abcam

Product datasheet

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

★★★★★ <u>5 Abreviews</u> <u>41 References</u> 画像数 4

製品の概要

製品名 Anti-Tubulin antibody [4D1] - Loading Control

製品の詳細 Mouse monoclonal [4D1] to Tubulin - Loading Control

由来種 Mouse

アプリケーション 適用あり: WB, IHC-P, Flow Cyt

種交差性 交差種: Human

免疫原 Recombinant full length protein corresponding to Human Tubulin aa 1-451.

Database link: P68363

特記事項 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.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.4

Constituent: PBS

精製度 Tissue culture supernatant

特記事項(精製) Purified from TCS.

ポリ/モノ モノクローナル

クローン名 4D1 **アイソタイプ I**gG2b

1

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab56676の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	*** <u>*</u>	Use at an assay dependent concentration.
IHC-P	*** <u>*</u>	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170192 - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.

ターゲット情報

機能

配列類似性

翻訳後修飾

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.

Belongs to the tubulin family.

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.

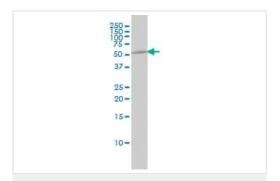
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly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

細胞内局在

Cytoplasm > cytoskeleton.

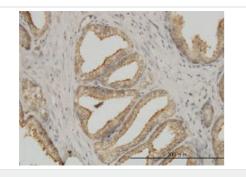
画像



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 paraffinembedded 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 μ g/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.

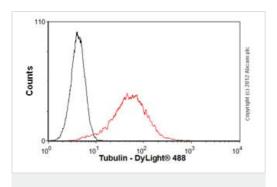
Performed under reducing conditions.

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.



Flow Cytometry - Anti-Tubulin antibody [4D1] - Loading Control (ab56676)

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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		5			