

Rabbit TUBA1/3/4 Polyclonal Antibody | anti-TUBA1/3/4 antibody

Phospho-TUBA1/3/4 (Tyr272) Antibody

CATALOG # AAA329367	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry
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PRODUCT SYNONYMS

TUBA1/3/4; Polyclonal Antibody; Phospho-TUBA1/3/4 (Tyr272) Antibody; Alpha tubulin ubiquitous; Alpha-tubulin ubiquitous; K alpha 1; TBA1B_HUMAN; TUBA1B; Tubulin alpha 1B; Tubulin alpha 1B chain; Tubulin alpha ubiquitous; Tubulin alpha ubiquitous chain; Tubulin alpha-1B chain; Tubulin alpha-ubiquitous chain; Tubulin K alpha 1; Tubulin K-alpha-1; Alpha-tubulin 1; ALS22; B ALPHA 1; bA408E5.3; H2 ALPHA; Hum a tub1; Hum a tub2; LIS3; MGC171407; MGC55332; TBA4A_HUMAN; Testis-specific alpha-tubulin; TUBA1; TUBA1A; tuba1l; Tuba4a; Tubulin alpha 1 chain; Tubulin alpha; Tubulin alpha-1 chain; tubulin alpha-1B chain; Tubulin alpha-4A chain; Tubulin H2-alpha; Tubulin; alpha 1 (testis specific); tubulin; alpha 1; like; alpha 4a; alpha; testis-specific; alpha-1; Alpha-tubulin 2; Alpha-tubulin 3C/D; alpha-tubulin isotype H2-alpha; H2-ALPHA; TBA3C_HUMAN; TUBA2; TUBA3C; TUBA3D; Tubulin alpha 2; Tubulin alpha 2 chain; Tubulin alpha 3c; Tubulin alpha-2 chain; Tubulin alpha-3C/D chain; Alpha tubulin 3; Alpha-tubulin 3; B alpha 1; FLJ25113; TBA1A_HUMAN; TUB; anti-TUBA1/3/4 antibody

PRODUCT SPECIFICATIONS

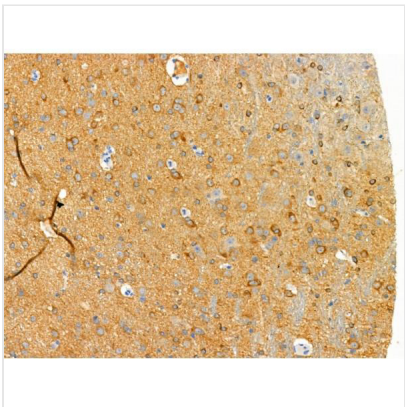
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-TUBA1/3/4 (Tyr272) Antibody detects endogenous levels of TUBA1/3/4 only when phosphorylated at Tyr272. Tissue Specificity: Expressed at a high level in fetal brain.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-TUBA1/3/4 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human TUBA1/3/4 around the phosphorylation site of Tyr272.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group. Polyglutamylation plays a key role in microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this glutamylation threshold. Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella). Both polyglutamylation and monoglycylation can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of monoglycylation is still unclear (Probable). Acetylation of alpha chains at Lys-40 is located inside the microtubule lumen. This modification has been correlated with increased microtubule stability, intracellular transport and ciliary assembly. Methylation of alpha chains at Lys-40 is found in mitotic microtubules and is required for normal mitosis and cytokinesis contributing to genomic stability.

Subunit Structure	Dimer of alpha and beta chains. A typical microtubule is a hollow water-filled tube with an outer diameter of 25 nm and an inner diameter of 15 nM. Alpha-beta heterodimers associate head-to-tail to form protofilaments running lengthwise along the microtubule wall with the beta-tubulin subunit facing the microtubule plus end conferring a structural polarity. Microtubules usually have 13 protofilaments but different protofilament numbers can be found in some organisms and specialized cells. Interacts with CFAP157 (By similarity).
Similarity	Belongs to the tubulin family.
Subcellular Location	Cytoplasm>Cytoskeleton.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohiostchemistry)
 Staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
 At 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-TUBA1/3/4 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	55977864
NCBI GeneID	7846
UniProt Accession #	Q71U36; P68363; Q9BQE3; Q13748; Q6PEY2; P68366
Molecular Weight	46,297 Da
NCBI Official Full Name	Tubulin alpha-1A chain
NCBI Official Synonym Full Names	tubulin, alpha 1a
NCBI Official Symbol	TUBA1A
NCBI Official Synonym Symbols	LIS3; TUBA3; B-ALPHA-1
NCBI Protein Information	tubulin alpha-1A chain; hum-a-tub1; hum-a-tub2; tubulin B-alpha-1; tubulin alpha-3 chain; tubulin, alpha, brain-specific
UniProt Protein Name	Tubulin alpha-1A chain
UniProt Gene Name	TUBA1A
UniProt Synonym Gene Names	TUBA3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/tuba1-3-4-antibody-peptide-elisa-immunohistochemistry-elisa/329367>