

### **KCNE4 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54761

### **Specification**

## **KCNE4 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC

Primary Accession
Reactivity
Rat, Dog
Host
Clonality
Polyclonal
Calculated MW
Rat, Dog
Rabbit
Polyclonal

Immunogen KLH conjugated synthetic peptide derived

Liquid

from human KCNE4

Isotype IgG

**Purity** 

**Physical State** 

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane; Single-pass type I membrane

protein.

SIMILARITY Belongs to the potassium channel KCNE

family.

SUBUNIT Associates with KCNQ1/KVLQT1

(Probable).

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

### **Background Descriptions**

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, isk-related subfamily. This member is a type I membrane protein, and a beta subunit that assembles with a potassium channel alpha-subunit to modulate the gating kinetics and enhance stability of the multimeric complex. This gene is prominently expressed in the embryo and in adult uterus. [provided by RefSeq, Jul 2008].

### **KCNE4 Polyclonal Antibody - Additional Information**

#### **Gene ID 23704**

#### **Other Names**

Potassium voltage-gated channel subfamily E member 4, MinK-related peptide 3, Minimum potassium ion channel-related peptide 3, Potassium channel subunit beta MiRP3, KCNE4

# Target/Specificity



Predominantly expressed in embryo and adult uterus. Low expression found in kidney, small intestine, lung and heart.

#### **Dilution**

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<span class ="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class = "dilution_ICC">ICC~~N/A</span>
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#### **Storage**

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

### **KCNE4 Polyclonal Antibody - Protein Information**

### Name KCNE4 (HGNC:6244)

#### **Function**

Ancillary protein that functions as a regulatory subunit of the voltage-gated potassium (Kv) channel complex composed of pore- forming and potassium-conducting alpha subunits and of regulatory beta subunits. KCNE4 beta subunit modulates the gating kinetics and enhances stability of the channel complex (PubMed:<a href="http://www.uniprot.org/citations/12096056" target="\_blank">12096056</a>, PubMed:<a href="http://www.uniprot.org/citations/19687231" target="\_blank">19687231</a>, PubMed:<a href="http://www.uniprot.org/citations/20533308" target="\_blank">205333308</a>, PubMed:<a href="http://www.uniprot.org/citations/27162025" target="\_blank">27162025</a>). Associates with KCNQ1/KVLTQ1 alpha subunit to inhibit potassium currents (PubMed:<a href="http://www.uniprot.org/citations/12096056" target="\_blank">12096056</a>, PubMed:<a href="http://www.uniprot.org/citations/19687231" target="\_blank">19687231</a>, PubMed:<a href="http://www.uniprot.org/citations/20533308" target="\_blank">205333308</a>, PubMed:<a href="http://www.uniprot.org/citations/27162025" target="\_blank">27162025</a>).

#### **Cellular Location**

Membrane; Single- pass membrane protein

#### **Tissue Location**

Predominantly expressed in embryo and adult uterus. Low expression found in kidney, small intestine, lung and heart

## **KCNE4 Polyclonal Antibody - Protocols**

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

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

# **KCNE4 Polyclonal Antibody - Images**