


Product datasheet

Anti-KCNA5 antibody ab110469

1 Image

Overview

<b>Product name</b>	Anti-KCNA5 antibody
<b>Description</b>	Rabbit polyclonal to KCNA5
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab110469 detects endogenous levels of total KCNA5 protein.
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide derived from an internal region of Human KCNA5 (UniProt ID: P22460).
<b>Positive control</b>	Extracts from 293 cells.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 0.88% Sodium chloride, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab110469 was affinity purified from Rabbit antiserum by affinity chromatography using epitope specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab110469** in the following tested applications.

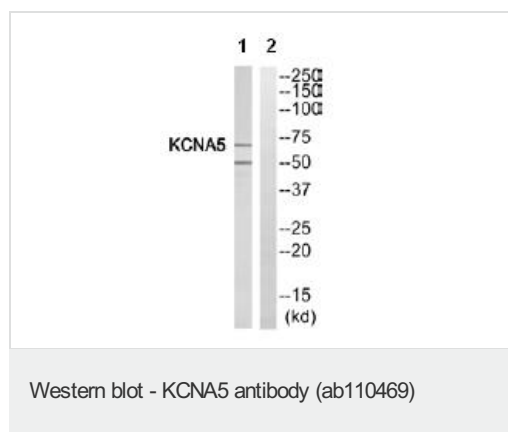
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 67 kDa.

## Target

<b>Function</b>	Mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient. This channel displays rapid activation and slow inactivation. May play a role in regulating the secretion of insulin in normal pancreatic islets. Isoform 2 exhibits a voltage-dependent recovery from inactivation and an excessive cumulative inactivation.
<b>Tissue specificity</b>	Pancreatic islets and insulinoma.
<b>Involvement in disease</b>	Defects in KCNA5 are the cause of atrial fibrillation familial type 7 (ATFB7) [MIM:612240]. Atrial fibrillation is a common disorder of cardiac rhythm that is hereditary in a small subgroup of patients. It is characterized by disorganized atrial electrical activity, progressive deterioration of atrial electromechanical function and ineffective pumping of blood into the ventricles. It can be associated with palpitations, syncope, thromboembolic stroke, and congestive heart failure.
<b>Sequence similarities</b>	Belongs to the potassium channel family. A (Shaker) (TC 1.A.1.2) subfamily. Kv1.5/KCNA5 sub-subfamily.
<b>Domain</b>	The amino terminus may be important in determining the rate of inactivation of the channel while the C-terminal PDZ-binding motif may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments. The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.
<b>Post-translational modifications</b>	Sumoylated on Lys-221, and Lys-536, preferentially by SUMO3. Sumoylation regulates the voltage sensitivity of the channel.
<b>Cellular localization</b>	Membrane.

## Images



**All lanes** : Anti-KCNA5 antibody (ab110469)  
at 1/500 dilution

**Lane 1** : Extracts from 293 cells

**Lane 2** : Extracts from 293 cells, treated with  
synthesized peptide

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 67 kDa

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