# abcam

## Product datasheet

# Alexa Fluor® 647 Anti-beta III Tubulin antibody [2G10] ab195880

★★★★★ 1 Abreviews 1 图像

#### 概述

产品名称 Alexa Fluor® 647荧光Anti-beta III Tubulin抗体[2G10]

描述 Alexa Fluor® 647荧光小鼠单克隆抗体[2G10] to beta Ill Tubulin

**宿主** Mouse

**偶联物** Alexa Fluor® 647. Ex: 652nm, Em: 668nm

 经测试应用
 适用于: ICC/IF

 种属反应性
 与反应: Rat

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 ICC/IF: PC12 cells

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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

性能

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形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)

纯**度** lgG fraction

 克隆
 单克隆

 克隆编号
 2G10

 同种型
 IgG2a

### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab195880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
ICC/IF		1/50.

#### 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.

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

组织特异性 Expression is primarily restricted to central and peripheral nervous system.

疾病相关 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 non-progressive, 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.

**序列相似性** Belongs to the tubulin family.

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

翻译后修饰 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.

#### 细胞定位

Cytoplasm > cytoskeleton.

#### 图片



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-beta III Tubulin antibody [2G10] (ab195880)

ab195880 staining beta III Tubulin in PC12 cells. The cells were fixed with 100% methanol (5 min), permeabilised in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab195880 at 1/50 dilution (shown in red) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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