

**Anti-KCNH1 Picoband Antibody**  
**Catalog # ABO10137****Specification****Anti-KCNH1 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O95259</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for KCNH1 detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

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

**Anti-KCNH1 Picoband Antibody - Additional Information**

**Gene ID** 3756

**Other Names**

Potassium voltage-gated channel subfamily H member 1, Ether-a-go-go potassium channel 1, EAG channel 1, h-eag, hEAG1, Voltage-gated potassium channel subunit Kv10.1, KCNH1

**Application Details**

Western blot, 0.1-0.5 µg/ml<br>

**Subcellular Localization**

Cell membrane.

**Tissue Specificity**

Highly expressed in brain and in myoblasts at the onset of fusion, but not in other tissues. Detected in HeLa (cervical carcinoma), SH-SY5Y (neuroblastoma) and MCF-7 (epithelial tumor) cells, but not in normal epithelial cells.

**Contents**

Each vial contains 4mg Trehalose, 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 of human KCNH1 (AKRKSWARFKDACGKSEDWNKVSKAESMETLPERTKA).

**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-KCNH1 Picoband Antibody - Protein Information**

**Name** KCNH1

### **Function**

Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel (PubMed:<a href="http://www.uniprot.org/citations/9738473" target="\_blank">9738473</a>, PubMed:<a href="http://www.uniprot.org/citations/11943152" target="\_blank">11943152</a>, PubMed:<a href="http://www.uniprot.org/citations/10880439" target="\_blank">10880439</a>, PubMed:<a href="http://www.uniprot.org/citations/22732247" target="\_blank">22732247</a>, PubMed:<a href="http://www.uniprot.org/citations/25556795" target="\_blank">25556795</a>, PubMed:<a href="http://www.uniprot.org/citations/27325704" target="\_blank">27325704</a>, PubMed:<a href="http://www.uniprot.org/citations/27005320" target="\_blank">27005320</a>, PubMed:<a href="http://www.uniprot.org/citations/27618660" target="\_blank">27618660</a>). Channel properties are modulated by subunit assembly (PubMed:<a href="http://www.uniprot.org/citations/11943152" target="\_blank">11943152</a>). Mediates IK(NI) current in myoblasts (PubMed:<a href="http://www.uniprot.org/citations/9738473" target="\_blank">9738473</a>). Involved in the regulation of cell proliferation and differentiation, in particular adipogenic and osteogenic differentiation in bone marrow-derived mesenchymal stem cells (MSCs) (PubMed:<a href="http://www.uniprot.org/citations/23881642" target="\_blank">23881642</a>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Nucleus inner membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:Q63472}. Cell projection, axon {ECO:0000250|UniProtKB:Q63472}. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q63472}. Perikaryon {ECO:0000250|UniProtKB:Q63472}. Postsynaptic density membrane {ECO:0000250|UniProtKB:Q63472}. Early endosome membrane. Note=Perinuclear KCNH1 is located to NPC-free islands

### **Tissue Location**

Highly expressed in brain and in myoblasts at the onset of fusion, but not in other tissues. Detected in HeLa (cervical carcinoma), SH-SY5Y (neuroblastoma) and MCF-7 (epithelial tumor) cells, but not in normal epithelial cells

## **Anti-KCNH1 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-KCNH1 Picoband Antibody - Images**

## **Anti-KCNH1 Picoband Antibody - Background**

Potassium voltage-gated channel subfamily H member 1 is a protein that in humans is encoded by the KCNH1 gene. Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, subfamily H. This member is a pore-forming (alpha) subunit of a voltage-gated non-inactivating delayed rectifier potassium channel. It is activated at the onset of myoblast differentiation. The gene is highly expressed in brain and in myoblasts. Overexpression of the gene may confer a growth advantage to cancer cells and favor tumor cell proliferation. Alternative splicing of this gene results in two transcript variants encoding distinct isoforms.