

Anti-alpha Tubulin antibody [TU-01] ab7750

★★★★★ [8 Abreviews](#) [29 References](#) [8 图像](#)

概述

产品名称	Anti-alpha Tubulin抗体[TU-01]
描述	小鼠单克隆抗体[TU-01] to alpha Tubulin
宿主	Mouse
经测试应用	适用于: Flow Cyt (Intra), IHC-P, ICC/IF, WB
种属反应性	与反应: Mouse, Human 预测可用于: Turkey, Pig, Saccharomyces cerevisiae, Paramecium tetraurelia, Nicotiana benthamiana 
免疫原	Full length native protein (purified) corresponding to Pig alpha Tubulin aa 37-154.
表位	aa 65-97 on N-terminal structural domain
阳性对照	ICC/IF: HeLa and NIH/3T3 cells. IHC-P: Human skin tissue. Flow Cyt (Intra): HEK293 cells, HeLa cells. WB: Jurkat, HeLa, HEK293T, U87-MG all under reducing conditions.
常规说明	<p>This product was changed from ascites to tissue culture supernatant on 24th January 2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</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>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
纯度	Proprietary Purification

纯化说明	Purified from TCS. Purified by precipitation and chromatography. Purity >95% by SDS-PAGE.
克隆	单克隆
克隆编号	TU-01
同种型	IgG1

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab7750于以下的经测试应用

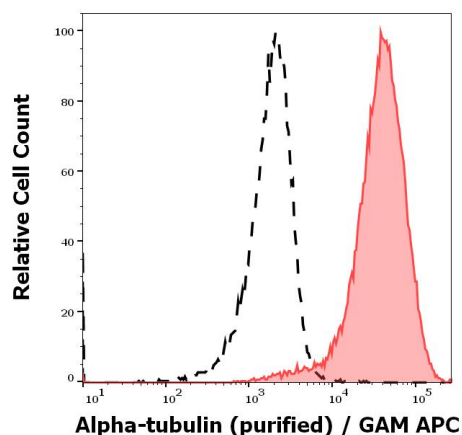
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use a concentration of 1 - 4 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 2 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (5)	Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 50 kDa. reducing conditions.

靶标

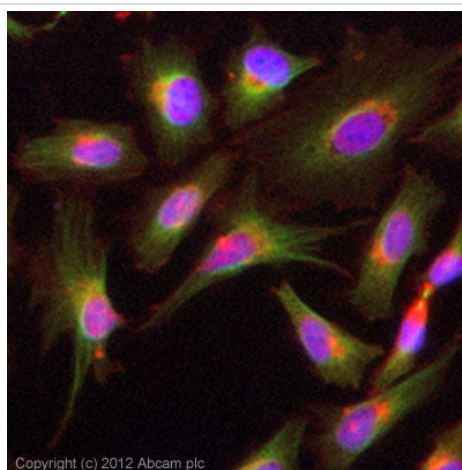
功能	Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain.
序列相似性	Belongs to the tubulin family.
翻译后修饰	<p>Some glutamate residues at the C-terminus are polyglutamylated. This modification 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.</p> <p>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.</p>
细胞定位	Cytoplasm > cytoskeleton.

图片



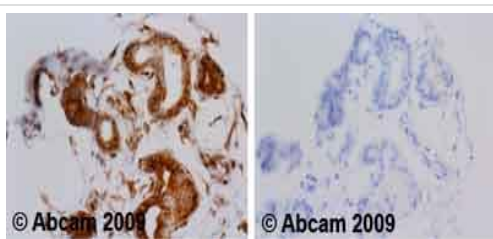
Flow Cytometry (Intracellular) - Anti-alpha Tubulin antibody [TU-01] (ab7750)

Separation of HeLa cells stained using ab7750 (concentration in sample 3 µg/ml, GAM APC, red-filled) from HeLa cells unstained by primary antibody (GAM APC, black-dashed) in flow cytometry analysis (intracellular staining).



Immunocytochemistry/ Immunofluorescence - Anti-alpha Tubulin antibody [TU-01] (ab7750)

ICC/IF image of ab7750 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab7750, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **anti-mouse DyLight® 488 (ab96879)** used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



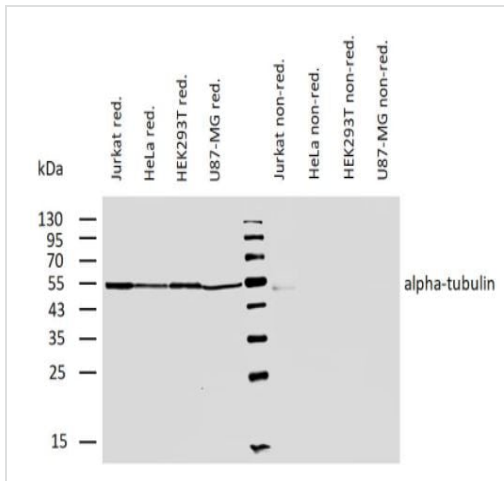
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Tubulin antibody [TU-01] (ab7750)

Ab7750 staining human normal skin. Staining is localised to the cytoplasm.

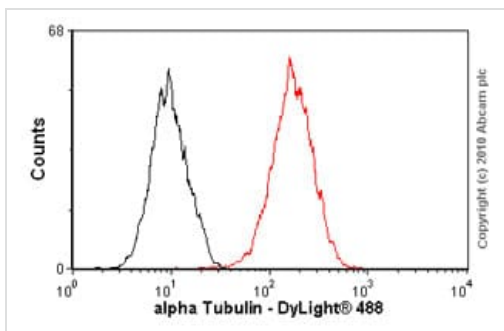
Left panel: with primary antibody at 2 ug/ml. Right panel: isotype control.

Sections were stained using an automated system at room temperature. Sections were rehydrated and antigen retrieved with a retrieval buffer EDTA pH 9.0 . Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 minutes. They were then blocked for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with an amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin. Please note that for manual staining we recommend

to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



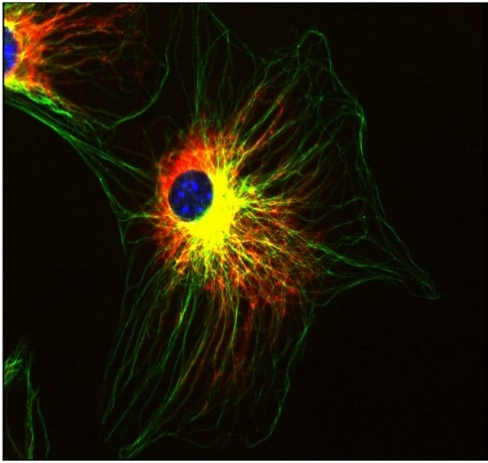
Western blot - Anti-alpha Tubulin antibody [TU-01] (ab7750)



Flow Cytometry (Intracellular) - Anti-alpha Tubulin antibody [TU-01] (ab7750)

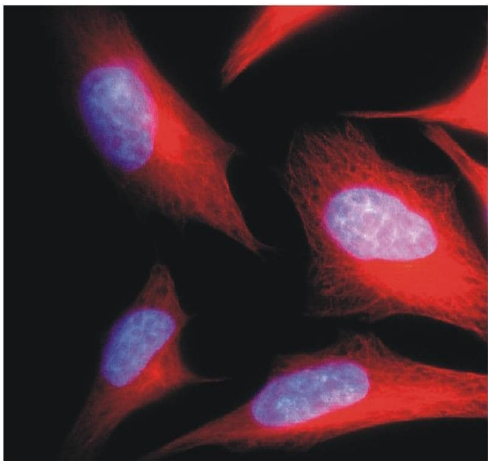
Western blotting analysis labeling alpha-tubulin using ab7750 on lysates of various cell lines under reducing and non-reducing conditions. Nitrocellulose membrane was probed with 2 µg/ml of [ab74696](#) followed by IRDye800-conjugated streptavidin. A specific band was detected for alpha-tubulin at approximately 54 kDa.

Overlay histogram showing HEK293 cells stained with ab7750 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab7750, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was anti-mouse DyLight® 488 ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with methanol (5 min)/permeabilized in 0.1% PBS-Triton used under the same conditions.



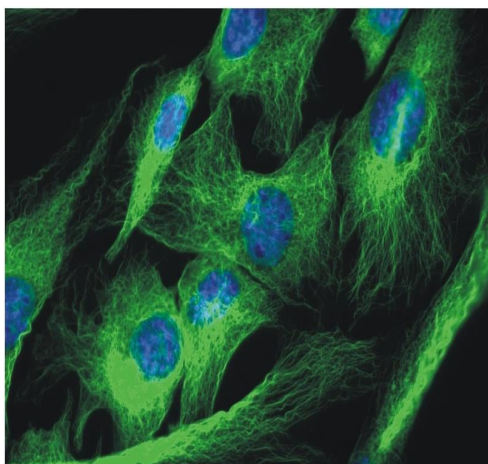
Immunocytochemistry/ Immunofluorescence analysis of NIH 3T3 (mouse embryonal fibroblast) cells labelling alpha tubulin (green) with ab7750. Vimentin was stained red as counterstain. DAPI was used to stain the nuclei blue.

Immunocytochemistry/ Immunofluorescence - Anti-alpha Tubulin antibody [TU-01] (ab7750)



Immunocytochemistry analysis of HeLa (human cervix carcinoma) cells labelling alpha tubulin (red) with ab7750. DAPI was used to stain the nuclei blue.

Immunocytochemistry/ Immunofluorescence - Anti-alpha Tubulin antibody [TU-01] (ab7750)



Immunocytochemistry analysis of NIH 3T3 (mouse embryonal fibroblast) cells labelling alpha tubulin (green) with ab7750. DAPI was used to stain the nuclei blue.

Immunocytochemistry/ Immunofluorescence - Anti-alpha Tubulin antibody [TU-01] (ab7750)

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