

Product Datasheet

Anti-Kv2.1 K⁺ Channel Antibody FL594 Conjugate

Overview

Catalog #	75-014-FL594
Conjugate	FL594 Ex: 594 nm, Em: 615 nm
Isotype	IgG1
Clone Number	K89/34
Size	200 µL
Concentration	0.5 mg/mL
Host Species	Mouse Monoclonal
Format	Purified by Protein A chromatography
Buffer	PBS with 0.09% azide
Applications	ICC, IHC
Species Reactivity	Human, Mouse, and Rat
Immunogen	Synthetic peptide amino acids 837-853 (HMLPGGGAHGSTRDQSI, cytoplasmic Cterminus) of rat Kv2.1 (accession number P15387)
Molecular Weight	105-125 kDa (varies with cell background due to phosphorylation)
Cite this Antibody	Antibodies Inc Cat# 75-014-FL594, RRID: AB_2939118

Details

Target Description	Kv 2.1 K ⁺ channel (Potassium voltage-gated channel subfamily B member 1), which is encoded by KCNB1 gene, is a member of the Potassium voltage-gated channel family. This protein, mainly expressed in the central nervous system, functions as a delayed rectifier. Indeed, it regulates the action potential (AP) repolarization as well as duration and frequency of repetitive AP firing in neurons, muscle cells and endocrine cells. Kv2.1 K ⁺ channel switches between open or closed conformation in response to the voltage difference across the membrane. This process directs the voltage-dependent potassium ion permeability of excitable membranes, which lets potassium ions pass in accordance with their electrochemical gradient. Kv2.1 K ⁺ channel is widely used as a marker to measure membrane excitability in hippocampal neurons.
Specificity	No cross-reactivity against rat Kv2.2
Purification Method	Produced by in vitro bioreactor culture of hybridoma line followed by Protein A affinity chromatography and conjugation of purified mAb. Purified mAbs are >90% specific antibody.

Quality Control Tests

Each new lot of antibody is quality control tested by western blot on rat whole brain lysate and confirmed to stain the expected molecular weight band.

Storage

Aliquot and store at $\leq -20^{\circ}\text{C}$ for long term storage. For short term storage, store at $2-8^{\circ}\text{C}$. For maximum recovery of product, centrifuge the vial prior to removing the cap.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience our 50+ year passion for science.

Note: For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, viewable on our website.