

Mouse Anti-KIR7.1/KCNJ13 [C12]: MC0247

Intended Use: For Research Use Only

Description: Inward rectifier K(+) channel Kir7.1 (inwardly rectifying subfamily J member 13/KCNJ13) predominantly expressed in small intestine. Expression is also detected in stomach, kidney, and all central nervous system regions tested with the exception of spinal cord. Kir7.1 is 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. Kir7.1 has a very low single channel conductance, low sensitivity to block by external barium and cesium, and no dependence of its inward rectification properties on the internal blocking particle magnesium.

Specifications

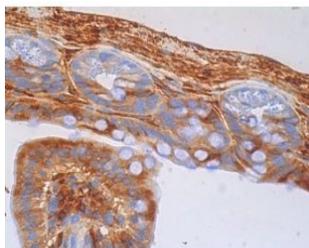
Clone: C12
Source: Mouse
Isotype: IgG2b/k
Reactivity: Human, mouse, rat
Localization: Membrane and/or cytoplasm
Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, ELISA, IF, IP, WB
Package:

Description	Catalog No.	Size
KIR7.1/KCNJ13 Concentrated	MC0247	1 ml

IHC Procedure*

Positive Control Tissue: Stomach
Concentrated Dilution: 50-200
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE mouse small intestine tissue stained with anti-KIR7.1 using DAB

References:

1. Kir7.1 immunoreactivity in canine choroid plexus tumors. Choi EJ, Sloma EA, Miller AD. J Vet Diagn Invest. Jul;28(4):464-8, 2016.
2. The inwardly rectifying K⁺ channel KIR7.1 controls uterine excitability throughout pregnancy. McCloskey C, et al. EMBO Mol Med. Sep;6(9):1161-74, 2014.
3. Expression and localization of the inwardly rectifying potassium channel Kir7.1 in native bovine retinal pigment epithelium. Yang D, et al. Invest Ophthalmol Vis Sci. Jul;44(7):3178-85, 2003.
4. Expression of the K⁺ channel Kir7.1 in the developing rat kidney: role in K⁺ excretion. Suzuki Y, et al. Kidney Int. Mar;63(3):969-75, 2003.

Doc. 100-MC0247
Rev. A