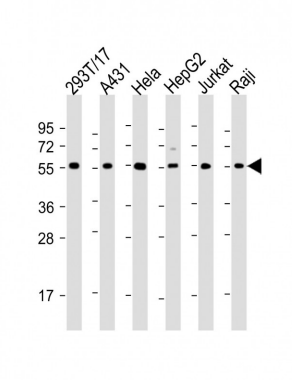


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling alpha Tubulin with AP22120a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. The nuclear counter stain is DAPI (blue).



Overlay histogram showing Hela cells stained with AP22120a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22120a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes : Anti-alpha Tubulin Antibody at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: HepG2 whole



cell lysate Lane 5: Jurkat whole cell lysate Lane 6: Raji 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.