

Product datasheet for **TA328961**

Kcnn4 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 RQVRLKHRKLREQV(C), corresponding to amino acid residues 350-363 of rat KCa3.1. 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 calcium-activated channel subfamily N member 4
Database Link:	NP_075410 Entrez Gene 3783 Human Entrez Gene 16534 Mouse Entrez Gene 65206 Rat



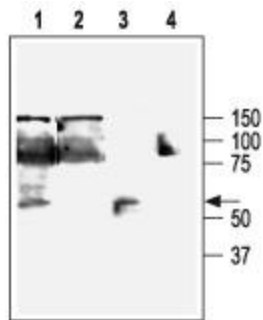
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Background:

KCa3.1 is part of the Ca^{2+} activated K^{+} channels family that share the characteristic of being activated by intracellular Ca^{2+} . The channel has an intermediate conductance, is voltage insensitive and is activated by Ca^{2+} in the submicromolar range. The channel has a similar topology to that of KV channels, that is six transmembrane domains and intracellular N- and C-termini. KCa3.1 is widely expressed in epithelial, endothelial and cells of hematopoietic origin. In erythrocytes (red blood cells) it has been identified as the molecular correlate of the so-called Gardos channel. The functional role of the channel is to set the cell membrane potential at negative values so as to aid in the electrochemical transport of other ions such as Cl^{-} and Ca^{2+} . Indeed, KCa3.1 has a key role in sustaining the Ca^{2+} influx in activated T lymphocytes and in regulating Cl^{-} secretion from colon epithelium. Therefore, specific blockers of the KCa3.1 channel have been proposed for the treatment of several diseases including autoimmune diseases, secretory diarrhea and sickle cell anemia.

Synonyms:

hIKCa1; hKCa4; hSK4; IK1; IKCA1; KCa3.1; KCA4; SK4

Product images:

Western blot analysis of HEK-293-KCa3.1 (1, 2) and K562 (3, 4) cells: 1, 3. Anti-KCa3.1 (SK4, IKCa1) antibody, (1:200). 2, 4. Anti-KCa3.1 (SK4, IKCa1) antibody, preincubated with the control peptide antigen.