

Rabbit TUBA4A Polyclonal Antibody | anti-TUBA4A antibody

TUBA4A Antibody

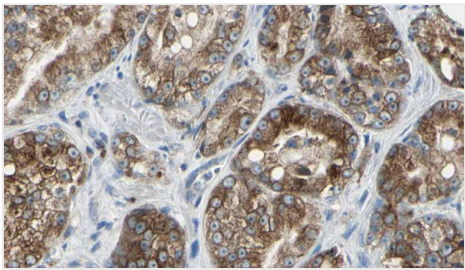
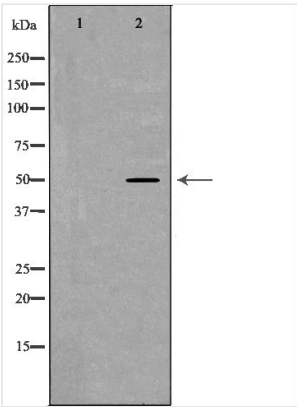
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326947	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

TUBA4A; Polyclonal Antibody; TUBA4A Antibody; 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; anti-TUBA4A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	TUBA4A antibody detects endogenous levels of total TUBA4A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	433
Applicable Applications for anti-TUBA4A antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide of human TUBA4A
Subcellular Location	Cytoplasm > Cytoskeleton.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326947 at 1/100 staining Human prostate 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 antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using TUBA4A Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-TUBA4A antibody

Description: Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulin. The genes encoding these microtubule constituents are part of the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes and they are highly conserved among and between species. This gene encodes an alpha tubulin that is a highly conserved homolog of a rat testis-specific alpha tubulin.

Function: 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.

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).

Post-translational Modifications: Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group (PubMed:26875866). 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 (PubMed:26875866). Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TTL10 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.

Similarity: Belongs to the tubulin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	514052659
NCBI GeneID	7277
NCBI Accession #	NP_001265481.1
NCBI GenBank Nucleotide #	NM_001278552.1
UniProt Accession #	P68366; P05215; A8MUB1; B3KNQ6

Molecular Weight	Observed: 50 kDa Predicted: 50 kDa
NCBI Official Full Name	tubulin alpha-4A chain isoform 2
NCBI Official Synonym Full Names	tubulin alpha 4a
NCBI Official Symbol	TUBA4A
NCBI Official Synonym Symbols	ALS22; TUBA1; H2-ALPHA
NCBI Protein Information	tubulin alpha-4A chain
UniProt Protein Name	Tubulin alpha-4A chain
UniProt Gene Name	TUBA4A
UniProt Synonym Gene Names	TUBA1

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/tuba4a-antibody-immunohistochemistry-western-blot-elisa/326947>