

## Product datasheet for **TA328676**

### KCNK5 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:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)YEQLMNEYNKANSPKGT, amino acid residues 483-499 of human K2P5.1. Å 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, 5% sucrose, 0.025% NaN <sub>3</sub> .
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 5
Database Link:	<a href="#">NP_003731</a> <a href="#">Entrez Gene 364241 Rat</a> <a href="#">O95279</a>



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**Background:**

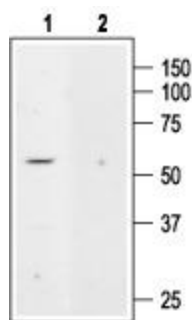
K2P5.1 (also named TWIK-Related Acid Sensitive K<sup>+</sup> channel 2, TASK-2 or KCNK5) is a member of the 2-pore (2P) domain K<sup>+</sup> channels family that includes at least 16 members. These channels show little time or voltage dependence and are considered to be “leak” or “background” K<sup>+</sup> channels, thereby generating background currents which help set the membrane resting potential and cell excitation. The K2P channels have a signature topology that includes four transmembrane domains and two pore domains with intracellular N- and C termini. The functional channel is believed to be a dimer. K2P channels are regulated by diverse physical and chemical stimuli including temperature, changes in intracellular pH, mechanical stretch, inhalation anesthetics, etc. The channels can then be subclassified based in their specific activators. As indicated by its name, K2P5.1 is sensitive to variations in external pH. K2P5.1 current is maximal at pH 8.8 but it is only 10% at pH 6.5. The channel is expressed in several epithelial tissues including pancreas, lung, small intestine and specially kidney. In the kidney K2P5.1 has an important function in NaHCO<sub>3</sub> absorption in the proximal tubule as knockout mice for K2P5.1 display metabolic acidosis and hypotension.

**Synonyms:**

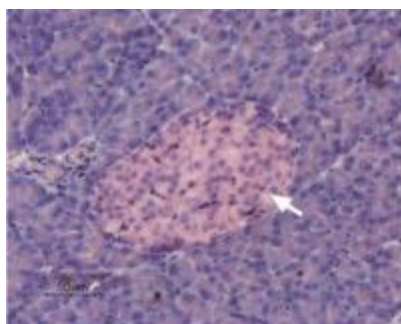
K2p5.1; KCNK5b; TASK-2; TASK2

**Protein Families:**

Druggable Genome, Ion Channels: Potassium, Transmembrane

**Product images:**

Western blot analysis of rat kidney membranes: 1. Anti-K2P5.1 (TASK-2) antibody, (1:200). 2. Anti-K2P5.1 (TASK-2) antibody, preincubated with the control peptide antigen.



1 in rat pancreas. IHC staining of rat pancreas was visualized using Anti-K2P5.1 (TASK-2) antibody, (1:50). Paraffin embedded sections of rat pancreas showing both endocrine (Islets of Langerhans) and exocrine areas. Strong and highly specific staining is evident only in endocrine cells (arrow). Universal Immuno-alkaline-phosphatase Polymer followed by New Fuchsin Substrate (Histofine, Nichirei Corp.) was used for the color reaction. Hematoxylin is used as the counterstain.