

Product datasheet for **TA328981**

Kcne4 Rabbit Polyclonal Antibody

Product data:

| | |
|------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | WB |
| Recommended Dilution: | WB: 1:200-1:2000 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Immunogen: | Peptide (C)GYMKSRRREKKSS, corresponding to amino acid residues 56- 68 of mouse KCNE4 . 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: | 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, Isk-related subfamily, gene 4 |
| Database Link: | NP_067317 Entrez Gene 23704 Human Entrez Gene 367302 Rat Entrez Gene 57814 Mouse Q9WTW3 |



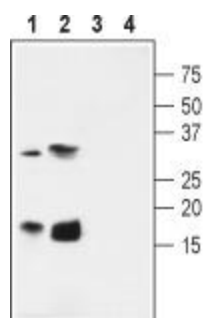
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Background:

The K⁺ voltage-gated channel subfamily E member (KCNE) family is a group of small, non-conducting, single transmembrane domain proteins that associate with pore-forming potassium channel subunits to form mixed complexes with unique characteristics. Five different KCNE proteins have been described (KCNE1-5)². The KCNE regulatory subunits are small proteins (14-20 kD) with a type-1 integral membrane topology. It is believed that both the cytoplasmic C-terminus tail and the transmembrane domain are necessary for the interaction with the α subunits. MinK-related peptides (MiRPs) MiRP3, protein encoded by KCNE43. The importance of these proteins to normal physiology of the heart and nervous system is exposed by their association with clinical disorders such as congenital long QT syndrome, drug-induced cardiac arrhythmias, sensorineural deafness, and periodic paralysis. In addition, MiRPs influence the normal physiology of endocrine and exocrine glands, intestinal secretion, and renal excretion. MiRP3 is found to co-localize with KV4.2 subunits that contribute to cardiac transient outward K⁺ currents. Levels of the KCNE4 transcript in human cardiac ventricle are robust and increase in patients with congestive failure suggesting a regulatory function for MiRP3 in the heart⁶. In addition to regulating KV4.2, MiRP3 also regulates KCNQ1 and BK channels.

Synonyms:

MGC20353; MiRP3

Product images:

Western blot analysis of rat pancreas membranes (lanes 1 and 3) and rat heart lysate (lanes 2 and 4): 1-2. Anti-KCNE4 (MiRP3) antibody, (1:600). 3-4. Anti-KCNE4 (MiRP3) antibody, preincubated with the control peptide antigen.