

Product datasheet for **AP05130PU-N**

Kv4.2 (KCND2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 5 - 10 µg/ml.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide derived from the rat Kv4.2 potassium channel conjugated to KLH.
Specificity:	This antibody reacts to Kv4.2 Potassium Channel.
Formulation:	Phosphate buffered saline with 0.08% sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	potassium voltage-gated channel subfamily D member 2
Database Link:	Entrez Gene 3751 Human Q9NZV8



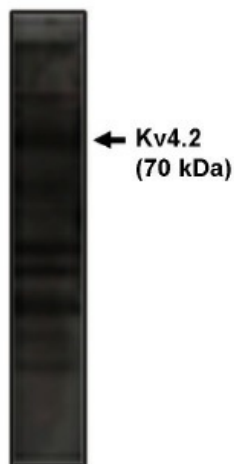
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Background:

The Kv4.2 potassium channel is a voltage-gated channel protein which belongs to the delayed rectifier class and to the Shal potassium channel subfamily. Potassium channels are mainly found in plasma membranes but are not generally distributed over the cell surface. Potassium channels catalyze the rapid permeation of potassium ions while rejecting biologically abundant potential competitors such as sodium, calcium and magnesium. Ion selectivity and high through put rate of potassium channels is accomplished by precise co-ordination of dehydrated potassium by the protein and multiple ion occupancy within the permeation pathway. All potassium channels carry out the formation of a transmembrane leak specific for potassium ions. Since cells almost universally maintain cytoplasmic potassium concentrations higher than those extracellularly, the opening of a potassium channel implies a negative ongoing change in electrical voltage across the cell membrane. This may result in termination of the action potential of electrically excitable cells including nerve, muscle and pancreatic beta cells. In non-excitable cells, potassium channels play important roles in the cellular potassium recycling required for electrolyte balance effected by the renal epithelium.

Synonyms:

Potassium voltage-gated channel subfamily D member 2, Voltage-gated potassium channel subunit Kv4.2, KIAA1044

Product images:

Western blot analysis using Kv4.2 antibody on rat brain lysate.