

Product datasheet for **TA328971**

Kcnh4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CRLNQEISRLNQEVS, corresponding to amino acids 881-895 of rat Kv12.3 . Intracellular, C-terminal part.
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 4
Database Link:	NP_446082 Entrez Gene 23415 Human Entrez Gene 114032 Rat Q9R1T9



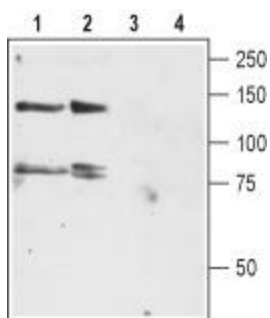
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Background:

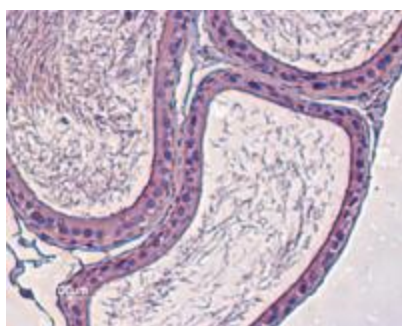
Kv12.3 (also known as elk3 and KCNH4) is a voltage-gated K⁺ channel that belongs to the ether-a-go-go (EAG) family. The EAG family of voltage-gated K⁺ channels can be subdivided into three distinct groups based on sequence homology. These are the eag (Kv10) with two members, the eag-related channels (erg or Kv11) and the eag-like K⁺ channels (elk or Kv12) with three members each. As all members of the family, Kv12.3 possesses the signature structure of the voltage-dependent K⁺ channels: six membrane-spanning domains with intracellular N and C termini. As with all voltage-dependent K⁺ channels the functional channel is a tetramer composed of four subunits. It has been suggested that the Kv12 subfamily members can form functional heteromultimers within the subfamily. Kv12.3 channel distribution appears to be mainly confined to the central nervous system with some expression in peripheral organs such as testis and lung. The physiological function of the Kv12.3 channel hasn't been established, although a role in the modulation of overall excitability of neurons has been suggested. At the moment there isn't much pharmacological data concerning the modulation of the Kv12.3 channel except for blocking of the channel by Ba²⁺.

Synonyms:

BEC2; elk1; Kv12.3

Product images:

Western blot analysis of rat brain (lanes 1 and 3) and cerebellum (lanes 2 and 4) lysates: 1, 2. Anti-KV12.3 (Elk3) antibody, (1:200). 3, 4. Anti-KV12.3 (Elk3) antibody, preincubated with the control peptide antigen.



Expression of Kv12.3 in rat testes. Immunohistochemical staining of rat testes paraffin embedded section using Anti-Kv12.3 (Elk3) antibody, (1:100). Kv12.3 (pink staining) is expressed in the columnar epithelium of the epididymus. Hematoxylin is used as the counterstain.