



Rabbit Anti-KCNAB1/Kv beta 1 antibody

SL8691R

Product Name:	KCNAB1/Kv beta 1
Chinese Name:	电压门控钾Channel protein1 抗体
Alias:	hKvb3; hKvBeta3; K(+) channel subunit beta-1; KCAB1_HUMAN; KCNA1B; KCNAB1; KV-BETA-1; Kvb1.3; Voltage-gated potassium channel beta-1 subunit; Voltage-gated potassium channel subunit beta-1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KCNAB1/Kv beta 1:131-230/419
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 K ⁺ channels in the plasma membrane control the repolarization and the frequency of action potentials in neurons, muscles and other excitable cells. The KV gene family encodes more than 30 proteins that comprise the subunits of the K ⁺ channels, and they vary in their gating and permeation properties, subcellular distribution and expression patterns. Functional KV channels assemble as tetramers

consisting of pore-forming α subunits (KV), which include the KV1, KV2, KV3 and KV4 proteins, and accessory or KV-subunits that modify the gating properties of the coexpressed KV subunits. KV β , also known as KCNAB1 (potassium voltage-gated channel, shaker-related subfamily, beta member 1), is a 419 amino acid accessory K⁺ channel protein that exists as three alternatively spliced isoforms and regulates the activity of the pore-forming α subunit. It is expressed in brain, with highest levels detected in caudate nucleus, hippocampus and thalamus.

Function:

Accessory potassium channel protein which modulates the activity of the pore-forming alpha subunit. All three isoforms alter the functional properties of Kv1.4 and Kv1.5. Isoform Kv β 1.2 has no effect on Kv1.1, Kv1.2 or Kv2.1.

Subunit:

Forms heteromultimeric complex with alpha subunits. Interacts with SQSTM1 (By similarity). Part of a complex containing KCNA1, KCNA4 and LGI1 (By similarity).

Subcellular Location:

Cytoplasm.

Tissue Specificity:

In brain, expression is most prominent in caudate nucleus, hippocampus and thalamus. Significant expression also detected in amygdala and subthalamic nucleus. Also expressed in both healthy and cardiomyopathic heart. Up to four times more abundant in left ventricle than left atrium.

Similarity:

Belongs to the shaker potassium channel beta subunit family.

SWISS:

Q14722

Gene ID:

7881

Database links:

[Entrez Gene: 395730](#) Chicken

[Entrez Gene: 526133](#) Cow

[Entrez Gene: 7881](#) Human

[Entrez Gene: 16497](#) Mouse

[Entrez Gene: 100125830](#) Pig

[Entrez Gene: 29737](#) Rat

[GenBank: NP_751891](#) Human

[Omim: 601141](#) Human

[SwissProt: Q9PWR1](#) Chicken

[SwissProt: Q4PJK1](#) Cow

[SwissProt: Q14722](#) Human

[SwissProt: P63143](#) Mouse

[SwissProt: P63144](#) Rat

[Unigene: 654519](#) Human

[Unigene: 703187](#) Human

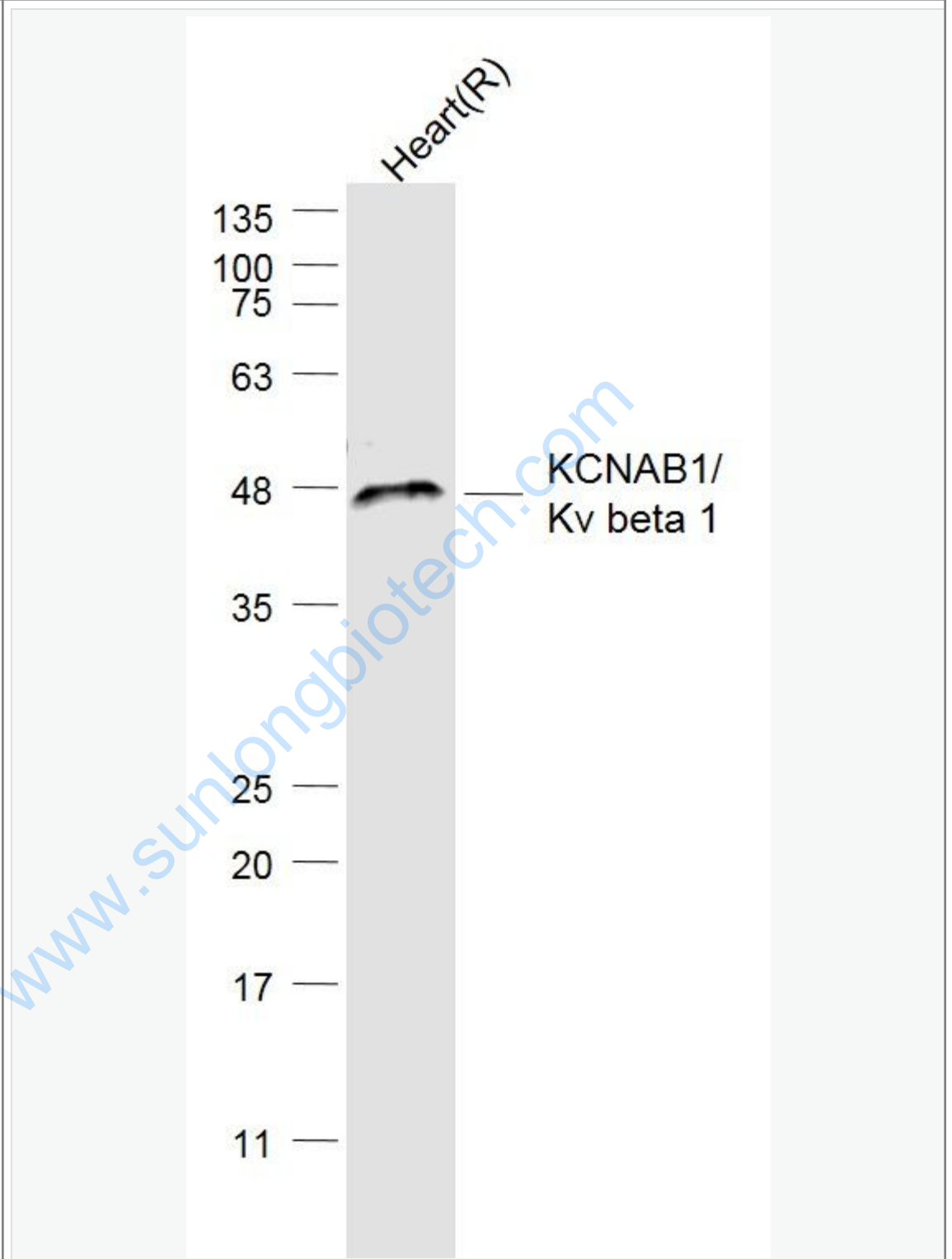
[Unigene: 316402](#) Mouse

[Unigene: 32090](#) Rat

Important Note:

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

Picture:



Sample:

Heart (Rat) Lysate at 40 ug

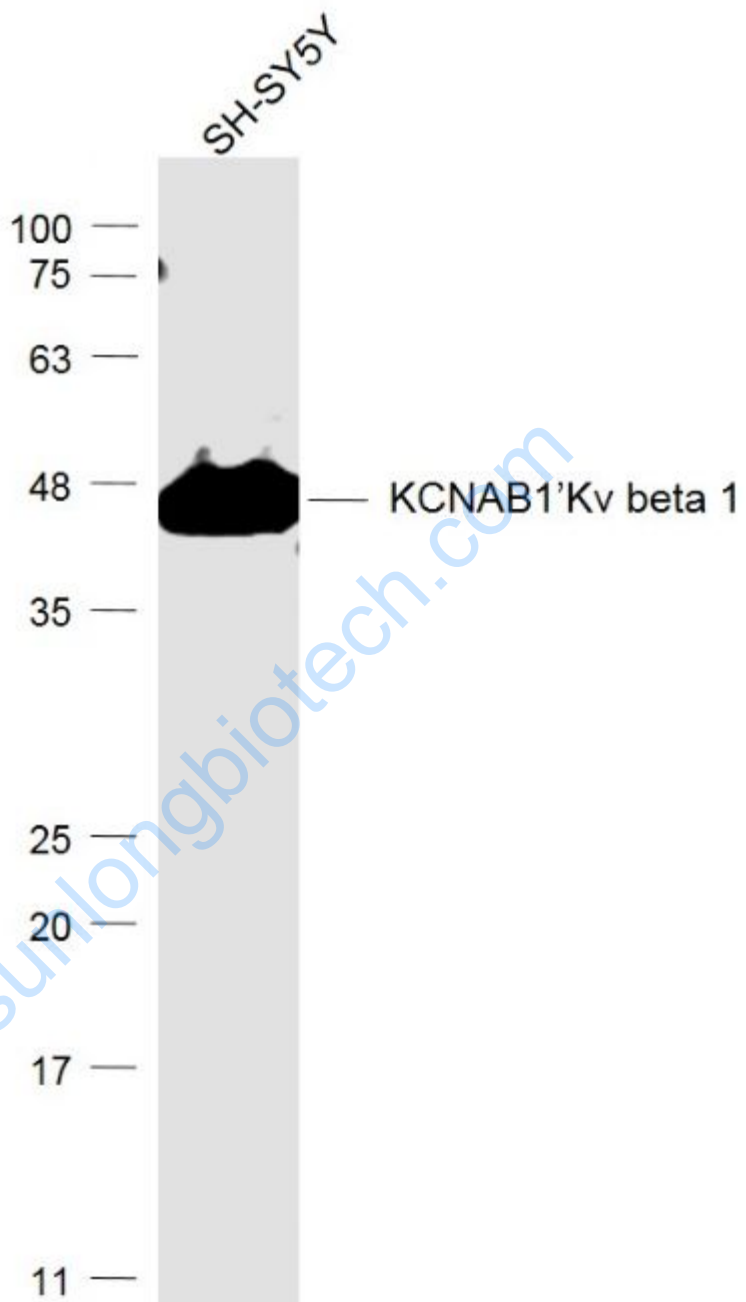
Primary: Anti-KCNAB1'Kv beta 1 (SL8691R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47 kD

Observed band size: 47 kD

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Sample:

SH-SY5Y (Human) Cell Lysate at 30 ug

Primary: Anti-KCNAB1'Kv beta 1 (SL8691R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47 kD

Observed band size: 47 kD

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