SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-KCNAB1/Kv beta 1 antibody

Catalog Number: SL8691R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	KCNAB1/Kv beta 1
Immunogen:	KLH conjugated synthetic peptide derived from human KCNAB1/Kv beta 1: 131-230/419
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Rat(predicted:Mouse,Chicken,Dog,Pig,Cow,Rabbit,Sheep)
Predicted MW.:	47kDa
Subcellular Location:	cytoplasmic
Background:	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 å 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∫, 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 å 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

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	of the pore-forming alpha subunit. All three isoforms alter the functional properties of Kv1.4 and Kv1.5. Isoform KvB1.2 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. **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

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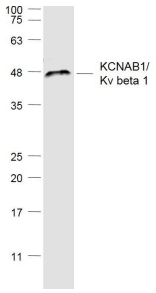
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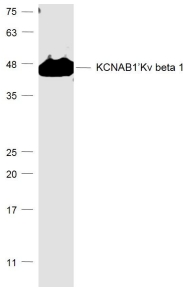
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[VALIDATION IMAGES]



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



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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