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KCNS1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56466

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC
Primary Accession	Q96KK3
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58372
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCNS1
Epitope Specificity	161-260/526
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane. May not reach the plasma membrane but remain in an intracellular compartment in the absence of KCNB1.
SIMILARITY	Belongs to the potassium channel family. S (TC 1.A.1.2) subfamily. Kv9.1/KCNS1 sub-subfamily.
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 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. [provided by RefSeq, Jul 2008]

Additional Information

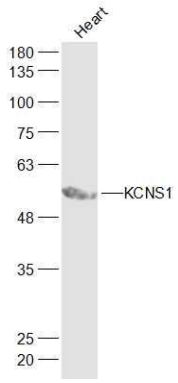
Gene ID	3787
Other Names	Potassium voltage-gated channel subfamily S member 1, Delayed-rectifier K(+) channel alpha subunit 1, Voltage-gated potassium channel subunit Kv9.1, KCNS1
Target/Specificity	Detected in all tissues tested with the exception of skeletal muscle. Highly expressed in adult and fetal brain, fetal kidney and lung, and adult prostate and testis.

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °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 °C.

Protein Information

Name	KCNS1 (HGNC:6300)
Function	Potassium channel regulatory subunit that modulate the delayed rectifier voltage-gated potassium channel activity of KCNB1 and KCNB2 by altering their kinetics, expression levels, and shifting the half-inactivation potential to more polarized values (PubMed:10484328). While it does not form functional channels on its own, it can form functional heterotetrameric channels with KCNB1 and KCNB2 (PubMed:10484328). Each regulatory subunit has unique regulatory properties that can lead to extensive inhibition, significant changes in kinetics, and/or substantial shifts in the voltage dependencies of the inactivation process (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 or KCNB2 (PubMed:10484328)
Tissue Location	Detected in all tissues tested with the exception of skeletal muscle (PubMed:10484328). Highly expressed in adult and fetal brain, fetal kidney and lung, and adult prostate and testis (PubMed:10484328).

Images



Sample:
Heart(Rat) Cell Lysate at 40 ug
Primary: Anti-KCNS1 (AP56466) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 58 kD
Observed band size: 58 kD