


Product datasheet

Biotin Anti-alpha Tubulin antibody [TU-01] ab74696

[3 References](#) [1 Image](#)

Overview

Product name	Biotin Anti-alpha Tubulin antibody [TU-01]
Description	Biotin Mouse monoclonal [TU-01] to alpha Tubulin
Host species	Mouse
Conjugation	Biotin
Specificity	ab74696 recognizes the defined epitope (aa 65-97) on the N-terminal structural domain of alpha-tubulin. This epitope is conserved within all species.
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: a wide range of other species 
Immunogen	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, HeLa, HEK293T, U87-MG all under reducing conditions.
General notes	<p>The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.</p> <p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
Purity	Size exclusion
Clonality	Monoclonal

Clone number TU-01
Isotype IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab74696 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
IHC-P		Use at an assay dependent concentration. PubMed: 25665878
WB		Use a concentration of 1 - 2 µg/ml. reducing conditions.

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.

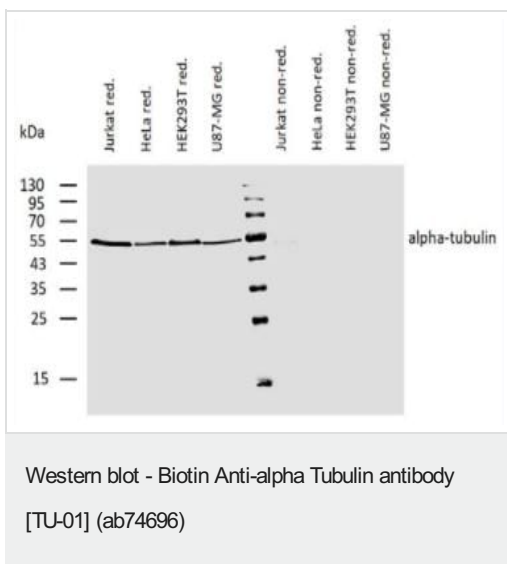
Sequence similarities Belongs to the tubulin family.

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 TLL10 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 polyglutamylated, 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 blotting analysis labeling alpha-tubulin using ab74696 on lysates of various cell lines under reducing and non-reducing conditions. Nitrocellulose membrane was probed with 2 µg/ml of ab74696 followed by IRDye800-conjugated streptavidin. A specific band was detected for alpha-tubulin at approximately 54 kDa.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors