

Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric)
ab279289

重组

1 References 6 图像

概述	
产品名称	Anti-GFAP抗体[EPR1034Y] -小鼠IgG1 (Chimeric)
描述	小鼠单克隆抗体[EPR1034Y] to GFAP -小鼠IgG1
宿主	Mouse
经测试应用	适用于: Flow Cyt (Intra), IHC-Fr, IP, IHC-P, WB, ICC
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Human, mouse and rat brain tissue lysate. IHC-Fr: Mouse cerebrum tissue. Flow Cyt (intra): Rat primary neural/glia cells. IP: Rat brain tissue lysate. IHC-P: Human cerebral cortex tissue. ICC: Primary hippocampal rat neurons/glia
常规说明	This mouse monoclonal chimeric antibody has been engineered from a RabMAb parent antibody (ab68428). By necessity, some rabbit sequence is retained as part of the variable domain. When multiplexing with other rabbit-derived antibodies, using cross absorbed Fc-reactive secondary antibodies are recommended.
性能	
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 long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR1034Y
同种型	IgG1

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab279289于以下的经测试应用

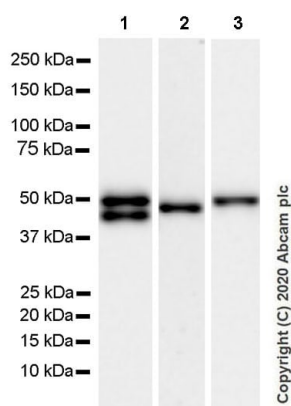
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/1000.
IHC-Fr		1/500. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		1/30.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000.
ICC		Use a concentration of 1 - 5 µg/ml.

靶标

功能	GFAP, a class-III intermediate filament, is a cell-specific marker that, during the development of the central nervous system, distinguishes astrocytes from other glial cells.
组织特异性	Expressed in cells lacking fibronectin.
疾病相关	Defects in GFAP are a cause of Alexander disease (ALEXD) [MIM:203450]. Alexander disease is a rare disorder of the central nervous system. It is a progressive leukoencephalopathy whose hallmark is the widespread accumulation of Rosenthal fibers which are cytoplasmic inclusions in astrocytes. The most common form affects infants and young children, and is characterized by progressive failure of central myelination, usually leading to death usually within the first decade. Infants with Alexander disease develop a leukoencephalopathy with macrocephaly, seizures, and psychomotor retardation. Patients with juvenile or adult forms typically experience ataxia, bulbar signs and spasticity, and a more slowly progressive course.
序列相似性	Belongs to the intermediate filament family.
翻译后修饰	Phosphorylated by PKN1.
细胞定位	Cytoplasm. Associated with intermediate filaments.

图片



Western blot - Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

All lanes : Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289) at 1/1000 dilution

Lane 1 : Human brain tissue lysate

Lane 2 : Mouse brain tissue lysate

Lane 3 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

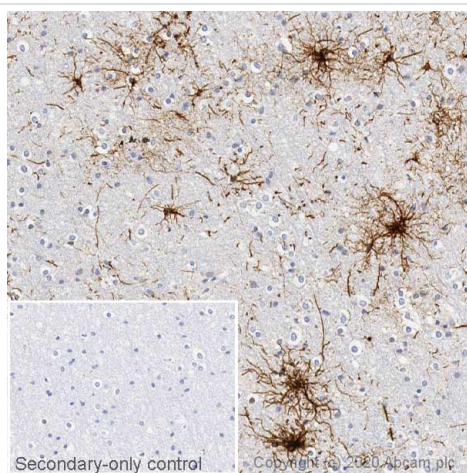
All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/5000 dilution

Observed band size: 40-50 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

The molecular weight observed is consistent with the literature (PMID: 824020, 2294, 6340792).

Exposure times: Lane 1: 3.25 seconds; Lane 2: 48 seconds; Lane 3: 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

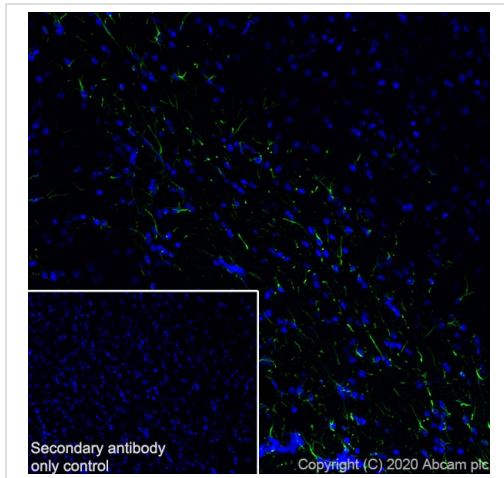
IHC image of GFAP staining in a section of formalin-fixed paraffin-embedded normal human cerebral cortex performed on a Leica BOND™ system using the standard protocol F.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab279289, 1 µg/ml, for 15 mins at room temperature. A rabbit anti-mouse IgG1, [ab125913](#), was added for 8 mins at room temperature and detected using an HRP conjugated goat anti-rabbit compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated)

customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

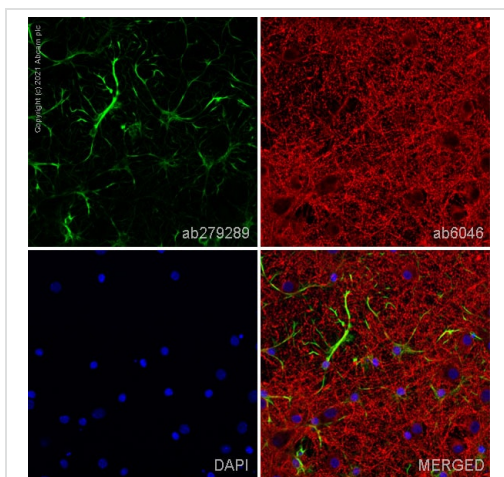


Immunohistochemistry (Frozen sections) - Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse cerebrum tissue labeling GFAP with ab279289 at 1/500 (1.968 µg/ml) dilution followed by **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on mouse cerebrum is observed. The nuclear counterstain was DAPI (Blue).

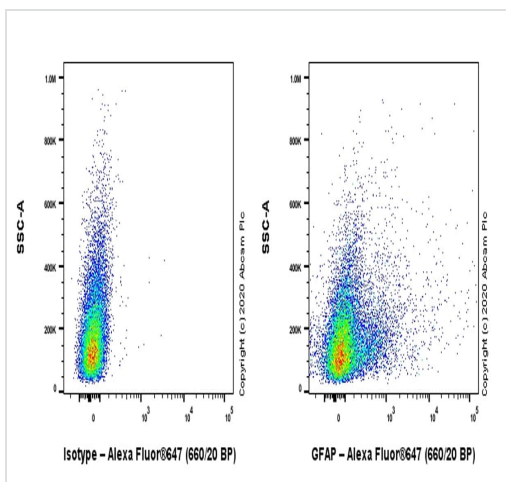
Secondary antibody control: Secondary antibody is **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunocytochemistry - Anti-GFAP antibody [EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

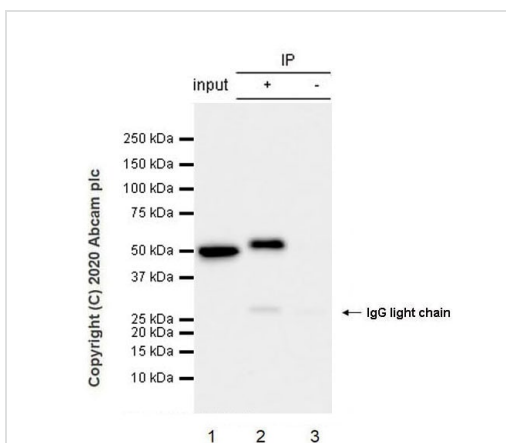
ab279289 staining GFAP in primary hippocampal rat neurons/glia (obtained from Neuromics, cat. no. PC35101), DIV14. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab279289 at 1 µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin. Cells were then incubated with **ab150117**, Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150084**, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). The antibody ab279289 gave comparable results using MeOH fixation (100%, 5 min).



Flow Cytometry (Intracellular) - Anti-GFAP antibody
[EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized rat primary neural/glia cells labelling GFAP with ab279289 at 1/1000 dilution (0.1 µg)/ Right compared with a Mouse monoclonal IgG isotype control/ Left.

Goat Anti-Mouse IgG (Alexa Fluor® 647, **ab150119**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-GFAP antibody
[EPR1034Y] - Mouse IgG1 (Chimeric) (ab279289)

GFAP was immunoprecipitated from 0.35 mg rat brain tissue lysate 10 µg with ab279289 at 1/30 dilution (2 µg in 0.35mg lysates).

Western blot was performed on the immunoprecipitate using ab279289 at 1/1000 dilution. mouse IgG for IP (HRP) (**ab131368**) was used at 1/5000 dilution.

Lane 1: Rat brain tissue lysate 10 µg.

Lane 2: ab279289 IP in rat brain tissue lysate.

Lane 3: Mouse monoclonal IgG1 (**ab18443**) instead of ab279289 in rat brain tissue lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 23 seconds.

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