



Rabbit Anti-KCNE3 antibody

SL11661R

Product Name:	KCNE3
Chinese Name:	钾离子Channel protein家族成员3抗体
Alias:	Cardiac voltage gated potassium channel accessory subunit; HOKPP; KCNE 3; Minimum potassium ion channel related peptide 2; minK related peptide 2; MiRP 2; MiRP2; Potassium voltage gated channel subfamily E member 3; Potassium voltage gated channel, Isk related family, member 3; Voltage gated K ⁺ channel subunit MIRP2; KCNE3 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	12kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KCNE3:51-103/103
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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 kidney. A missense mutation in this gene is associated with hypokalemic periodic paralysis. [provided by RefSeq, Jul 2008].

Function:

KCNE3 (also known as MiRP2) is an ancillary protein that functions as a beta subunit with a voltage-gated potassium channel complex of pore-forming alpha subunits. It modulates the gating kinetics of the complex, as well as enhancing channel stability. The complex of KCNE3 with KCNQ1/KCLQT1 is postulated form the intestinal cAMP-stimulated potassium channel that is involved in chloride secretion. KCNE3 in complex with KCNC4/Kv3.4 is thought to form the subthreshold voltage-gated potassium channel that establishes the resting membrane potential in skeletal muscle. Altered activity of the KCNE3/Kv3.4 channel induced by the Abeta peptide is thought to result in the upregulation of the transient outward potassium current, a significant step in the etiology of Alzheimer's disease.

Subunit:

Associates with KCNC4/Kv3.4. May associate with KCNQ1/KCLQT1.

Subcellular Location:

Cell Membrane

Tissue Specificity:

Widely expressed with highest levels in kidney and moderate levels in small intestine.

DISEASE:

Defects in KCNE3 are the cause of Brugada syndrome type 6 (BRGDA6) [MIM:613119]. A tachyarrhythmia characterized by right bundle branch block and ST segment elevation on an electrocardiogram (ECG). It can cause the ventricles to beat so fast that the blood is prevented from circulating efficiently in the body. When this situation occurs (called ventricular fibrillation), the individual will faint and may die in a few minutes if the heart is not reset.

Similarity:

Belongs to the potassium channel KCNE family.

SWISS:

Q9Y6H6

Gene ID:

10008

Database links:

[Entrez Gene: 101144160](#)Gorilla

[Entrez Gene: 10008](#)Human

[Entrez Gene: 57442](#)Mouse

[Entrez Gene: 63883](#)Rat

[Omim: 604433](#)Human

[SwissProt: Q9Y6H6](#)Human

[SwissProt: Q9WTW2](#)Mouse

[SwissProt: Q9JJV7](#)Rat

[Unigene: 523899](#)Human

[Unigene: 44843](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

www.sunlongbiotech.com