

**Anti-KCNA3 Picoband Antibody**  
**Catalog # ABO12336****Specification**

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**Anti-KCNA3 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P22001</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Potassium voltage-gated channel subfamily A member 3(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<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**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 reconstitution, 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

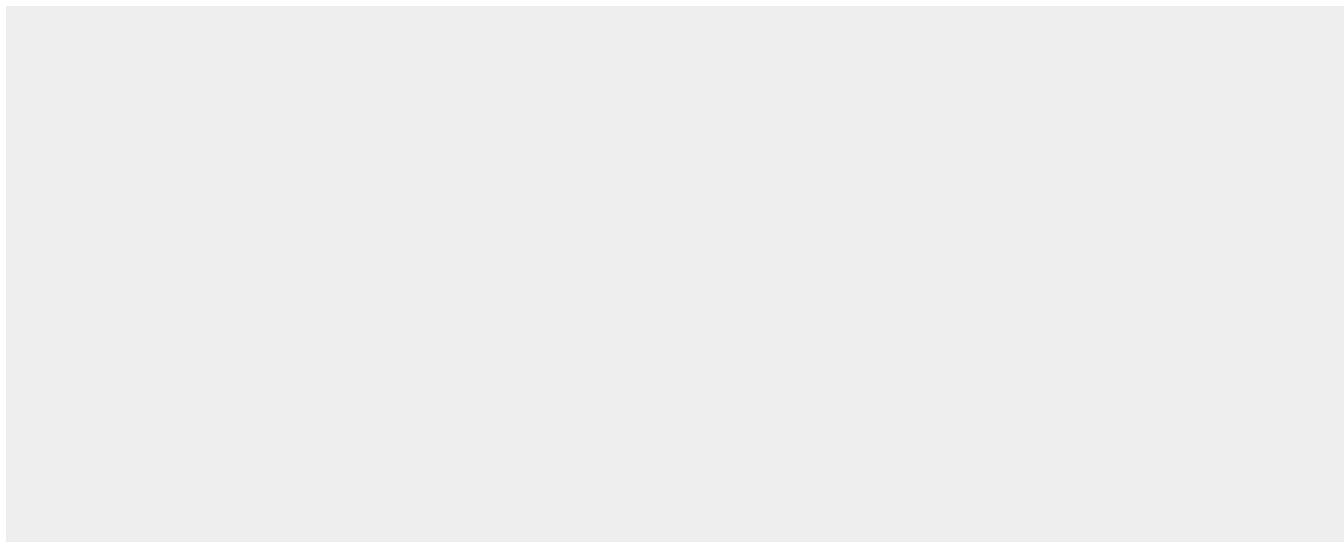
[Isoform 1]: Cell membrane; Multi-pass membrane protein [Isoform 3]: Cytoplasm, perinuclear region

### Anti-KCNA3 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-KCNA3 Picoband Antibody - Images





Anti- KCNA3 Picoband antibody, ABO12336, Western blotting All lanes: Anti KCNA3 (ABO12336) at 0.5ug/ml  
Lane 1: Rat Brain Tissue Lysate at 50ug  
Lane 2: Mouse Brain Tissue Lysate at 50ug  
Lane 3: K562 Whole Cell Lysate at 40ug  
Lane 4: HELA Whole Cell Lysate at 40ug  
Lane 5: 22RV1 Whole Cell Lysate at 40ug  
Predicted bind size: 64KD  
Observed 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 the outer 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.