

Product datasheet for **TA328929**

Kcna2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	GST fusion protein with sequence YHRETEGEEQAQYLQVTSCPKIPSSPDLKK SRSASTISKSDYMEIQEGVNNSNEDFREENLKTANCTLANCTNYVNITKMLTDV, corresponding to amino acid residues 417-499 of rat KV1.2. Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	The serum was depleted of anti-GST antibodies by affinity chromatography on immobilized GST and from cross-reactive antibodies by affinity chromatography on immobilized KV1.1-GST-fusion protein and KV1.4-GST-fusion protein. The antibody was then affinity
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	potassium voltage-gated channel subfamily A member 2
Database Link:	NP_037102 Entrez Gene 3737 Human Entrez Gene 16490 Mouse Entrez Gene 25468 Rat P63142



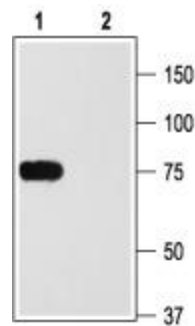
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Background:

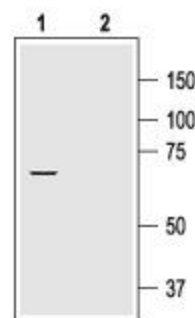
KV1.2 is a mammalian voltage dependent K⁺ channel, homologous to the Drosophila Shaker K⁺ channel. KV1.2 was first cloned from rat brain.¹ Eight Shaker related genes exist in mammals constituting the KV1, subfamily of the large KV channel family of genes. A functional KV1 channel is either a membrane spanning homotetramer or heterotetramer, which is composed of members of the same subfamily. In addition several auxiliary subunits and intracellular proteins might interact with the channel and affect its function. The structure of KV1.2 channel is similar to all KV channels and includes six membrane spanning helices creating a voltage sensor domain and a pore domain. The channel is expressed in neurons and cardiac and smooth muscle tissue as well as in retina and pancreas. The crystal structure of KV1.2 was recently solved shedding light on the structure of a mammalian voltage dependent channel. The functional channel is considered low voltage activated and shows very little inactivation. Therefore, this channel activity influences the membrane potential and excitability of neurons and muscle. KV1.2 channels are sensitive to high doses of TEA (560 mM) and low doses of 4-AP (0.59 mM), the "classical" non-selective potassium channel blockers.

Synonyms:

HBK5; HK4; HUKIV; KV1.2; MGC50217; MK2; NGK1; RBK2

Product images:

Western blot analysis of rat brain membranes: 1. Anti-KV1.2 antibody, (1:200). 2. Anti-KV1.2 antibody, preincubated with the control peptide antigen.



Western blot analysis of rat heart membranes: 1. Anti-KV1.2 antibody, (1:200) 2. Anti-KV1.2 antibody, preincubated with the control antigen.