

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

重组

7 References **5 图像**

概述

产品名称	Anti-Kir2.1/KCNJ2抗体[S112]
描述	小鼠单克隆抗体[S112] to Kir2.1/KCNJ2
宿主	Mouse
特异性	No cross reactivity against Kir2.2, or Kir2.3
经测试应用	适用于: WB, ICC/IF, IHC-P, Flow Cyt
种属反应性	与反应: Mouse, Human, African green monkey
免疫原	<p>This product was produced with the following immunogens:</p> <p>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 <u>contact</u> our Scientific Support team to discuss your requirements.</p> <p>Database link: <u>P35561</u></p> <p>Fusion protein corresponding to Mouse Kir2.1/KCNJ2 aa 189-428.</p> <p>Database link: <u>P35561</u></p>
阳性对照	Rat brain normal tissue lysate - membrane extract (<u>ab29473</u>) 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.
常规说明	<p>The clone number has been updated from S112B-14 to N112B/14, both clone numbers name the same antibody clone.</p> <p>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.</p> <p>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</p>

性能

形式	Liquid
----	--------

存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.09% Sodium azide Constituents: PBS, 50% Glycerol
纯度	Protein G purified
克隆	单克隆
克隆编号	S112
同种型	IgG1

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab85492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		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.

靶标

功能	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.
组织特异性	Heart, brain, placenta, lung, skeletal muscle, and kidney. Diffusely distributed throughout the brain.
疾病相关	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.

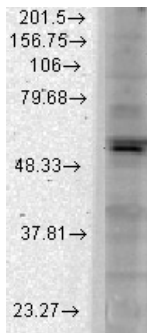
序列相似性

Belongs to the inward rectifier-type potassium channel (TC 1.A.2.1) family. KCNJ2 subfamily.

细胞定位

Membrane.

图片



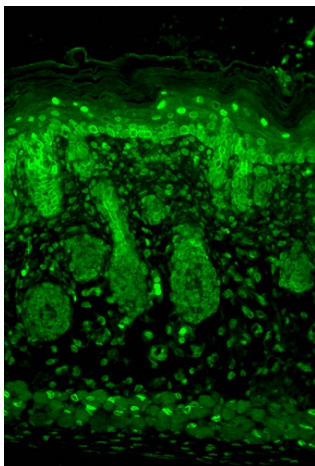
Western blot - Anti-Kir2.1/KCNJ2 antibody [S112]
(ab85492)

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.

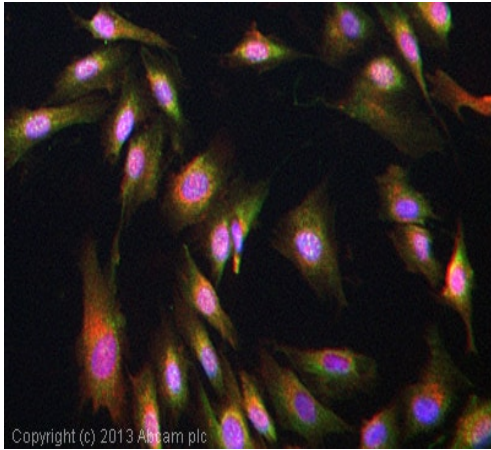
Predicted band size: 48 kDa



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).

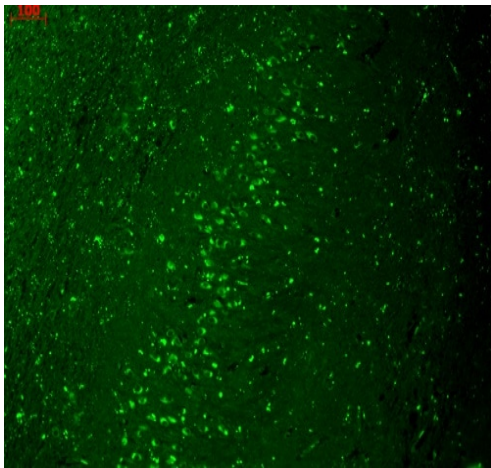
Incubated with primary antibody at 1:1000 for 1 hour at RT.
Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1
hour at RT.



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

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

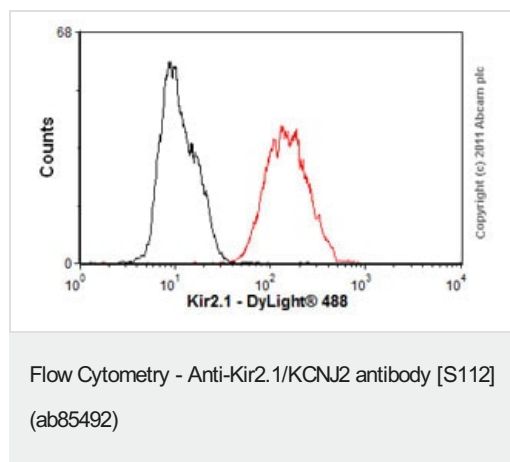
The cells were 4% formaldehyde fixed (10 minutes) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab85492, 10 µg/ml) overnight 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.



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 μ g/ 1×10^6 cells) for 30 minutes at 22°C.

The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 minutes at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2 μ g/ 1×10^6 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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors