

Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] - BSA and Azide free ab230136

リコンビナント RabMAb

1 References [画像数 5](#)

製品の概要

製品名	Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EP2411Y] to GABA B Receptor 2/GABBR2 - BSA and Azide free
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), WB, IHC-P 適用なし: ICC/IF or IP
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: Unboiled human hippocampus, rat brain, and mouse brain tissue lysates; IHC-P: Human brain tissue, Rat Postnatal (P15) Cerebellum; Flow Cyt (intra): SH-SY5Y (human neuroblastoma cell line from bone marrow).
特記事項	<p>ab230136 is the carrier-free version of ab75838.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP2411Y
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ab230136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)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 106 kDa. We recommend not to boil the samples after lysis to get desired WB results.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

追加情報 Is unsuitable for ICC/IF or IP.

ターゲット情報

機能 Receptor for GABA. The activity of this receptor is mediated by G-proteins that inhibit adenylyl cyclase activity, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipids hydrolysis. Plays a critical role in the fine-tuning of inhibitory synaptic transmission. Pre-synaptic GABA-B-R inhibit neurotransmitter release by down-regulating high-voltage activated calcium channels, whereas postsynaptic GABA-B-R decrease neuronal excitability by activating a prominent inwardly rectifying potassium (Kir) conductance that underlies the late inhibitory postsynaptic potentials. Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception.

組織特異性 Highly expressed in brain, especially in cerebral cortex, thalamus, hippocampus, frontal, occipital and temporal lobe, occipital pole and cerebellum, followed by corpus callosum, caudate nucleus, spinal cord, amygdala and medulla. Weakly expressed in heart, testis and skeletal muscle.

配列類似性

Belongs to the G-protein coupled receptor 3 family. GABA-B receptor subfamily.

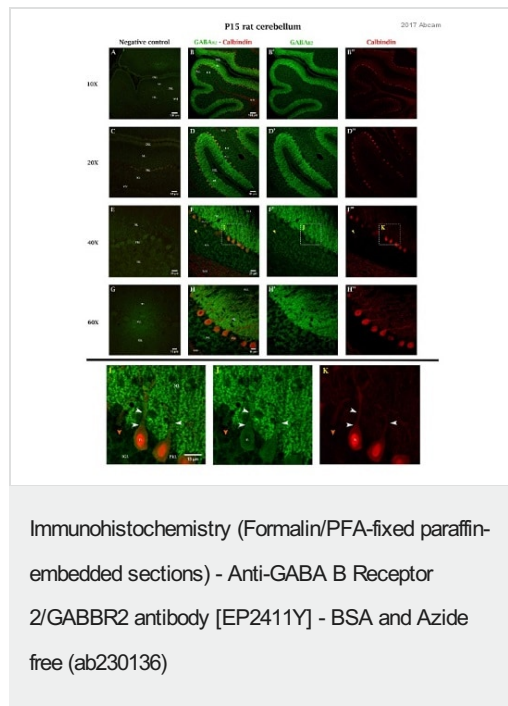
ドメイン

Alpha-helical parts of the C-terminal intracellular region mediate heterodimeric interaction with GABA-B receptor 1.

細胞内局在

Cell membrane. Cell junction > synapse > postsynaptic cell membrane. Moreover coexpression of GABA-B-R1 and GABA-B-R2 appears to be a prerequisite for maturation and transport of GABA-B-R1 to the plasma membrane.

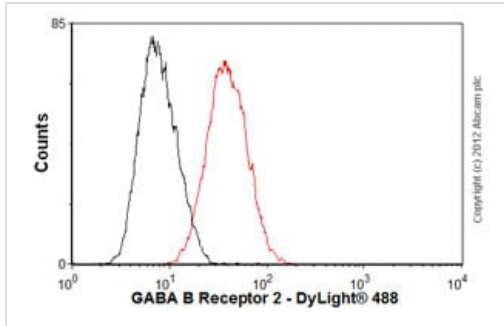
画像



This IHC data was generated using the same anti-GABA B Receptor 2/GABBR2 antibody clone, EP2411Y, in a different buffer formulation (cat# [ab75838](#)).

Ab75838 staining GABA B Receptor 2/GABBR2 in Rat Postnatal (P15) Cerebellum by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 10% serum for 1 hour at 25°C; antigen retrieval was by heat mediation in a 10mM citrate buffer, pH6. Samples were incubated with primary antibody (1/400 in PBS with 2% donkey serum) for 16 hours at 25°C. An Alexa Fluor® 488 conjugated Donkey anti-rabbit, polyclonal was used as the secondary antibody.

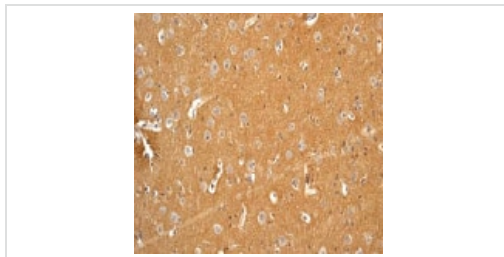
IHC and confocal microscopy for GABA B Receptor 2/GABBR2 (GABAB2) in the postnatal rat cerebellum. (A, C, E, G) Negative control by omission of the primary antibody at 10, 20, 40 and 60X. (B-B'', D-D'', F-F'', H-H'') Immunolabeling for GABAB2 (green) and/or the calcium-binding protein calbindin (red) at 10, 20, 40 and 60X. (I-K) Zooms of the insets shown in F-F''. Specific signal for GABAB2 is mainly observed in the molecular layer (ML) and internal granular layer (IGL) of the cerebellar grey matter. Purkinje cells (PKL) are enriched in GABAB2 especially at the surface of the dendritic trees (white arrowheads) oriented towards the ML. Golgi II cells (yellow arrowhead) located in the IGL are also positive for GABAB2. EGL: external granular layer. n: calbindin-positive nucleus of a Purkinje cell. Orange arrowhead: GABAB2-immunoreactive granular cell in the IGL. WM: white matter. An Olympus FV 1000 confocal microscope was used and images were processed with Adobe Photoshop CS4. Figure generated by Juan Vilchez Aruani and Estela Muñoz, IHEM, UNCuyo, CONICET, Mendoza, Argentina.



Flow Cytometry (Intracellular) - Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] - BSA and Azide free (ab230136)

Overlay histogram showing SH-SY5Y cells stained with **ab75838** (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 (**ab75838**, 1/50 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) (1 µg/1x10⁶ 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab75838**).

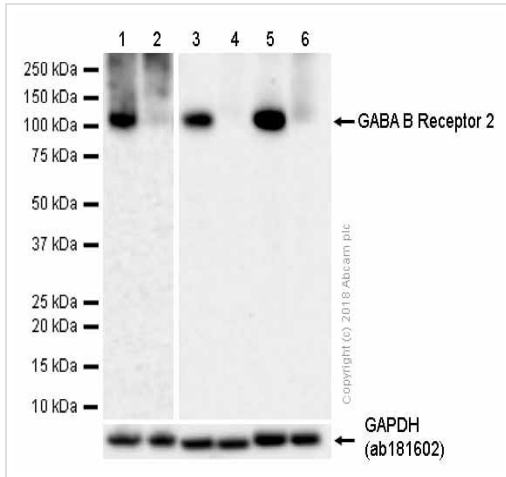


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] - BSA and Azide free (ab230136)

This IHC data was generated using the same anti-GABA B Receptor 2/GABBR2 antibody clone, EP2411Y, in a different buffer formulation (cat# **ab75838**).

ab75838, at a 1/100 dilution, staining GABA B Receptor 2/GABBR2 in paraffin embedded human brain tissue by Immunohistochemistry.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Western blot - Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] - BSA and Azide free (ab230136)

All lanes : Anti-GABA B Receptor 2/GABBR2 antibody [EP2411Y] ([ab75838](#)) at 1/1000 dilution

Lane 1 : Human hippocampus lysates unboiled

Lane 2 : Human hippocampus lysates boiled

Lane 3 : Mouse brain lysates unboiled

Lane 4 : Mouse brain lysates boiled

Lane 5 : Rat brain lysates unboiled

Lane 6 : Rat brain lysates boiled

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: 106 kDa

Observed band size: 106 kDa

Blocking/Diluting buffer and concentration: 5% NFDm/TBST.

Exposure time:

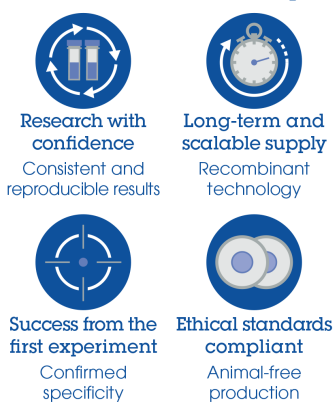
Lane 1 and 2: 140 seconds

Lane 3 to 6: 180 seconds

We recommend not to boil the samples after lysis to get desired WB results.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab75838](#)).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-GABA B Receptor 2/GABBR2 antibody
[EP2411Y] - BSA and Azide free (ab230136)

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