

Anti-Tubulin antibody [4D1] - Loading Control ab56676

★★★★★ [5 Abreviews](#) [41 References](#) [4 图像](#)

概述

产品名称	Anti-Tubulin抗体[4D1] - Loading Control
描述	小鼠单克隆抗体[4D1] to Tubulin - Loading Control
宿主	Mouse
经测试应用	适用于: WB, IHC-P, Flow Cyt
种属反应性	与反应: Human
免疫原	Recombinant full length protein corresponding to Human Tubulin aa 1-451. Database link: P68363
常规说明	<p>This product was changed from ascites to tissue culture supernatant on 15 May 2019. 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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.4 Constituent: PBS
纯度	Tissue culture supernatant
纯化说明	Purified from TCS.
克隆	单克隆
克隆编号	4D1
同种型	IgG2b

kappa

The Abpromise guarantee

“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
WB	★★★★★ (2)	Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

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

Undergoes a tyrosination/detyrosination cycle, the cyclic removal and re-addition of a C-terminal tyrosine residue by the enzymes tubulin tyrosine carboxypeptidase (TTCP) and tubulin tyrosine ligase (TTL), respectively.

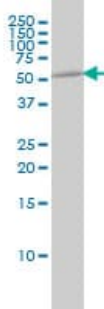
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTL10 in human. Monoglycylation is mainly 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-tubulins 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.

细胞定位

Cytoplasm > cytoskeleton.

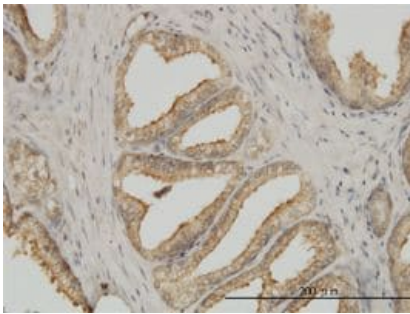
图片



Western blot - Anti-Tubulin antibody [4D1] - Loading Control (ab56676)

Tubulin antibody (ab56676) at 1ug/lane + A-431 cell lysate at 25ug/lane.

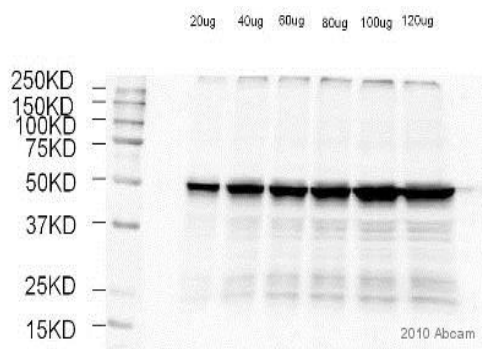
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tubulin antibody [4D1] - Loading Control (ab56676)

Tubulin antibody (ab56676) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human prostate.

This image was generated using the ascites version of the product.



Western blot - Anti-Tubulin antibody [4D1] - Loading Control (ab56676)

This image is courtesy of an Abreview submitted by Xun Ai

All lanes : Anti-Tubulin antibody [4D1] - Loading Control (ab56676) at 1 µg/ml (in TPBS for 18 hours at 4°C)

Lane 1 : Whole tissue lysate of rabbit heart at 20 µg

Lane 2 : Whole tissue lysate of rabbit heart at 40 µg

Lane 3 : Whole tissue lysate of rabbit heart at 60 µg

Lane 4 : Whole tissue lysate of rabbit heart at 80 µg

Lane 5 : Whole tissue lysate of rabbit heart at 100 µg

Lane 6 : Whole tissue lysate of rabbit heart at 120 µg

Secondary

All lanes : An HRP-conjugated Donkey anti-mouse IgG polyclonal at 1/50000 dilution

Developed using the ECL technique.

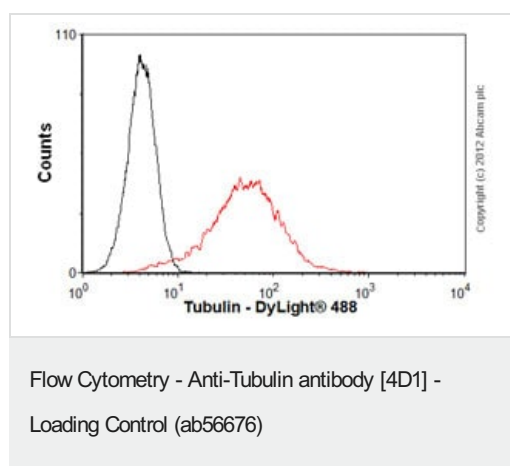
Performed under reducing conditions.

Observed band size: 47 kDa

Exposure time: 1 second

Blocking Step : 5% BSA for 2 hours at 23°C

This image was generated using the ascites version of the product.



Overlay histogram showing HeLa cells stained with ab56676 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween 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 (ab56676, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] ([ab91366](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This image was generated using the ascites version of the product.

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