

Product datasheet for **TA328966**

Kcnh1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide GDPAKRRKGWARFKDAC, corresponding to amino acid residues 802-817 of rat KV10.1. ?Â ?Â 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, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
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 H member 1
Database Link:	NP_113930 Entrez Gene 3756 Human Entrez Gene 16510 Mouse Entrez Gene 65198 Rat Q63472



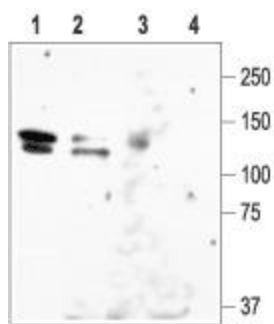
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Background:

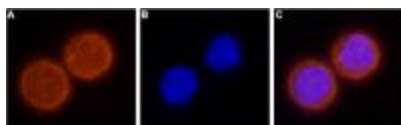
KV10.1 is a member of the Ether-a-go-go family of voltage-activated K⁺ channels. To date, the family includes 8 members: the closely related KV10.2 (EAG-2) protein, the KV12 (elk) subfamily (elk1, elk2, elk3) and the KV11 (erg) proteins (erg1, erg2, erg3). As with the other KV superfamily members, KV10.1 shows the characteristic 6 transmembrane domains with intracellular N and C termini. The KV10 subfamily current is characterized by outward rectification without inactivation and slow activation kinetics. Its expression is normally confined to the brain where its physiological function has not yet been clarified. Intriguingly, the KV10.1 channel has been implicated in malignant tumor development. It has been shown that KV10.1 was inappropriately expressed in several cancer cell lines. Moreover, one study showed that KV10.1 by itself had oncogenic potential, as a cell line transfected with the channel, induced aggressive and faster tumor growth in vivo as compared to a cell line transfected with an unrelated KV channel.

Synonyms:

EAG; eag1; h-eag; hEAG1; Kv10.1; MGC142269

Product images:

Western blot analysis of rat brain lysate (lanes 1 and 3) and HEK-KV10.1 (lanes 2 and 4): 1, 2. Anti-KV10.1 (EAG-1) antibody, (1:200). 3, 4. Anti-KV10.1 (EAG-1) antibody, preincubated with the control antigen.



Expression of Kv10.1 in human MDA-468 mammary gland adenocarcinoma cells. Immunocytochemical staining of pA. Cells were stained with Anti-Kv10.1 (EAG-1) antibody, (1:200) followed by goat anti-rabbit-AlexaFluor-555 secondary antibody (red). B. Nuclei were visualized with the cell-permeable dye Hoechst 33342 (blue). C. Merged image of panels A and B.