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Product datasheet

Anti-Neuron specific beta III Tubulin antibody ab229590

3 References 画像数 8

製品の概要

製品名 Anti-Neuron specific beta III Tubulin antibody

製品の詳細 Rabbit polyclonal to Neuron specific beta III Tubulin

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, IP, IHC-P, WB, IHC-Fr

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Neuron specific beta III Tubulin (internal sequence). The exact

sequence is proprietary. Carrier-protein conjugated.

Database link: Q13509

ポジティブ・コントロール WB: HeLa, U-87 MG, SK-N-SH, IMR32 and SK-N-AS whole cell extracts; Mouse and rat brain

tissue extracts. IP: SK-N-SH whole cell extract. IHC-P: Rat brain tissue. IHC-Fr: E13.5 rat brain

tissue. ICC/IF: DIV9 rat E18 primary cortical neurons.

特記事項

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

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Abpromise保証は、次のテスト済みアプリケーションにおけるab229590の使用に適用されます The Abpromise guarantee 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		1/100 - 1/1000.
IP		1/100 - 1/500.
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/50000.
IHC-Fr		1/100 - 1/1000.

ターゲット情報

機能

組織特異性

関連疾患

配列類似件

ドメイン

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

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.

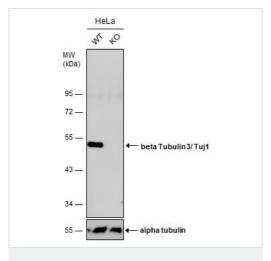
Belongs to the tubulin family.

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.

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Western blot - Anti-Neuron specific beta III Tubulin antibody (ab229590)

All lanes : Anti-Neuron specific beta III Tubulin antibody (ab229590) at 1/5000 dilution

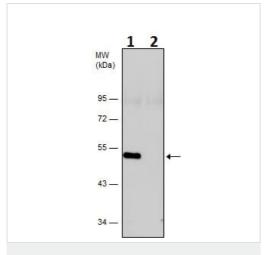
Lane 1: WT HeLa cell extract

Lane 2 : Neuron specific beta III Tubulin Knockout HeLa cell extracts

Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP-conjugated anti-rabbit lgG



Western blot - Anti-Neuron specific beta III Tubulin antibody (ab229590)

All lanes : Anti-Neuron specific beta III Tubulin antibody (ab229590) at 1/5000 dilution

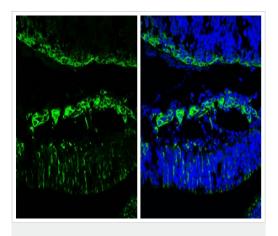
Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract

Lane 2: Neuron specific beta III Tubulin knockout HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract

Lysates/proteins at 30 µg per lane.

Developed using the ECL technique.

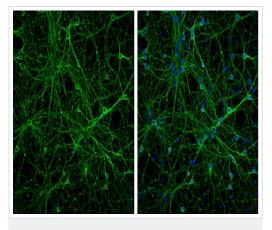
10% SDS-PAGE gel.



Immunohistochemistry (Frozen sections) - Anti-Neuron specific beta III Tubulin antibody (ab229590)

Frozen E13.5 rat brain tissue stained for Neuron specific beta III Tubulin (green) using ab229590 at 1/250 dilution in immunohistochemical analysis.

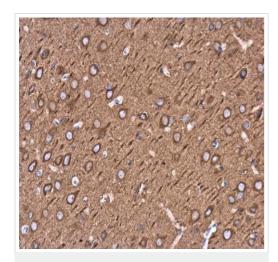
Nuclear counterstain: Fluoroshield with DAPI (blue).



Immunocytochemistry/ Immunofluorescence - Anti-Neuron specific beta III Tubulin antibody (ab229590)

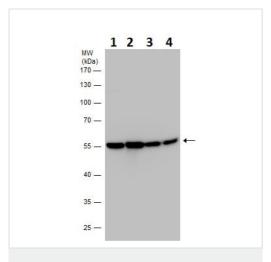
4 % paraformaldehyde-fixed DIV9 rat E18 primary cortical neurons stained for Neuron specific beta III Tubulin (green) using ab229590 at 1/500 dilution in ICC/IF.

Nuclear counterstain: Fluoroshield with DAPI (blue).

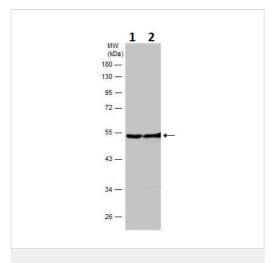


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Neuron specific beta III
Tubulin antibody (ab229590)

Paraffin-embedded rat brain tissue stained for Neuron specific beta III Tubulin using ab229590 at 1/500 dilution in immunohistochemical analysis.



Western blot - Anti-Neuron specific beta III Tubulin antibody (ab229590)



Western blot - Anti-Neuron specific beta III Tubulin antibody (ab229590)

All lanes : Anti-Neuron specific beta III Tubulin antibody (ab229590) at 1/1000 dilution

Lane 1 : U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell extract

Lane 2 : SK-N-SH (human neuroblastoma cell line) whole cell extract

Lane 3: IMR32 whole cell extract

Lane 4: SK-N-AS whole cell extract

Lysates/proteins at 30 µg per lane.

10% SDS-PAGE gel.

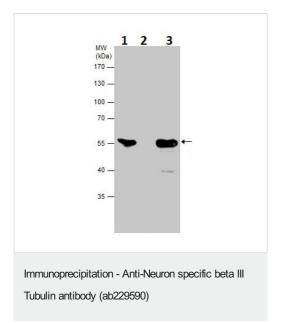
All lanes : Anti-Neuron specific beta III Tubulin antibody (ab229590) at 1/50000 dilution

Lane 1: Mouse brain tissue extract

Lane 2: Rat brain tissue extract

Lysates/proteins at 50 µg per lane.

10% SDS-PAGE gel.



Neuron specific beta III Tubulin was immunoprecipitated from SK-N-SH (human neuroblastoma cell line) whole cell extract with 5 μ g ab229590. Western blot was performed from the immunoprecipitate using ab229590. Anti-rabbit lgG was used as a secondary antibody.

Lane 1: SK-N-SH whole cell extract (Input).

Lane 2: Control IgG instead of ab229590 in SK-N-SH whole cell extract.

Lane 3: ab229590 IP in SK-N-SH whole cell extract.

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