



KVβ1 Polyclonal Antibody

Catalog No	YP-Ab-01197
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	IHC;IF
Gene Name	KCNAB1
Protein Name	Voltage-gated potassium channel subunit beta-1 (K(+)) channel subunit beta-1 (Kv-beta-1)
Immunogen	Synthetic Peptide of KVβ1 AA range: 66-116
Specificity	KVβ1 protein(A255) detects endogenous levels of KVβ1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen.
Dilution	IHC 1:100-200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Voltage-gated potassium channel subunit beta-1 (K(+)) channel subunit beta-1;Kv-beta-1)
Observed Band	50kD
Cell Pathway	Cytoplasm . Membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Recruited to the cytoplasmic side of the cell membrane via its interaction with pore-forming potassium channel alpha subunits. .
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.
Function	domain:Alteration of functional properties of alpha subunit is mediated through N-terminal domain of beta subunit.,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 KvB1.2 has no effect on Kv1.1, Kv1.2 or Kv2.1.,similarity:Belongs to the shaker potassium channel beta subunit family.,subunit:Forms heteromultimeric complex with alpha subunits. Interacts with SQSTM1.,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.,

Background

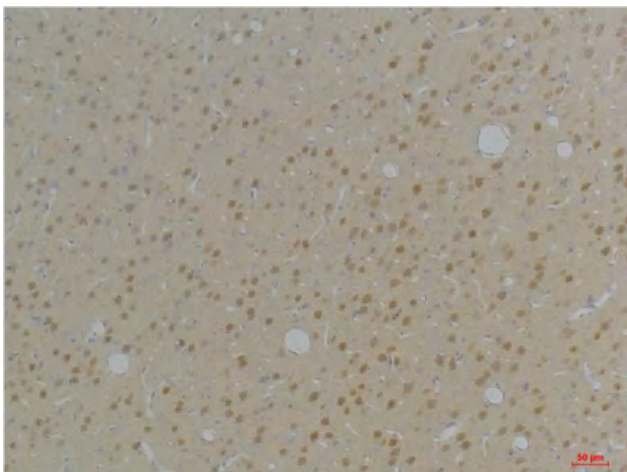
Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle 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 homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member includes distinct isoforms which are encoded by alternatively spliced transcript variants of this gene. Some of these isoforms are beta subunits, which form heteromultimeric complexes with alpha subunits and modulate the activity of the pore-forming alp

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using Kvb1 Rabbit pAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using Kvb1 Rabbit pAb diluted at 1:200.