

## Product datasheet for **AP05122PU-N**

### KCNA1 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 Kv1.1 potassium channel conjugated to KLH.
Specificity:	This antibody reacts to Kv1.1 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 A member 1
Database Link:	<a href="#">Entrez Gene 3736 Human Q09470</a>



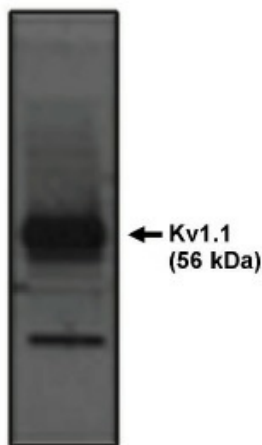
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**Background:**

K<sup>+</sup> channels from the Kv1 subfamily contain four alpha-subunits and the combinations (from Kv1.1-1.6) determine susceptibility to dendrotoxin (DTX) homologue. Kv1.1, a Shaker-like voltage-gated potassium channel, is strongly expressed in a variety of neurons in adult rodents, in which it appears to be involved in regulating neuronal excitability. Here we show that Kv1.1 is also expressed during embryonic development in the mouse, exhibiting two transient peaks of expression around embryonic day 9.5 (E9.5) and E14.5. Potassium channels play a critical role in limiting neuronal excitability. Mutations in certain voltage-gated potassium channels have been associated with hyperexcitable phenotypes in both humans and animals. However, only recently have mutations in potassium channel genes (i.e. KCNQ2 and KCNQ3) been discovered in a human epilepsy, benign familial neonatal convulsions.

**Synonyms:**

HUK1, HBK1

**Product images:**

Western blot analysis using Kv1.1 antibody on rat brain lysate.