

# KCNN3 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI10788

## Product Information

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<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">Q9UGI6</a>
<b>Other Accession</b>	<a href="#">NM_002249</a> , <a href="#">NP_002240</a>
<b>Reactivity</b>	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
<b>Predicted</b>	Mouse, Rat, Rabbit, Pig, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	81385

## Additional Information

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<b>Gene ID</b>	3782
<b>Alias Symbol</b>	SK3, hSK3, SKCA3, KCa2.3
<b>Other Names</b>	Small conductance calcium-activated potassium channel protein 3, SK3, SKCa3, SKCa3, KCa2.3, KCNN3, K3
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-KCNN3 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.
<b>Precautions</b>	KCNN3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	KCNN3 ( <a href="#">HGNC:6292</a> )
<b>Synonyms</b>	K3
<b>Function</b>	Small conductance calcium-activated potassium channel that mediates the voltage-independent transmembrane transfer of potassium across the cell membrane through a constitutive interaction with calmodulin which binds the intracellular calcium allowing its opening (PubMed: <a href="#">12808432</a> , PubMed: <a href="#">20562108</a> , PubMed: <a href="#">31155282</a> , PubMed: <a href="#">36502918</a> ). The current is characterized by a voltage-independent activation, an intracellular calcium concentration increase-dependent activation and a single-channel conductance of 10 picosiemens (PubMed: <a href="#">12808432</a> , PubMed: <a href="#">20562108</a> ,

PubMed:[31155282](#), PubMed:[36502918](#)). Also presents an inwardly rectifying current, thus reducing its already small outward conductance of potassium ions, which is particularly the case when the membrane potential displays positive values, above + 20 mV (PubMed:[12808432](#)). Activation is followed by membrane hyperpolarization. Thought to regulate neuronal excitability by contributing to the slow component of synaptic afterhyperpolarization (By similarity).

## Cellular Location

Cell membrane; Multi-pass membrane protein. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250|UniProtKB:P58391}

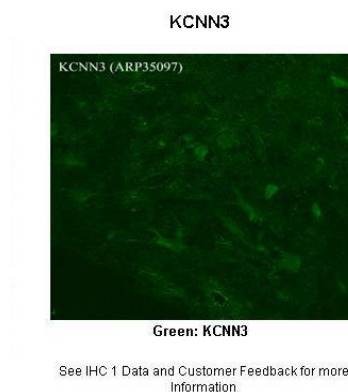
## Tissue Location

[Isoform 3]: Widely distributed in human tissues and is present at 20-60% of KCNN3 in the brain

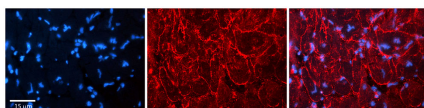
## References

Kolski-Andreaco,A., et al., (2004) J. Biol. Chem. 279 (8), 6893-6904  
Reconstitution 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.

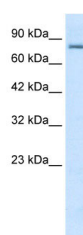
## Images



Sample Type : Rhesus macaque spinal cord  
Primary Antibody Dilution : 1:300  
Secondary Antibody : Donkey anti Rabbit 488  
Secondary Antibody Dilution : 1:500  
Color/Signal Descriptions : Green: KCNN3  
Gene Name : KCNN3  
Submitted by : Timur Mavlyutov, Ph. D.,  
Department of Pharmacology, University of Wisconsin Medical School, 1300 University Avenue, Madison, WI 53706

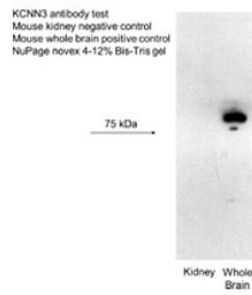


Rabbit Anti-KCNN3 Antibody  
Catalog Number: AI10788  
Formalin Fixed Paraffin Embedded Tissue: Human Adult heart  
Observed Staining: Membrane  
Primary Antibody  
Concentration: 1:600  
Secondary Antibody: Donkey anti-Rabbit-Cy2/3  
Secondary Antibody  
Concentration: 1:200  
Magnification: 20X  
Exposure Time: 0.5 s 2.0 sec  
Protocol located in Reviews and Data.



WB Suggested Anti-KCNN3 Antibody Titration: 0.2-1 µg/ml  
ELISA Titer: 1:62500  
Positive Control: Daudi cell lysate  
KCNN3 is supported by BioGPS gene expression data to be expressed in Daudi

KCNN3 antibody - C-terminal region (AI10788) validated by WB using Mouse kidney , Whole brain lysate at 2 µg/ml.



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