



# KV4.1 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-16456
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB
<b>Gene Name</b>	KCND1
<b>Protein Name</b>	Potassium voltage-gated channel subfamily D member 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human KCND1. AA range:558-607
<b>Specificity</b>	KV4.1 Monoclonal Antibody detects endogenous levels of KV4.1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	KCND1; Potassium voltage-gated channel subfamily D member 1; Voltage-gated potassium channel subunit Kv4.1
<b>Observed Band</b>	70kD
<b>Cell Pathway</b>	Membrane; Multi-pass membrane protein. Cell projection, dendrite .
<b>Tissue Specificity</b>	Widely expressed. Highly expressed in brain, in particular in cerebellum and thalamus; detected at lower levels in the other parts of the brain.
<b>Function</b>	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: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.,similarity:Belongs to the potassium channel family. D (Shal) subfamily.,subunit:Homotetramer or heterotetramer with KCND2 and/or KCND3. Associates with the regulatory subunits KCNIP1, KCNIP2, KCNIP3 and KCNIP4 (By similarity). Interacts with DPP10.,tissue specificity:Widely expressed. Highly expressed in brain, in particular in cerebellum and thalamus; detected at lower levels in the other parts of the brain.,



## Background

This gene encodes a multipass membrane protein that comprises the pore subunit of the voltage-gated A-type potassium channel, which functions in the repolarization of membrane action potentials. Activity of voltage-gated potassium channels is important in a number of physiological processes, among them the regulation of neurotransmitter release, heart rate, insulin secretion, and smooth muscle contraction. [provided by RefSeq, Aug 2013],

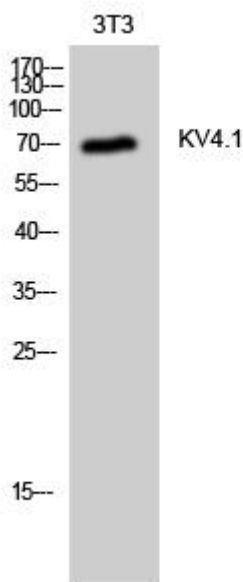
## matters needing attention

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 KV4.1 Monoclonal Antibody