

### KCNV1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5787a

# **Specification**

Reactivity

Predicted

### KCNV1 Antibody (N-term) - Product Information

Application IHC-P, FC, WB,E

Primary Accession <u>Q6PIU1</u>

Other Accession P97557, Q8BZN2, Q9GKU7, Q0P583,

<u>NP\_055194.1</u> Human, Mouse Bovine, Monkey, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 56304
Antigen Region 137-166

### KCNV1 Antibody (N-term) - Additional Information

#### **Gene ID 27012**

#### **Other Names**

Potassium voltage-gated channel subfamily V member 1, Neuronal potassium channel alpha subunit HNKA, Voltage-gated potassium channel subunit Kv81, KCNV1

#### Target/Specificity

This KCNV1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-166 amino acids from the N-terminal region of human KCNV1.

### **Dilution**

IHC-P~~1:50~100 FC~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### 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**

KCNV1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# KCNV1 Antibody (N-term) - Protein Information



#### Name KCNV1

**Function** Potassium channel subunit that does not form functional channels by itself. Modulates KCNB1 and KCNB2 channel activity by shifting the threshold for inactivation to more negative values and by slowing the rate of inactivation. Can down-regulate the channel activity of KCNB1, KCNB2, KCNC4 and KCND1, possibly by trapping them in intracellular membranes.

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=Has to be associated with another potassium channel subunit to get inserted in the plasma membrane. Remains intracellular in the absence of KCNB2

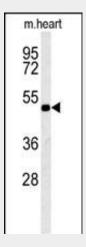
Tissue Location
Detected in brain...

### KCNV1 Antibody (N-term) - Protocols

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

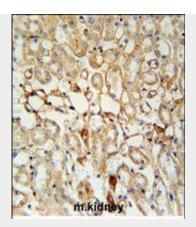
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# KCNV1 Antibody (N-term) - Images

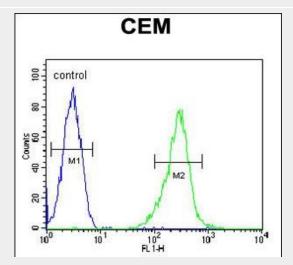


KCNV1 Antibody (N-term) (Cat. #AP5787a) western blot analysis in mouse heart tissue lysates (15ug/lane). This demonstrates the KCNV1 antibody detected KCNV1 protein (arrow).





KCNV1 Antibody (N-term) (Cat. #AP5787a) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KCNV1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



KCNV1 Antibody (N-term) (Cat. #AP5787a) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### KCNV1 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 voltage-gated channel subfamily V. This protein is essentially present in the brain, and its role might be to inhibit the function of a particular class of outward rectifier potassium channel types.

# KCNV1 Antibody (N-term) - References

Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005) Ebihara, M., et al. Gene 325, 89-96 (2004) : Sano, A., et al. Epilepsia 43 SUPPL 9, 26-31 (2002) : Salinas, M., et al. J. Biol. Chem. 272(13):8774-8780(1997)





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