

Rabbit KCNC3 Polyclonal Antibody | anti-KCNC3 antibody

KCNC3 Antibody

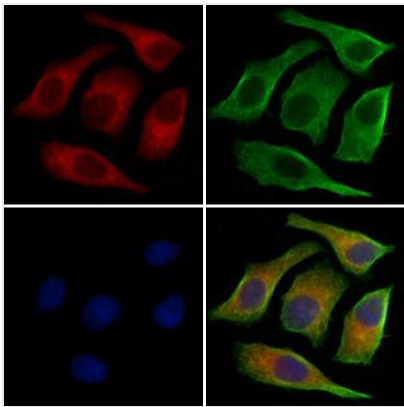
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328958	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Sheep(100%), Rabbit(100%)	ELISA

PRODUCT SYNONYMS

KCNC3; Polyclonal Antibody; KCNC3 Antibody; Kcnc3; KCNC3_HUMAN; KSHIID; KV3.3; Potassium voltage gated channel Shaw related subfamily member 3; Potassium voltage gated channel subfamily C member 3; Potassium voltage-gated channel subfamily C member 3; SCA13; Shaw related subfamily; member 3; Shaw related voltage gated potassium channel protein 3; Spinocerebellar ataxia 13; Voltage gated potassium channel protein KV3.3; Voltage gated potassium channel subunit Kv3.3; Voltage-gated potassium channel subunit Kv3.3; anti-KCNC3 antibody

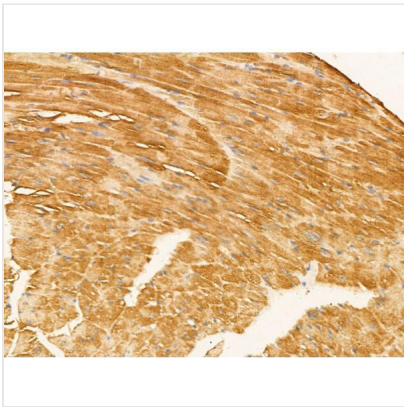
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Sheep(100%), Rabbit(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	KCNC3 Antibody detects endogenous levels of total KCNC3.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	757
Applicable Applications for anti-KCNC3 antibody	ELISA
Immunogen	A synthesized peptide derived from human KCNC3, corresponding to a region within C-terminal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



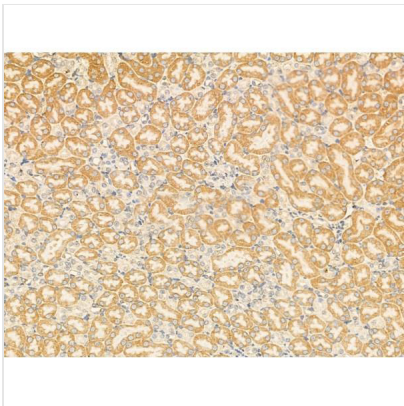
IF (Immunofluorescence)

AAA328958 staining HepG2 cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25Å°C. Samples were then incubated with primary Ab(AAA328958 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37Å°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

AAA328958 at 1/100 staining Mouse heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Å°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



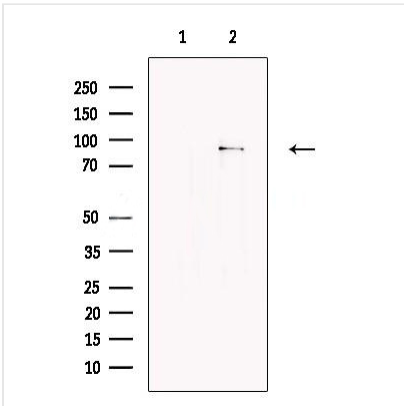
IHC (Immunohistochemistry)

AAA328958 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Å°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA328958 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Å°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from 293, using KCNC3 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-KCNC3 antibody	Function: Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient. The channel displays rapid activation and inactivation kinetics (PubMed:10712820, PubMed:26997484, PubMed:22289912, PubMed:23734863, PubMed:16501573, PubMed:19953606, PubMed:21479265, PubMed:25756792). It plays a role in the regulation of the frequency, shape and duration of action potentials in Purkinje cells. Required for normal survival of cerebellar neurons, probably via its role in regulating the duration and frequency of action potentials that in turn regulate the activity of voltage-gated Ca(2+) channels and cellular Ca(2+) homeostasis (By similarity). Required for normal motor function (PubMed:23734863, PubMed:16501573, PubMed:19953606, PubMed:21479265, PubMed:25756792). Plays a role in the reorganization of the cortical actin cytoskeleton and the formation of actin veil structures in neuronal growth cones via its interaction with HAX1 and the Arp2/3 complex (PubMed:26997484). Post Translational Modifications: N-glycosylated. Subcellular Location: Cell membrane>Multi-pass membrane protein. Cell junction>Synapse>Presynaptic cell membrane>Multi-pass membrane protein. Perikaryon. Cell projection>Axon. Cell projection>Dendrite. Cell projection>Dendritic spine membrane>Multi-pass membrane protein. Cytoplasm>Cell cortex. Cytoplasm>Cytoskeleton. Note: In Detected on Purkinje cell dendritic spines, positioned perisynaptically but also in extrasynaptic positions along the spine membranes (By similarity). Detected at presynaptic calices of Held (By similarity). Colocalizes with the cortical actin cytoskeleton and the Arp2/3 complex (PubMed:26997484). Subunit Structure: Homotetramer. Heterotetramer with KCNC1 (PubMed:23734863). Interacts (via C-terminus) with HAX1 (PubMed:26997484). Identified in a complex with ACTR3, a subunit of the Arp2/3 complex; this interaction is indirect and depends on the presence of HAX1 (PubMed:26997484). Interaction with HAX1 modulates channel gating (PubMed:26997484). Similarity: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position. The cytoplasmic N-terminus mediates N-type inactivation. The C-terminal cytoplasmic tail contributes to the regulation of channel inactivation and to the interaction with HAX1 and the Arp2/3 complex. Belongs to the potassium channel family. C (Shaw) (TC 1.A.1.2) subfamily. Kv3.3/KCNC3 sub-subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	212276500
NCBI GeneID	3748
UniProt Accession #	Q14003
Molecular Weight	Observed Molecular Weight: (Observed)80kD. Predicted Molecular Weight: (Calculated)81kDa.
NCBI Official Full Name	Potassium voltage-gated channel subfamily C member 3
NCBI Official Synonym Full Names	potassium voltage-gated channel subfamily C member 3
NCBI Official Symbol	KCNC3
NCBI Official Synonym Symbols	KV3.3; SCA13; KSHIID
NCBI Protein Information	potassium voltage-gated channel subfamily C member 3
UniProt Protein Name	Potassium voltage-gated channel subfamily C member 3
UniProt Gene Name	KCNC3
UniProt Entry Name	KCNC3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.