



# Kv4.2 rabbit pAb

Cat No.:ES5999

For research use only

## Overview

<b>Product Name</b>	Kv4.2 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Kv4.2/KCND2. AA range:581-630
<b>Specificity</b>	Kv4.2 Polyclonal Antibody detects endogenous levels of Kv4.2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Potassium voltage-gated channel subfamily D member 2
<b>Gene Name</b>	KCND2
<b>Cellular localization</b>	Cell membrane ; Multi-pass membrane protein . Cell projection, dendrite . Cell junction, synapse . Perikaryon . Cell junction, synapse, postsynaptic cell membrane . Cell projection, dendritic spine . Cell junction . In neurons, primarily detected on dendr
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	
<b>Human Gene ID</b>	3751
<b>Human Swiss-Prot Number</b>	Q9NZV8
<b>Alternative Names</b>	KCND2; KIAA1044; Potassium voltage-gated channel subfamily D member 2; Voltage-gated potassium channel subunit Kv4.2





## Background

Voltage-gated potassium (Kv) 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, shal-related subfamily, members of which form voltage-activated A-type potassium ion channels and are prominent in the repolarization phase of the action potential. This member mediates a rapidly inactivating, A-type outward potassium current which is not under the control of the N terminus as i

Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Kv4.2/KCND2 Antibody. The picture on the right is blocked with the synthesized peptide.

