abcam

Product datasheet

Anti-GAP43 antibody [EP890Y] - Neuronal Marker ab75810

リコンビナント RabMAb

★★★★★ 8 Abreviews 75 References 画像数 12

製品の概要

製品名	Anti-GAP43 antibody [EP890Y] - Neuronal Marker
製品の詳細	Rabbit monoclonal [EP890Y] to GAP43 - Neuronal Marker
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: SH-SY5Y, Human brain, Mouse brain, Rat brain, and PC-12 lysates. IHC-P: human cerebrum, mouse cerebrum, and rat cerebrum tissues. ICC/IF: Neuro-2a cells. Flow Cyt (intra): SH-SY5Y cells. IP: SH-SY5Y cells.
特記事項	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**.

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: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP890Y

アイソタイプ	IgG

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ab75810の使用に適用されます

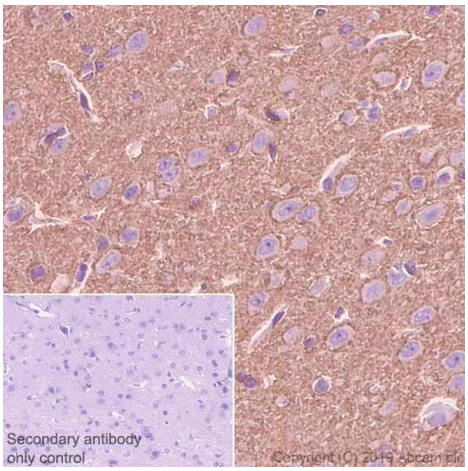
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/20. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (1)	1/160. **For unpurified use at 1/500.**
WB	★★★★★ (2)	1/1000. Detects a band of approximately 48 kDa (predicted molecular weight: 25 kDa). **For unpurified use at 1/100000 - 1/200000.** The expression of GAP43 is undetectable in undifferentiated PC-12 cells in Western Blot (Ref: PMID: 2139463, PMID: 15969743)
IP		1/20 - 1/50.
IHC-P	★★★★★ (5)	1/3000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. **For unpurified use at 1/500.**

ターゲット情報

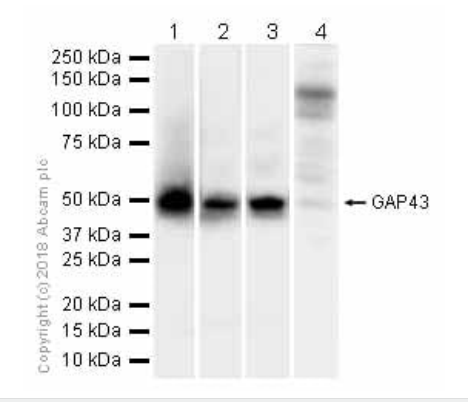
機能	This protein is associated with nerve growth. It is a major component of the motile "growth cones" that form the tips of elongating axons.
配列類似性	Belongs to the neuromodulin family. Contains 1 IQ domain.
翻訳後修飾	Phosphorylation of this protein by a protein kinase C is specifically correlated with certain forms of synaptic plasticity.
細胞内局在	Cell membrane. Cell projection > growth cone membrane. Cell junction > synapse. Cytoplasmic surface of growth cone and synaptic plasma membranes.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling GAP43 with Purified ab75810 at 1:3000 dilution (0.07 µg/ml). Heat mediated antigen retrieval using Bond© Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

All lanes : Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810) (Purified)

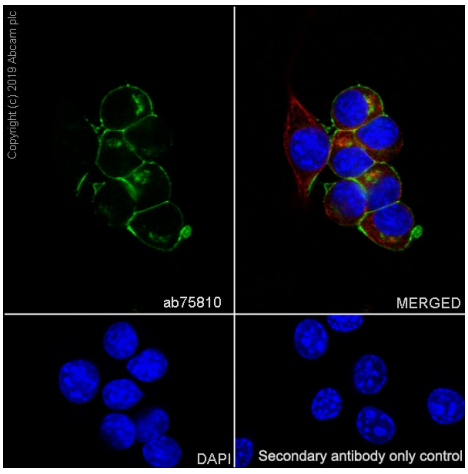
Lane 1 : Human brain lysates
Lane 2 : Mouse brain lysates
Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

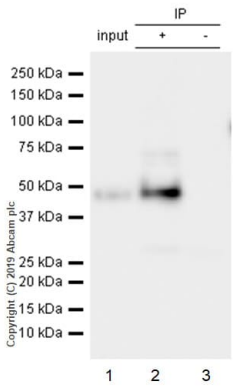
Predicted band size: 25 kDa
Observed band size: 48 kDa

This antibody fails to detect GAP43 in PC-12 cells which is positve as described in PMID: 21695168



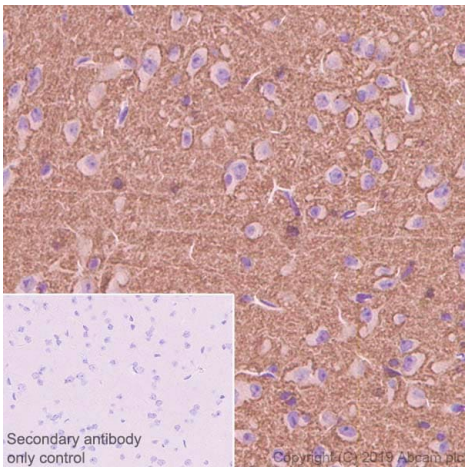
Immunocytochemistry/ Immunofluorescence - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Immunocytochemistry/ Immunofluorescence analysis of Neuro-2a (Mouse neuroblastoma neuroblast) cells labeling GAP43 with Purified ab75810 at 1:160 dilution (1.4 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



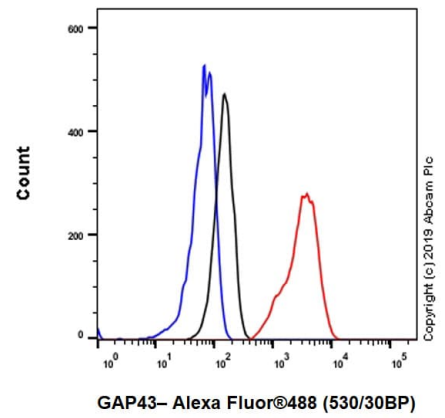
Immunoprecipitation - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

ab75810 (Purified) at 1:20 dilution (1 µg) immunoprecipitating GAP43 in SH-SY5Y whole cell lysate.
Lane 1 (input): SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate 10 µg
Lane 2 (+): ab75810 & SH-SY5Y whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab75810 in SH-SY5Y whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



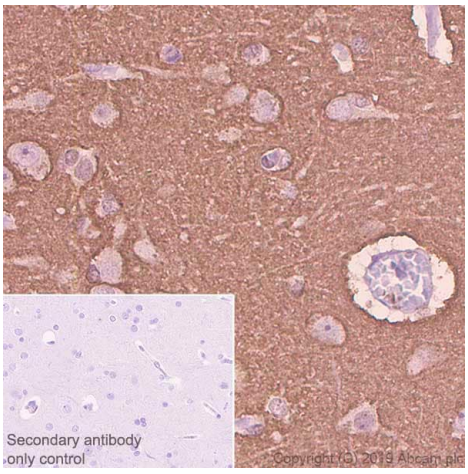
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue sections labeling GAP43 with Purified ab75810 at 1:3000 dilution (0.07 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



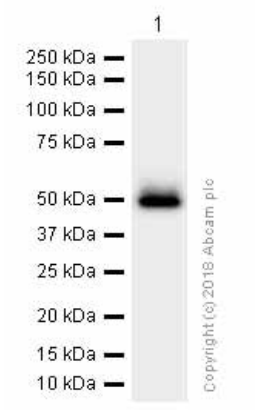
Flow Cytometry (Intracellular) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling GAP43 with Purified ab75810 at 1/20 dilution (10 µg/ml) (Red). Cells were fixed with 80% Methanol and permeabilised with 0.1% Tween-20. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling GAP43 with Purified ab75810 at 1:3000 dilution (0.07 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

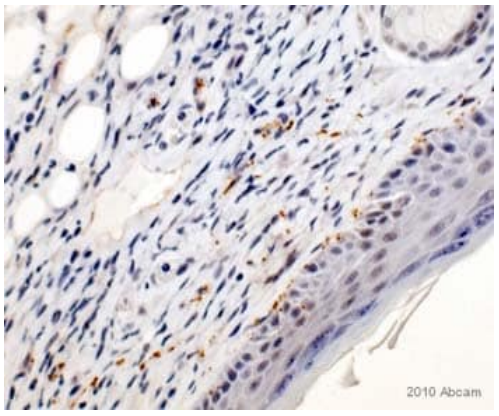
Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810) at 1/50000 dilution (Purified) + SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 25 kDa

Observed band size: 48 kDa



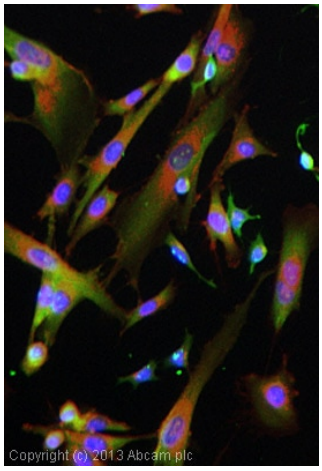
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

This image is a courtesy of anonymous Abreview.

ab75810 (unpurified) staining GAP43 in Mouse ear tissue sections by Immunohistochemistry (Formalin/ PFA-fixed paraffin-embedded tissue sections). The sections were formaldehyde fixed, subjected to heat mediated antigen retrieval at pH 6 and blocked for 10 minutes at 25C. The primary antibody was diluted 1/500 and incubated with the sample for 1 hour at 25°C. An HRP polymer anti-rabbit IgG system was used undiluted, as the secondary antibody.

Flow Cytometry (Intracellular) - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

Overlay histogram showing SH-SY5Y cells stained with ab75810 (unpurified) (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab75810, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

ICC/IF image of ab75810 (unpurified) stained SKNSH cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab75810, 1/50 dilution) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG(H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Anti-GAP43 antibody [EP890Y] - Neuronal Marker (ab75810)

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