

### **KCNH4 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10887A

## **Specification**

# KCNH4 Antibody (N-term) - Product Information

**Application** WB, FC, E **Primary Accession** O9UO05 Other Accession NP 036417.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 67-96

## KCNH4 Antibody (N-term) - Additional Information

### **Gene ID 23415**

### **Other Names**

Potassium voltage-gated channel subfamily H member 4, Brain-specific eag-like channel 2, BEC2, Ether-a-go-go-like potassium channel 1, ELK channel 1, ELK1, Voltage-gated potassium channel subunit Kv123, KCNH4

## Target/Specificity

This KCNH4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-96 amino acids from the N-terminal region of human KCNH4.

## **Dilution**

WB~~1:1000 FC~~1:10~50

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

KCNH4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# KCNH4 Antibody (N-term) - Protein Information

#### Name KCNH4





**Function** Pore-forming (alpha) subunit of voltage-gated potassium channel. Elicits an outward current, but shows no inactivation. Channel properties may be modulated by cAMP and subunit assembly.

### **Cellular Location**

Membrane; Multi-pass membrane protein.

### **Tissue Location**

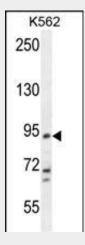
Detected only in brain, in particular in the telencephalon. Detected in putamen and caudate nucleus, and at lower levels in cerebral cortex, occipital and hippocampus

## KCNH4 Antibody (N-term) - Protocols

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

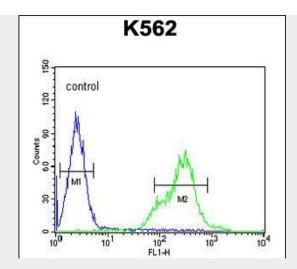
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## KCNH4 Antibody (N-term) - Images



KCNH4 Antibody (N-term) (Cat. #AP10887a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the KCNH4 antibody detected the KCNH4 protein (arrow).





KCNH4 Antibody (N-term) (Cat. #AP10887a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## KCNH4 Antibody (N-term) - Background

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. The gene is brain-specific, and located in the neocortex and the striatum. It may be involved in cellular excitability of restricted neurons in the central nervous system.

# KCNH4 Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005) Zou, A., et al. Am. J. Physiol., Cell Physiol. 285 (6), C1356-C1366 (2003): Miyake, A., et al. J. Biol. Chem. 274(35):25018-25025(1999)