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PRODUCT DATASHEET

Anti-Kv3.2 Potassium Channel Antibody FL490 Conjugate

NeuroMab KO Validated

Product Details

Available Variants	200 µL (SKU:75-397-FL490)
Conjugate	FL490 Ex: 491 nm, Em: 515 nm
Isotype	IgG1
Clone	N410/17
Gene Name	Kcnc2
Host Species	Mouse
Concentration	Lot dependent: provided at 0.3-0.5 mg/mL
Format	Purified by Protein A chromatography
Physical State	Liquid
Buffer	PBS with 0.09% azide
Production Notes	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.
Applications	ICC, IHC
Species Reactivity	Human, Mouse, Rat
Immunogen	Fusion protein amino acids 474-613 (cytoplasmic C-terminus) of rat Kv3.2a (accession number P22462-3) produced recombinantly in E. Coli
Specificity	No cross-reactivity reported
Molecular Weight	80-100 kDa (varies due to post-translational modifications)
Quality Control	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 ≤ -20°C for long term storage. For short term storage, store at 2-8°C. For maximum recovery of product, centrifuge the vial prior to removing the cap.
Antibody Registry ID	AB_2940308
UniProt ID	P22462 UniProt Summary: Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes, primarily in the brain. Contributes to the regulation of the fast action potential repolarization and in sustained high-frequency firing in neurons of the central nervous system. Homotetramer channels mediate delayed-rectifier voltage-dependent potassium currents that activate rapidly at high-threshold voltages and inactivate slowly. Forms tetrameric channels through which potassium ions pass in accordance with their electrochemical gradient. The channel alternates between opened and closed conformations in response to the voltage difference across the membrane (Probable). Can form functional homotetrameric and heterotetrameric channels that contain variable proportions of KCNC1, and possibly other family members as well; channel properties depend on the type of alpha subunits that are part of the channel. Channel properties may be modulated either by the association with ancillary subunits, such as KCNE1, KCNE2 or KCNE3 or indirectly by nitric oxide (NO) through a cGMP- and PKG-mediated signaling cascade, slowing channel activation and deactivation of delayed rectifier potassium channels. Contributes to fire sustained trains of very brief action potentials at high frequency in retinal ganglion cells, thalamocortical and suprachiasmatic nucleus (SCN) neurons and in hippocampal and neocortical interneurons. Sustained maximal action potential firing frequency in inhibitory hippocampal interneurons is negatively modulated by histamine H2 receptor activation in a cAMP- and protein kinase (PKA) phosphorylation-dependent manner. Plays a role in maintaining the fidelity of synaptic transmission in neocortical GABAergic interneurons by generating action potential (AP) repolarization at nerve terminals, thus reducing spike-evoked calcium influx and GABA neurotransmitter release. Required for long-range synchronization of gamma oscillations over distance in the neocortex. Contributes to the modulation of the circadian rhythm of spontaneous action potential firing in suprachiasmatic nucleus (SCN) neurons in a light-dependent manner.
Country of Origin	United States
Shipping	Shipped on ice packs
Expiration	12 months from date of receipt
Usage Statement	These antibodies are to be used as research laboratory reagents and are not for use as diagnostic or therapeutic reagents in humans.
NCBI Gene ID	246153

Product Images



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