10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



# KCNK13 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI10823

#### **Product Information**

ApplicationWB, IHCPrimary AccessionQ9HB14

Other Accession NM 022054, NP 071337
Reactivity Human, Rat, Pig, Horse

Predicted Human, Pig
Host Rabbit
Clonality Polyclonal
Calculated MW 45391

#### **Additional Information**

**Gene ID** 56659

Alias Symbol THIK1, THIK-1, K2p13.1

Other Names Potassium channel subfamily K member 13, Tandem pore domain

halothane-inhibited potassium channel 1, THIK-1, KCNK13

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 ul of distilled water. Final anti-KCNK13 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

**Precautions** KCNK13 antibody - C-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

#### **Protein Information**

Name KCNK13 {ECO:0000303 | PubMed:24163367,

ECO:0000312 | HGNC:HGNC:6275}

**Function** K(+) channel that conducts outward rectifying tonic currents potentiated by

purinergic signals (PubMed:<u>24163367</u>, PubMed:<u>25148687</u>, PubMed:<u>30472253</u>, PubMed:<u>38409076</u>). Homo- and heterodimerizes to form functional channels

with distinct regulatory and gating properties (PubMed:25148687). Contributes most of K(+) currents at the plasma membrane of resting microglia. Maintains a depolarized membrane potential required for proper ramified microglia morphology and phagocytosis, selectively mediating microglial pruning of presynaptic compartments at hippocampal excitatory synapses (PubMed:38409076). Upon local release of ATP caused by neuronal

injury or infection, it is potentiated by P2RY12 and P2RX7 receptor signaling and contributes to ATP-triggered K(+) efflux underlying microglial NLRP3 inflammasome assembly and IL1B release (By similarity) (PubMed: 38409076).

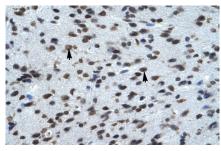
**Cellular Location** Cell membrane; Multi-pass membrane protein

**Tissue Location** Expressed in microglia (at protein level).

### References

Rajan, S., et al., (2001) J. Biol. Chem. 276 (10), 7302-7311Reconstitution and Storage: For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

## **Images**

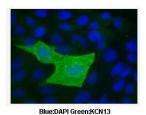


Rabbit Anti-Q9HB14 Antibody Paraffin Embedded Tissue: Human Brain Cellular Data: Neural Cells

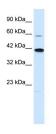
Antibody Concentration: 4.0-8.0 µg/ml

Magnification: 400X





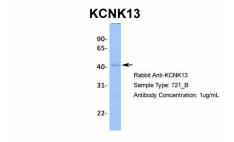
See IHC 2 Data and Customer Feedback for more Information



WB Suggested Anti-KCNK13 Antibody Titration: 0.12µg/ml

ELISA Titer: 1:1562500

Positive Control: Jurkat cell lysate



Host: Rabbit

Target Name: KCNK13 Sample Tissue: 721\_B

Antibody Dilution: 1.0µg/mlKCNK13 is supported by BioGPS gene expression data to be expressed in 721\_B

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.