

Product datasheet for **TA328934**

Kcnc4 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:	Peptide EAGDD ERELA LQRLG PHEG(C), corresponding to amino acid residues 177-195 of rat Kv3.4. Intracellular, N-terminal.
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, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized peptide.
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 C member 4
Database Link:	NP_001116248 Entrez Gene 3749 Human Entrez Gene 99738 Mouse Entrez Gene 684516 Rat Q63734



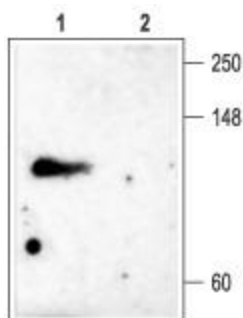
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Background:

Kv3.4 is a member of the voltage-gated K⁺ channel superfamily. Together with the related proteins Kv3.1, Kv3.2 and Kv3.3 they constitute the Shaw type subfamily family. As with all Kv channels, Kv3.4 possesses the signature structure of the voltage-dependent K⁺ channels: six membrane-spanning domains with intracellular N and C termini. The functional Kv channel is a tetramer that can either be a homomer or a heteromer of Kv3 subunits. Kv3 subfamily members inactivate very rapidly and therefore are thought to play a role in the repolarization of action potentials and to facilitate repetitive high frequency firing. Kv3.4 expression is wide and the channel can be found in brain, skeletal muscle, prostate and pancreas among others. Kv3.4 subunits have been implicated recently in the response mechanism to chronic hypoxia and the etiology of Alzheimer's and Parkinson's diseases. In addition, Kv3.4 was found to associate with the auxiliary subunit KCNE3 (MirP2) in skeletal muscle. A mutation in KCNE3 (R83H) has been associated with an inherited form of periodic paralysis (Thyrotoxic hypokalemic periodic paralysis) that is caused by the altered physiological function of the Kv3.4 channel.

Synonyms:

HKSHIIIC; KSHIIIC; KV3.4; MGC126818

Product images:

Western blot analysis of rat brain membranes: 1. Anti-Kv3.4 antibody, (1:200). 2. Anti-Kv3.4 antibody, preincubated with the control peptide antigen.