abcam

Product datasheet

Anti-alpha Tubulin antibody - Microtubule Marker ab 15246

**** 18 Abreviews 254 References 3 Images

Overview

Product name Anti-alpha Tubulin antibody - Microtubule Marker

Description Rabbit polyclonal to alpha Tubulin - Microtubule Marker

Host species Rabbit

Specificity Homology to both Tubulin alpha-3E chain and Tubulin alpha-4A chain

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Sheep, Rabbit, Chicken, Guinea pig, Cow, Pig, Xenopus

laevis, Drosophila melanogaster, Zebrafish, Gerbil, Newt

Immunogen Synthetic peptide within Human alpha Tubulin aa 400 to the C-terminus. The exact sequence is

proprietary.

Database link: **Q6PEY2**

General notes

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.60

Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Purity Immunogen affinity purified

1

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

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.

Application	Abreviews	Notes
WB	**** (14)	Use at an assay dependent concentration. Detects a band of approximately 55 kDa (predicted molecular weight: 50 kDa).
IHC-P	★★★★ (1)	1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

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

Post-translational modifications

Belongs to the tubulin family.

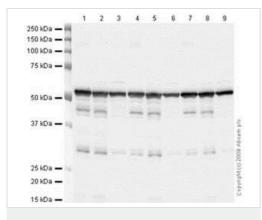
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly 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.

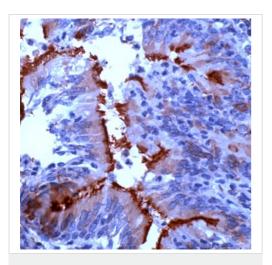
Images



Western blot - Anti-alpha Tubulin antibody -Microtubule Marker (ab15246)

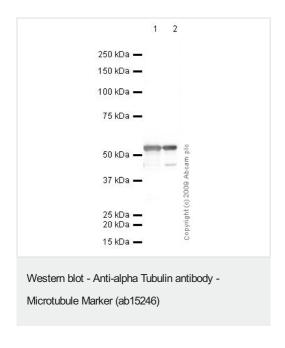
Lanes: 1, 4, 7 - SK N BE; 2, 5, 8 - TE 671; 3, 6, 9 - HeLa

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 paraffinembedded sections) - Anti-alpha Tubulin antibody - Microtubule Marker (ab15246)

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



All lanes: Anti-alpha Tubulin antibody - Microtubule Marker (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 lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

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

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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