# abcam

# Product datasheet

# Anti-beta III Tubulin antibody ab41489

★★★★★ 6 Abreviews 55 References 画像数 3

## 製品の概要

製品名 Anti-beta III Tubulin antibody

製品の詳細 Chicken polyclonal to beta III Tubulin

由来種 Chicken

アプリケーション 適用あり: ICC/IF 種交差性 交差種: Mouse

免疫原 Three different synthetic peptides conjugated to KLH. These synthetic peptides corresponded to

different regions of the beta III Tubulin gene product, but are shared between human and rat.

特記事項 Equal volumes of three different affinity-purified anti-peptide antibodies were combined to make

this product.

Do not freeze antibody unless you want to store for longer periods of time. Note, however, that

each time an antibody preparation is frozen, about half its binding activity is lost.

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. Store at 4°C (stable for up to 12 months). Upon delivery aliquot. Store at +4°C.

Avoid freeze / thaw cycle. Store In the Dark.

**バッファー** pH: 7

Preservative: 0.02% Sodium azide Constituent: 99.98% 1X PBS

精製度 Immunogen affinity purified

特記事項(精製) After repeated injections into the hens, immune eggs were collected, and the lgY fractions were

purified from the yolks. These IgY fractions were then affinity-purified using a peptide column.

**ポリ**/モノ ポリクローナル

1

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab41489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	<b>★★★★</b> (3)	1/1000 - 1/2000.

#### 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. TUBB3 plays a critical role in proper axon guidance and mantainance.

組織特異性

関連疾患

Expression is primarily restricted to central and peripheral nervous system.

Defects in TUBB3 are the cause of congenital fibrosis of extraocular muscles type 3A (CFEOM3A) [MIM:600638]. A congenital ocular motility disorder marked by restrictive ophthalmoplegia affecting extraocular muscles innervated by the oculomotor and/or trochlear nerves. It is clinically characterized by anchoring of the eyes in downward gaze, ptosis, and backward tilt of the head. Congenital fibrosis of extraocular muscles type 3 presents as a nonprogressive, autosomal dominant disorder with variable expression. Patients may be bilaterally or unilaterally affected, and their oculo-motility defects range from complete ophthalmoplegia (with the eyes fixed in a hypo- and exotropic position), to mild asymptomatic restrictions of ocular movement. Ptosis, refractive error, amblyopia, and compensatory head positions are associated with the more severe forms of the disorder. In some cases the ocular phenotype is accompanied by additional features including developmental delay, corpus callosum agenesis, basal ganglia dysmorphism, facial weakness, polyneuropathy.

配列類似性

Belongs to the tubulin family.

翻訳後修飾

ドメイン

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

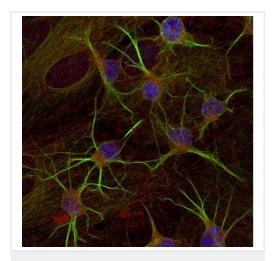
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly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

細胞内局在

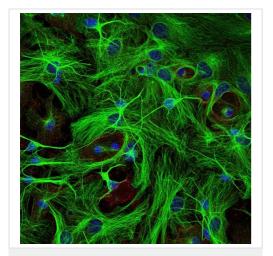
Cytoplasm > cytoskeleton.

#### 画像



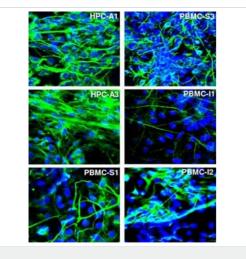
Immunocytochemistry/ Immunofluorescence - Antibeta III Tubulin antibody (ab41489)

Immunocytochemistry/Immunofluorescence analysis of SpH21 cells in culture labelling beta III Tubulin (green) with ab41489. Cells were fixed with 4% paraformaldehyde. Red - Rabbit anti-GAD67, Blue - DAPI.



Immunocytochemistry/ Immunofluorescence - Antibeta III Tubulin antibody (ab41489)

Immunocytochemistry/Immunofluorescence analysis of SpH64 cells in culture labelling beta III Tubulin (green) with ab41489. Cells were fixed with 4% paraformaldehyde. Red - Rabbit anti-GFP, Blue: DAPI.



Immunocytochemistry/ Immunofluorescence - Anti-

beta III Tubulin antibody (ab41489)

Image from Ohmine S et al., Stem Cell Research & Therapy 2011, 2:46, 16 November 2011. Fig 5.; doi: 10.1186/scrt87.

Immunofluorescence analysis of HPC and PBMC blood-derived iPSC clones, staining beta Ill Tubulin (green) with ab41489.

Cells were fixed with 4% PFA and blocked for 30 minutes in PBS with 5% fetal bovine serum. Cells were incubated with primary antibody overnight at 4°C. A FITC-conjugated donkey anti-chicken IgG was used as the secondary antibody.

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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

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