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# Product datasheet

# Anti-beta Tubulin antibody ab15568

★★★★★ 6 Abreviews 85 References 画像数 5

製品の概要

製品名 Anti-beta Tubulin antibody

製品の詳細 Rabbit polyclonal to beta Tubulin

由来種 Rabbit

特異性 Homology with Tubulin beta chain and Tubulin beta-3 chain

アプリケーション 適用あり: ICC/IF, IHC-P, WB

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Chicken, Guinea pig, Cow, Dog, Pig, Saccharomyces cerevisiae, Xenopus laevis, Chimpanzee, Sea urchin, Fungi, Rice, Xenopus tropicalis

免疫原 Synthetic peptide within Human beta Tubulin aa 400 to the C-terminus. The exact sequence is

proprietary.

Database link: Q13509

特記事項 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

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. Avoid freeze / thaw cycles.

**バッファー** pH: 7.60

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

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

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ab15568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
ICC/IF	**** <u>(1)</u>	Use a concentration of 1 µg/ml.
IHC-P	*** <u>*</u> (2)	1/200. Antigen retrieval is not essential but may optimise staining.
WB	<b>★★★★★</b> (3)	Use at an assay dependent concentration. Predicted molecular weight: 55 kDa.

#### ターゲット情報

機能 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.

組織特異性 Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

**関連疾患** Cortical dysplasia, complex, with other brain malformations 6

Skin creases, congenital symmetric circumferential, 1

**配列類似性** Belongs to the tubulin family.

ドメイン The highly acidic C-terminal region may bind cations such as calcium.

翻訳後修飾
Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group (PubMed:26875866). Polyglutamylation plays a key role in

microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as

the number of glutamates per tubulin rises from one to eight, but decreases beyond this

glutamylation threshold (PubMed:26875866).

Some glutamate residues at the C-terminus are 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). Both polyglutamylation and monoglycylation can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation,

and reciprocally. The precise function of monoglycylation is still unclear.

Phosphorylated on Ser-172 by CDK1 during the cell cycle, from metaphase to telophase, but not

in interphase. This phosphorylation inhibits tubulin incorporation into microtubules.

**細胞内局在** Cytoplasm, cytoskeleton.

## 画像



Western blot - Anti-beta Tubulin antibody (ab15568)

All lanes: Anti-beta Tubulin antibody (ab15568) at 1 µg/ml

Lane 1: Human brain tissue lysate - total protein (ab29466)

Lane 2: U2OS (Human osteosarcoma cell line) Whole Cell Lysate

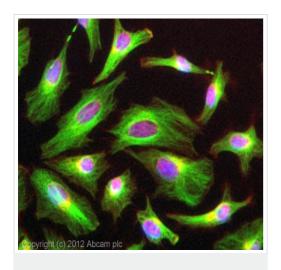
Lysates/proteins at 10 µg per lane.

# **Secondary**

 $\textbf{All lanes:} \ \, \textbf{Goat polyclonal to Rabbit lgG-H\&L-Pre-Adsorbed}$ 

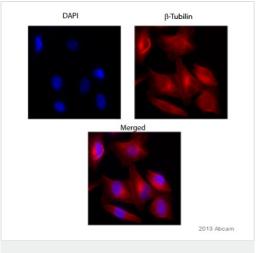
(HRP) at 1/3000 dilution

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

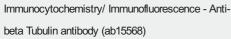


Immunocytochemistry/ Immunofluorescence - Antibeta Tubulin antibody (ab15568)

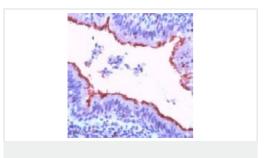
ICC/IF image of ab15568 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab15568, 1μg/ml) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit lgG (H+L) 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.



ab15568 staining beta Tubulin in IMR32 Human neuroblastoma cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.3% Triton X-100 and blocked with 1% BSA for 1 hour at 25°C. Samples were incubated with primary antibody (1/100 in 1% BSA containing TBST) for 16 hours at 4°C. A Cy3®-conjugated Goat anti-rabbit IgG polyclonal (1:1000) was used as the secondary antibody. Blue - nuclei (DAPI).

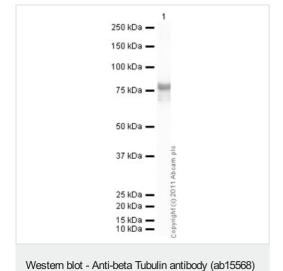


This image is courtesy of an anonymous Abreview



ab15568 staining beta Tubulin in Human lung by Immunohistochemistry (FFPE-sections).

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta Tubulin antibody (ab15568)



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