

Datasheet for ABIN7237781
anti-KCNA5 antibody (Extracellular) (FITC)



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Overview

Quantity:	15 µL
Target:	KCNA5
Binding Specificity:	AA 268-279, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNA5 antibody is conjugated to FITC
Application:	Live Cell Imaging (LCI), Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to KV1.5 (extracellular) conjugated to the fluorescent dye FITC
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)DERELLRHPPVP(K), corresponding to amino acid residues 268-279 of rat KV1.5
Isotype:	IgG
Specificity:	1st extracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	mouse - 9,Rat - 12,13 amino acid residues identical, human - 11
Characteristics:	1st extracellular loop
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	KCNA5
Alternative Name:	KCNA5 (KCNA5 Products)
Background:	Potassium voltage-gated channel subfamily A member 5, KV1.5 is a mammalian voltage dependent K⁺ channel, homologous to the Drosophila Shaker K⁺ channel. KV1.5 was first cloned from the rat brain.¹ Eight Shaker related genes exist in mammals constituting the KV1 subfamily of the large KV channel family of genes.² A functional KV1 channel is either a membrane spanning homotetramer or heterotetramer, which is composed of members of the same subfamily. In addition several auxiliary subunits and intracellular proteins might interact with the channel and affect its function. The structure of KV1.5 channel is similar to all KV channels and includes six membrane spanning helices creating a voltage sensor domain and a pore domain.² The channel is expressed in cardiac and smooth muscle tissue (colon, aorta, stomach and pulmonary artery) as well as in neurons and kidney.² A loss-of-function mutation in the gene encoding the channel was found in atrial fibrillation patients, stressing its role as a cardiac action potential regulator.³ The functional channel is considered transient (A-type) channel and shows prominent inactivation. Therefore, this channel activity influences the membrane potential and excitability of neurons and muscle. KV1.5 channels are sensitive to high doses of TEA (330 mM) and low doses of 4-AP (0.27 mM), the "classical" non-selective potassium channel blockers.² Alternative names: Potassium voltage-gated channel subfamily A member 5, Kv1.5
Gene ID:	25470
NCBI Accession:	NM_022154
UniProt:	P19024

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A
Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7236511)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	15 µL or 50 µL double distilled water (DDW), depending on the sample size.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).