

beta Tubulin

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP22105a

Product Information

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| Application | WB, FC, IHC-P, E |
| Primary Accession | P99024 |
| Other Accession | Q17299 , P12456 , P09203 , Q24560 , Q9YHC3 , Q27U48 , O17449 , P36221 , Q6EVK8 , Q13885 , Q4R5B3 , Q7TMM9 , P85108 , Q6B856 , Q9BVA1 , Q9CWF2 , Q3KRE8 , P52275 , P32882 , P83130 , P61858 , P61857 , P13602 , Q2T9S0 , P09206 , Q13509 , Q60HC2 , Q9ERD7 , Q4QRB4 , Q3ZBU7 , P04350 , Q4R4X8 , Q9D6F9 , Q3MHM5 , P68371 , P86221 , P68 |
| Reactivity | Rat, Mouse |
| Predicted | Bovine, Chicken, Human, Mouse, Pig, Rat |
| Host | Rabbit |
| Clonality | polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB55944 |
| Calculated MW | 49671 |

Additional Information

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| Gene ID | 22154 |
| Other Names | Tubulin beta-5 chain, Tubb5 |
| Target/Specificity | This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 46-78 amino acids from human. |
| Dilution | WB~~1:2000 FC~~1:25 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 | beta Tubulin is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| Name | Tubb5 |
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| 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 |
| Tissue Location | Ubiquitously expressed with highest levels in spleen, thymus and immature brain. Expressed in embryonic brain, including throughout the developing cortex and in the subventricular zone. Also found in radial glial cells, intermediate progenitors, migrating neurons and postmitotic neurons (PubMed:23246003). Expressed in skin and developing hair follicle (PubMed:26637975) |

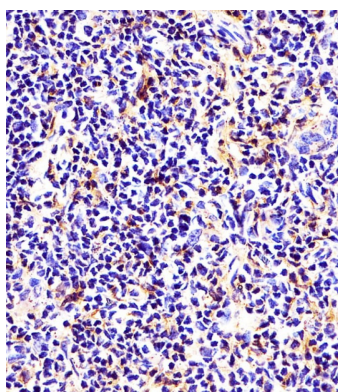
Background

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.

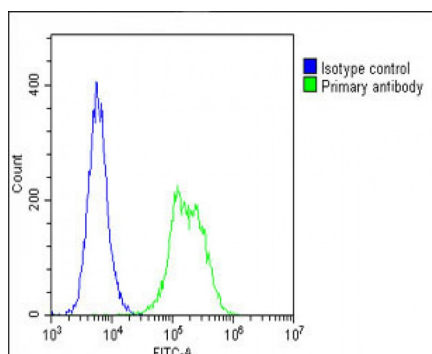
References

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Images

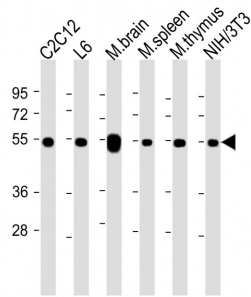


AP22105a staining beta Tubulin in mouse thymus tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing C2C12 cells stained with AP22105a(green line). The cells were fixed with 2% paraformaldehyde (10 min) 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 (AP22105a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit

IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-beta Tubulin at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: L6 whole cell lysate Lane 3: mouse brain lysate Lane 4: mouse spleen whole cell lysate Lane 5: mouse thymus lysate Lane 6: NIH/3T3 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'.