

Product datasheet for **TA328947**

Kcnk9 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DDYQQLELVILQSEPHR, corresponding to amino acid residues 57-73 of rat K2P9.1 . Extracellular, near the P1 loop.
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 two pore domain channel subfamily K member 9
Database Link:	NP_445857 Entrez Gene 51305 Human Entrez Gene 84429 Rat Q9ES08



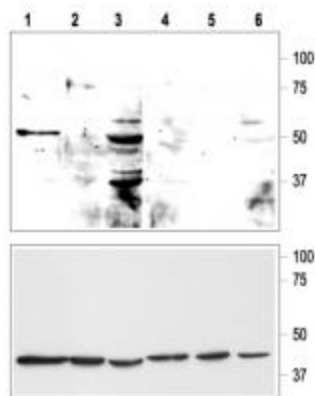
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Background:

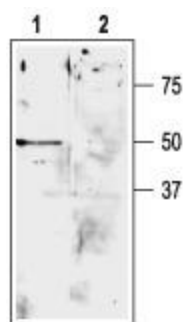
K2P9.1 (also named TASK3 or KCNK9) is a member of the 2-pore (2P) domain K⁺ channels family that probably assemble as dimers to constitute a functional channel. These channels show little time or voltage dependence and are considered to be “leak” or “background” K⁺ channels, thereby generating background currents which help set the membrane resting potential and cell excitation. The channels are regulated by diverse physical and chemical stimuli including temperature, pH, mechanical stretch, inhalation anesthetics, etc. The physiological role of the K2P channels is not yet clear, though they were proposed to participate in breathing, aldosterone secretion and anesthetic-mediated neuronal activity. In human, expression of K2P9.1 is restricted in brain and its expression overlaps with the structurally related K2P3.1 (TASK1, KCNK3) channel. In rat, it is more widely expressed in other tissues as well as in brain. Unexpectedly, K2P9.1 was found to be over-expressed between 5 to 100-fold in 44% of breast cancer tumors tested. Transfection and over-expression of K2P9.1 in cell lines promotes tumor growth and confers resistance to hypoxia and serum deprivation. Recently, K2P9.1 was found to play an important role in K⁺-dependent apoptosis of cerebellar granules.

Synonyms:

K2p9.1; KT3.2; MGC138268; MGC138270; TASK-3; TASK3

Product images:


WB analysis of K2P9.1 in rat cerebellum (lanes 1, 4), human mammary gland MCF-10A (lanes 2, 5) and MCF-7 (lanes 3, 6) cell lysates (upper panel): 1-3. Anti-K2P9.1 (TASK-3) antibody. 4-6. Anti-K2P9.1 (TASK-3) antibody, preincubated with the control peptide antigen. Lower panel: anti-beta-actin to ensure equal loading. Note that the expected 50 kD MW band is present in cerebellum and in the tumorigenic breast cancer cell line (MCF-7) but not in the non-tumorigenic breast cell line (MCF-10A).



Western blot analysis of rat cerebellum lysate: 1. Anti-K2P9.1 (TASK-3) antibody, (1:200). 2. Anti-K2P9.1 (TASK-3) antibody, preincubated with the control peptide antigen.