

# Rabbit Anti-Kv4.3 antibody

## SL20219R

Product Name:	Kv4.3
Chinese Name:	离子Channel proteinKv4.3抗体
Alias:	KCND 3; KCND 3L; KCND 3S; KCND3; KCND3L; KCND3S; KSHIVB; Kv 4.3; Potassium ioinic channel Kv4.3; Potassium voltage gated channel Shal related subfamily member 3; Potassium voltage gated channel subfamily D member 3; Sha1 related potassium channel Kv4.3; Voltage gated K+ channel; Voltage gated potassium channel Kv4.3; Voltage gated potassium channel subunit Kv4.3; KCND3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=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:	73kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Kv4.3:451-550/655
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:	<u>PubMed</u>
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. Four sequence related potassium channel genes (shaker, shaw, shab, and shal) have been identified in Drosophila, and each has been shown to have human homologs. This protein is a member of the potassium channel, voltage gated, shal related subfamily, members of which form voltage activated A type potassium ion channels and are prominent in the repolarization phase of the action potential. This member includes two isoforms with different sizes, which are encoded by alternatively spliced transcript variants of this gene.

#### **Function:**

Pore-forming (alpha) subunit of voltage-gated rapidly inactivating A-type potassium channels. May contribute to I(To) current in heart and I(Sa) current in neurons. Channel properties are modulated by interactions with other alpha subunits and with regulatory subunits.

#### **Subunit:**

Homotetramer or heterotetramer with KCND1 and/or KCND2. Interacts with DLG1. Associates with the regulatory subunits KCNIP1, KCNIP2, KCNIP3 and KCNIP4. Interacts with KCNE1, KCNE2, SCN1B and KCNAB1.

#### **Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Cell membrane, sarcolemma. Cell projection, dendrite.

#### Tissue Specificity:

Highly expressed in brain, in particular in the retrosplenial cortex, medial habenula, anterior thalamus, hippocampus, cerebellum and lateral geniculate and superior colliculus. Highly expressed in heart atrium (at protein level) and throughout the ventricle wall, in lung and vas deferens.

#### Post-translational modifications:

Regulated through phosphorylation at Ser-569 by CaMK2D (By similarity).

#### Similarity:

Belongs to the potassium channel family. D (Shal) (TC 1.A.1.2) subfamily. Kv4.3/KCND3 sub-subfamily.

#### **SWISS:**

Q9UK17

#### Gene ID:

3752

#### Database links:

Entrez Gene: 3752Human

Entrez Gene: 56543Mouse

Entrez Gene: 65195Rat

Omim: 605411Human

SwissProt: Q9UK17Human

SwissProt: Q9Z0V1Mouse

SwissProt: Q62897Rat

Unigene: 666367Human

Unigene: 44530 Mouse

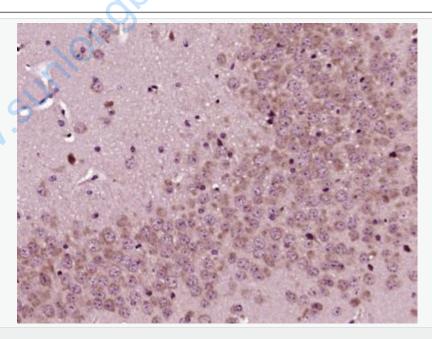
Unigene: 10540Rat

Unigene: 202969Rat

Unigene: 214215Rat

### Important Note:

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



#### Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

for 30min; Antibody incubation with (Kv4.3) Polyclonal Antibody, Unconjugated
(SL20219R) at 1:400 overnight at 4°C, followed by operating according to SP
Kit(Rabbit) (sp-0023) instructions and DAB staining.

