

Anti-KCNA3 Picoband Antibody

Catalog # ABO12336

Specification

Anti-KCNA3 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP22001HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Potassium voltage-gated channel subfamily A member3(KCNA3) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-KCNA3 Picoband Antibody - Additional Information

Gene ID 3738

Other Names Potassium voltage-gated channel subfamily A member 3, HGK5, HLK3, HPCN3, Voltage-gated K(+) channel HuKIII, Voltage-gated potassium channel subunit Kv1.3, KCNA3, HGK5

Calculated MW 63842 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Cell membrane ; Multi-pass membrane protein.

Protein Name Potassium voltage-gated channel subfamily A member 3

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human KCNA3 (513-544aa EELRKARSNSTLSKSEYMVIEEGGMNHSAFPQ), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-KCNA3 Picoband Antibody - Protein Information

Name KCNA3

Synonyms HGK5

Function

[Isoform 1]: 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.

Cellular Location

[Isoform 1]: Cell membrane; Multi-pass membrane protein [Isoform 3]: Cytoplasm, perinuclear region

Anti-KCNA3 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-KCNA3 Picoband Antibody - Images





Anti- KCNA3 Picoband antibody, ABO12336, Western blottingAll lanes: Anti KCNA3 (ABO12336) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: K562 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 64KDObserved bind size: 55KD

Anti-KCNA3 Picoband Antibody - Background

Potassium voltage-gated channel, shaker-related subfamily, member 3, also known as KCNA3 or Kv1.3, is a protein that in humans is encoded by the KCNA3 gene. This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. It plays an essential role in T-cell proliferation and activation. This gene appears to be intronless and it is clustered together with KCNA2 and KCNA10 genes on chromosome 1. And Kv1.3 has been reported to be expressed in the inner mitochondrial membrane in lymphocytes. The apoptotic protein Bax has been suggested to insert into theouter mitochondrial membrane and occlude the pore of Kv1.3 via a lysine residue. Thus, Kv1.3 modulation may be one of many mechanisms that contribute to apoptosis.