Kv1.8 Monoclonal Antibody

Catalog No	YP-mAb-01199
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	KCNA10
Protein Name	Potassium voltage-gated channel subfamily A member 10 (Voltage-gated potassium channel subunit Kv1.8)
Immunogen	Synthetic Peptide of Kv1.8 AA range: 194-244
Specificity	Kv1.8 protein(A258) detects endogenous levels of Kv1.8
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Potassium voltage-gated channel subfamily A member 10 (Voltage-gated potassium channel subunit Kv1.8)
Observed Band	58kD
Cell Pathway	Membrane ; Multi-pass membrane protein .
Tissue Specificity	Detected in kidney, in proximal tubules, glomerular endothelium, in vascular endothelium and in smooth muscle cells.
Function	domain:The N-terminus may be important in determining the rate of inactivation of the channel while the tail may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments.,domain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.,function:Mediates voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient. The channel activity is up-regulated by cAMP.,similarity:Belongs to the potassium channel family. A (Shaker) subfamily.,subunit:Homotetramer. Interacts with KCN4B/POMP. Interaction with KCN4B/POMP is nec
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 contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It is specifically regulated by cGMP and postulated to mediate the effects of substances that increase intracellular cGMP. This gene is intronless, and the gene is clustered with genes KCNA
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

Western Blot analysis of various cells using Kv1.8 Monoclonal Antibody