Product datasheet

Anti-alpha Tubulin antibody ab15246

★★★★★ 15 Abreviews  131 References  4 Images

Overview

Product name: Anti-alpha Tubulin antibody
Description: Rabbit polyclonal to alpha Tubulin
Host species: Rabbit

Tested applications: Suitable for: ICC/IF, IHC-Fr, WB, IHC-P, IP
Species reactivity: Reacts with: Mouse, Rat, Sheep, Human, Pig, Drosophila melanogaster, Zebrafish
Predicted to work with: Rabbit, Chicken, Guinea pig, Cow, Xenopus laevis, Gerbil, Newt

Immunogen: Synthetic peptide within Human alpha Tubulin aa 400 to the C-terminus. The exact sequence is proprietary.
Database link: Q6PEY2

Positive control: IHC-P: Human lung tissue.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: pH: 7.6
Preservative: 0.1% Sodium azide
 Constituents: 0.0268% PBS, 1% BSA

Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab15246 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>ICC/IF</td>
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<td>Use at an assay dependent concentration. PubMed: 17785506</td>
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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.

Sequence similarities
Belongs to the tubulin family.

Post-translational modifications
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also 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) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules. Acetylation of alpha chains at Lys-40 stabilizes microtubules and affects affinity and processivity of microtubule motors. This modification has a role in multiple cellular functions, ranging from cell motility, cell cycle progression or cell differentiation to intracellular trafficking and signaling.

Cellular localization
Cytoplasm > cytoskeleton.

Images

Lanes: 1, 4, 7 - SK N BE; 2, 5, 8 - TE 671; 3, 6, 9 - HeLa

Lanes: 1-3: 4°C (1 freeze/thaw); 4-6: 4°C (2 freeze/thaws); 7-9: 4°C (4 freeze/thaws)
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Tubulin antibody (ab15246)

ab15246 at 1/200 dilution, staining alpha Tubulin in Human lung tissue section by Immunohistochemistry (Formalin/ PFA fixed paraffin-embedded tissue sections).

This image shows a single confocal z-section of a primary porcine macrophage stained with rabbit polyclonal to alpha tubulin.

This picture was kindly supplied as part of the review submitted by Peter Delputte (Laboratory of Virology, Ghent University, Belgium).

Immunocytochemistry/ Immunofluorescence - Anti-alpha Tubulin antibody (ab15246)

Western blot - Anti-alpha Tubulin antibody (ab15246)

All lanes: Anti-alpha Tubulin antibody (ab15246) at 1 µg/ml

Lane 1: SK N BE (Human neuroblastoma) Whole Cell Lysate
Lane 2: TE 671 (Human Rhabdomyosarcoma) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 50 kDa
Observed band size: 55 kDa

why is the actual band size different from the predicted?
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