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Product datasheet

Anti-Kir2.1/KCNJ2 antibody [S112] ab85492

リコンビナント

7 References 画像数 5

製品の概要

製品名	Anti-Kir2.1/KCNJ2 antibody [S112]
製品の詳細	Mouse monoclonal [S112] to Kir2.1/KCNJ2
由来種	Mouse
特異性	No cross reactivity against Kir2.2, or Kir2.3
アプリケーション	**適用あり:** WB, ICC/IF, IHC-P, Flow Cyt
種交差性	**交差種:** Mouse, Human, African green monkey
免疫原	**This product was produced with the following immunogens:** Recombinant fragment within Mouse Kir2.1/KCNJ2 aa 1-100. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **P35561** Fusion protein corresponding to Mouse Kir2.1/KCNJ2 aa 189-428. Database link: **P35561**
ポジティブ・コントロール	Rat brain normal tissue lysate - membrane extract (**ab29473**) can be used as a positive control in WB. Flow Cyt: SH-SY5Y cells. IHC-P: Human hippocampal tissue. ICC/IF: SK-N-SH cells.
特記事項	The clone number has been updated from S112B-14 to N112B/14, both clone numbers name the same antibody clone. 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	Preservative: 0.09% Sodium azide Constituents: PBS, 50% Glycerol
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	S112
アイソタイプ	IgG1

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ab85492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
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 48 kDa. If bands are weak, use lysate without boiling, heat at 37°C for 15 minutes.
ICC/IF		Use a concentration of 1 - 10 µg/ml.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use 1-2µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ターゲット情報

機能

Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by extracellular barium or cesium.

組織特異性

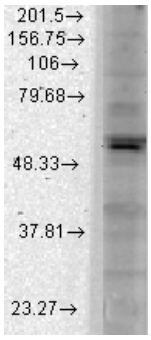
Heart, brain, placenta, lung, skeletal muscle, and kidney. Diffusely distributed throughout the brain.

関連疾患

Defects in KCNJ2 are the cause of long QT syndrome type 7 (LQT7) [MIM:170390]; also called Andersen syndrome or Andersen cardiodysrhythmic periodic paralysis. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to excercise or emotional stress. LQT7 manifests itself as a clinical triad consisting of potassium-sensitive periodic paralysis, ventricular ectopy and dysmorphic features.
Defects in KCNJ2 are the cause of short QT syndrome type 3 (SQT3) [MIM:609622]. Short QT syndromes are heart disorders characterized by idiopathic persistently and uniformly short QT interval on ECG in the absence of structural heart disease in affected individuals. They cause

	syncope and sudden death. SQT3 has a unique ECG phenotype characterized by asymmetrical T waves.
配列類似性	Belongs to the inward rectifier-type potassium channel (TC 1.A.2.1) family. KCNJ2 subfamily.
細胞内局在	Membrane.

画像



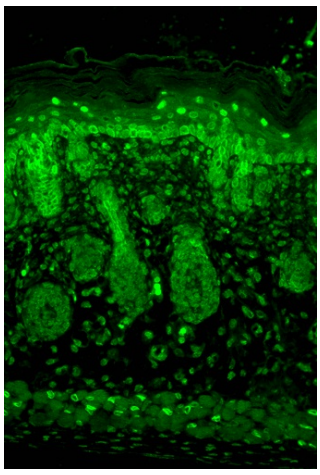
Western blot - Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492)

Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492) at 1/1000 dilution + Monkey COS transient cell lysate at 15 µg with 1.5% BSA for 30 minutes at RT

Secondary

Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

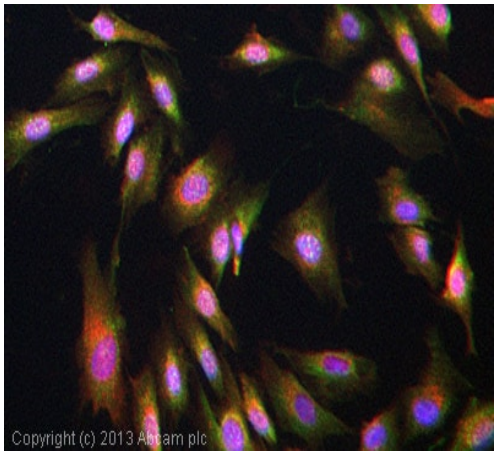
Predicted band size: 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492)

ab85492 staining Kir2.1/KCNJ2 in mouse backskin tissue by IHC-P (Bouin's fixed paraffin embedded).

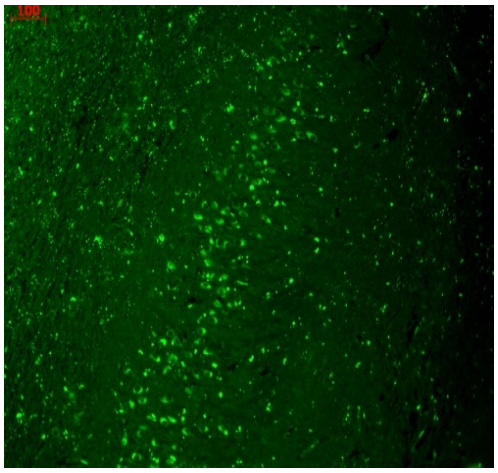
Incubated with primary antibody at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Immunocytochemistry/ Immunofluorescence - Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492)

ICC/IF image of ab85492 stained SK-N-SH (Human neuroblastoma cell line) cells.

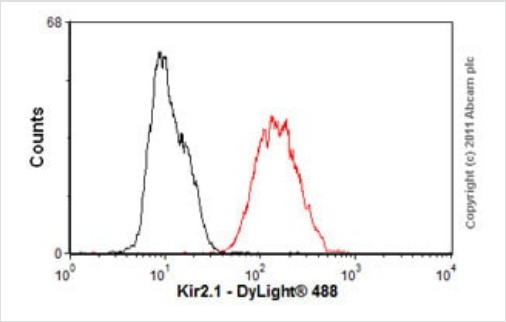
The cells were 4% formaldehyde fixed (10 minutes) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab85492, 10 µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96879**, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492)

ab85492 staining Kir2.1/KCNJ2 in human hippocampal tissue by IHC-P (Bouin's fixed paraffin embedded).

Incubated with primary antibody at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Flow Cytometry - Anti-Kir2.1/KCNJ2 antibody [S112] (ab85492)

Overlay histogram showing SH-SY5Y (Human neuroblastoma cell line from bone marrow) cells stained with ab85492 (red line).

The cells were fixed with 80% methanol (5 minutes) and then permeabilized with 0.1% PBS-Tween for 20 minutes. 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 (ab85492, 1 µg/1x10^6 cells) for 30 minutes at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 minutes at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2 µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in SH-SY5Y cells fixed with 4% paraformaldehyde (10 minutes)/permeabilized in 0.1% PBS-Tween for 20 minutes used under the same conditions.

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