abcam

Product datasheet

Anti-Calbindin antibody [EP3478] ab108404



重组 RabMAb

★★★★★ 3 Abreviews 22 References 15 图像

概述

产品名称 Anti-Calbindin抗体[EP3478]

描述 兔单克隆抗体[EP3478] to Calbindin

宿主 Rabbit

特异性 We do not guarantee IHC-P for mouse and rat.

We do not guarantee IHC-Fr for human.

经测试应用 适用于: WB, IHC-P, ICC/IF, IHC-Fr, Flow Cyt (Intra), mIHC

不适用于: IP

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: Recombinant Human Calbindin protein (ab117207), fetal brain, fetal cerebellum, fetal

> hypothalamus and fetal pituitary lysates, SH-SY5Y, Human kidney, Mouse brain, Mouse kidney, and Rat brain lysates. IHC-P: Human cerebrum and Human brain tissue. IHC-Fr: Mouse and Rat cerebellum tissues. ICC/IF: Mouse hippocampal cells. Flow Cyt (intra): SH-SY5Y cells. mIHC:

Human cerebellum tissue.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

性能

形式

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯**度** Protein A purified

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab108404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
WB		1/1000 - 1/10000. Predicted molecular weight: 30 kDa.
IHC-P	★★★★☆ (1)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. We do not guarantee IHC-P for mouse and rat. See IHC antigen retrieval protocols
ICC/IF		1/150. For unpurified use at 1/100
IHC-Fr	**** <u>(1)</u>	1/500. We do not guarantee IHC-Fr for human
Flow Cyt (Intra)		1/150.
mIHC		1/1000.

应用说明 Is unsuitable for IP.

靶标

功能 Buffers cytosolic calcium. May stimulate a membrane Ca(2+)-ATPase and a 3',5'-cyclic

nucleotide phosphodiesterase.

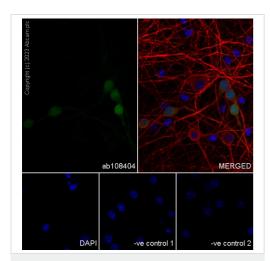
序列相似性 Belongs to the calbindin family.

Contains 5 EF-hand domains.

结构域 This protein has four functional calcium-binding sites; potential sites II and VI have lost affinity for

calcium.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Calbindin antibody [EP3478] (ab108404)

Immunofluorescent analysis was performed on 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized mouse hippocampal primary neural/glia cells labelling Calbindin with ab108404 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody (ab150077) at dilution of 1/1000 (green).

Anti-MAP2 antibody [HM-2] (ab11267) at 1/1000 dilution was used as a counterstain, with Goat Anti-Mouse IgG H&L (Alexa Fluor[®] 594) preadsorbed as the secondary antibody (ab150120) at dilution of 1/1000 (red).

Negative control 1: Anti-Calbindin (ab108404) at 1/250 dilution with Goat Anti-Mouse IgG H&L (Alexa Fluor[®] 594) preadsorbed as the secondary antibody (**ab150120**) at dilution of 1/1000.

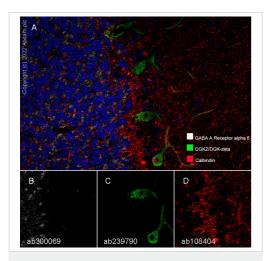
Negative control 2: Anti-MAP2 antibody [HM-2] (ab11267) at 1/200 dilution with Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) secondary antibody (ab150077) at dilution of 1/1000.

The nuclear counterstain is DAPI (blue).

Confocal image showing positive staining in subsets of mouse hippocampal primary neuron.

Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.

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



Multiplex immunohistochemistry - Anti-Calbindin antibody [EP3478] (ab108404)

Fluorescence multiplex immunohistochemical analysis of human cerebellum (formalin-fixed paraffin-embedded section). Merged staining of <u>ab300069</u>, GABA A Receptor alpha 6 at 1:500 (1.244 µg/ml) [Panel B], <u>ab239790</u>, DGKZ/DGK-zeta at 1:9000 (0.109 µg/ml) [Panel C], and ab108404, Calbindin at 1:1000 (1.394 µg/ml) [Panel D] on human cerebellum. Followed by Opal Polymer HRP Ms + Rb secondary. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument with an Opal[™] 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of <u>ab300069</u>, <u>ab239790</u>, and ab108404 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval

1 2 3 4 5 6

250 kDa —
150 kDa —
150 kDa —
75 kDa —
37 kDa —
25 kDa —
20 kDa —
15 kDa —
115 kDa —
115 kDa —
115 kDa —

Western blot - Anti-Calbindin antibody [EP3478] (ab108404)

solution2) for 20 mins was used. DAPI (dark blue) was used as a nuclear counter stain.

All lanes : Anti-Calbindin antibody [EP3478] (ab108404) at 1/2000 dilution (Purified)

Lane 1: Human fetal brain lysates

Lane 2 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell

lysates

Lane 3: Human kidney lysates

Lane 4: Mouse brain lysates

Lane 5: Mouse kidney lysates

Lane 6: Rat brain lysates

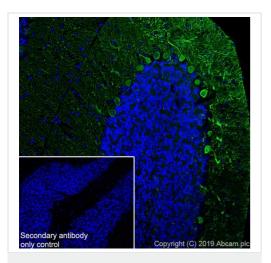
Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

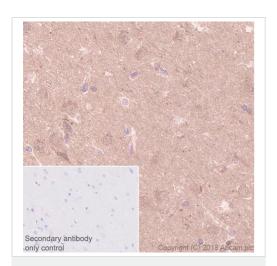
Predicted band size: 30 kDa **Observed band size:** 30 kDa



Immunohistochemistry (Frozen sections) - Anti-Calbindin antibody [EP3478] (ab108404)

Immunohistochemistry (Frozen) analysis of mouse cerebellum tissue sections labeling Calbindin with purified ab108404 at 1/500 dilution (3.0 μ g/ml). The tissue section was fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) at 1/1000 (2 μ g/ml) was used as the secondary antibody. DAPI (blue) was used as nuclear counterstain.

Secondary antibody only control: PBS instead of the primary antibody



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody
[EP3478] (ab108404)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cerebrum tissue sections labeling Calbindin with purified ab108404 at 1/1000 dilution (1.49 µg/ml). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Calbindin antibody [EP3478] (ab108404)

All lanes : Anti-Calbindin antibody [EP3478] (ab108404) at 1/1000 dilution

Lane 1: Fetal brain lysate

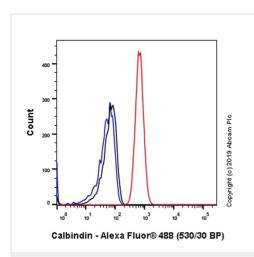
Lane 2: Fetal cerebellum lysate

Lane 3: Fetal hypothalamus lysate

Lane 4: Fetal pituitary lysate

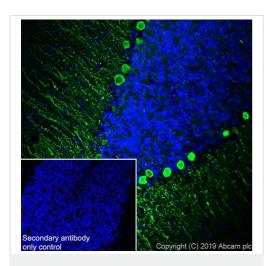
Lysates/proteins at 10 µg per lane.

Predicted band size: 30 kDa



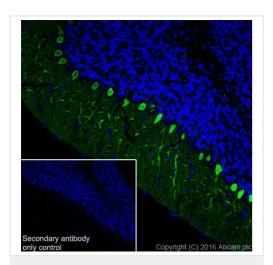
Flow Cytometry (Intracellular) - Anti-Calbindin antibody [EP3478] (ab108404)

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling Calbindin with purified ab108404 at 1/150 dilution (10 μ g/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Frozen sections) - Anti-Calbindin antibody [EP3478] (ab108404)

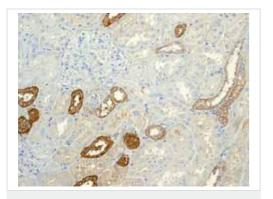
Immunohistochemistry (Frozen) analysis of rat cerebellum tissue sections labeling Calbindin with purified ab108404 at 1/500 dilution (3.0 μ g/ml). The tissue section was fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) at 1/1000 (2 μ g/ml) was used as the secondary antibody. DAPI (blue) was used as nuclear counterstain. Secondary antibody only control: PBS instead of the primary antibody



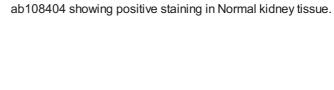
Immunohistochemistry (Frozen sections) - Anti-Calbindin antibody [EP3478] (ab108404)

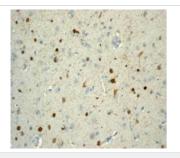
Immunohistochemical analysis of mouse frozen cerebellum tissue sections with ab108404 labelling Calbindin at 1/500. Sections were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, Alexa Fluor 488-conjugated goat antirabbit IgG (1/1000) was used as the secondary antibody. Nuclei were counterstained with DAPI (blue). The image shows specific staining on Purkinje cells of mouse cerebellum.

Secondary antibody only was used as negative control and is shown in the inset.



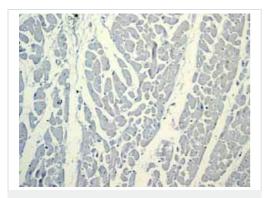
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody
[EP3478] (ab108404)





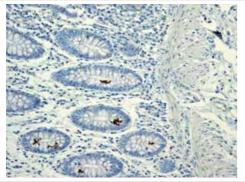
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody
[EP3478] (ab108404)

ab108404, at 1/100 dilution, staining Calbindin in paraffinembedded Human brain tissue by Immunohistochemistry.

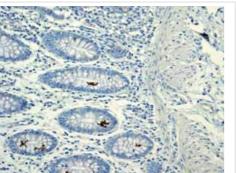


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody [EP3478] (ab108404)

ab108404 showing negative staining in Normal heart tissue.

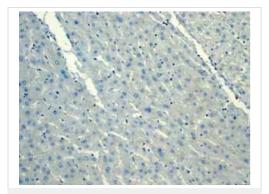


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody [EP3478] (ab108404)

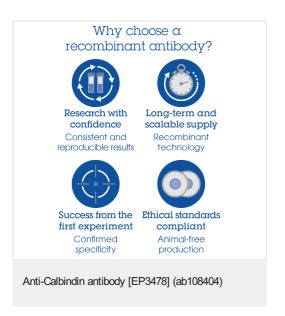


ab108404 showing negative staining in Normal liver tissue.

ab108404 showing negative staining in Normal colon tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody [EP3478] (ab108404)



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