

## KCNS3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17334a

# **Specification**

## KCNS3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q9BQ31

Other Accession <u>088759</u>, <u>Q8BQZ8</u>, <u>NP\_002243.3</u>

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
1-30

# KCNS3 Antibody (N-term) - Additional Information

#### **Gene ID 3790**

### **Other Names**

Potassium voltage-gated channel subfamily S member 3, Delayed-rectifier K(+) channel alpha subunit 3, Voltage-gated potassium channel subunit Kv93, KCNS3

## Target/Specificity

This KCNS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KCNS3.

#### **Dilution**

WB~~1:1000

#### **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**

KCNS3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# KCNS3 Antibody (N-term) - Protein Information

### Name KCNS3



**Function** Potassium channel subunit that does not form functional channels by itself. Can form functional heterotetrameric channels with KCNB1; modulates the delayed rectifier voltage-gated potassium channel activation and deactivation rates of KCNB1 (PubMed: 10484328). Heterotetrameric channel activity formed with KCNB1 show increased current amplitude with the threshold for action potential activation shifted towards more negative values in hypoxic-treated pulmonary artery smooth muscle cells (By similarity).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=May not reach the plasma membrane but remain in an intracellular compartment in the absence of KCNB1 (PubMed:10484328).

### **Tissue Location**

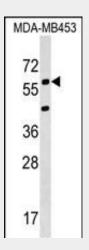
Detected in whole normal term placental and placental chorionic plate arteries and veins. Detected in syncytiotrophoblast and in blood vessel endothelium within intermediate villi and chorionic plate (at protein level) (PubMed:22943705) Detected in most tissues, but not in peripheral blood lymphocytes. The highest levels of expression are in lung (PubMed:10484328)

### KCNS3 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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

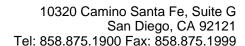
# KCNS3 Antibody (N-term) - Images



KCNS3 Antibody (N-term) (Cat. #AP17334a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the KCNS3 antibody detected the KCNS3 protein (arrow).

## KCNS3 Antibody (N-term) - Background

Voltage-gated potassium channels form the largest and most diversified class of ion channels and are present in both excitable and nonexcitable cells. Their main functions are associated with





the regulation of the resting membrane potential and the control of the shape and frequency of action potentials. The alpha subunits are of 2 types: those that are functional by themselves and those that are electrically silent but capable of modulating the activity of specific functional alpha subunits. The protein encoded by this gene is not functional by itself but can form heteromultimers with member 1 and with member 2 (and possibly other members) of the Shab-related subfamily of potassium voltage-gated channel proteins. This gene belongs to the S subfamily of the potassium channel family.

# KCNS3 Antibody (N-term) - References

Nyholt, D.R., et al. Hum. Mol. Genet. 17(21):3318-3331(2008) van Es, M.A., et al. Nat. Genet. 40(1):29-31(2008) Schymick, J.C., et al. Lancet Neurol 6(4):322-328(2007) Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005) Kerschensteiner, D., et al. Proc. Natl. Acad. Sci. U.S.A. 102(17):6160-6165(2005)