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Goat Anti-KCNN2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2211a

Specification

Goat Anti-KCNN2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9H2S1
Other Accession	NP_740721, 3781, 140492 (mouse), 54262 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**63760**

Goat Anti-KCNN2 Antibody - Additional Information

Gene ID 3781

Other Names
Small conductance calcium-activated potassium channel protein 2, SK2, SKCa 2, SKCa2, KCa2.2, KCNN2

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-KCNN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-KCNN2 Antibody - Protein Information

Name KCNN2

Function
Forms a voltage-independent potassium channel activated by intracellular calcium (PubMed:10991935, PubMed:9287325, PubMed:33242881). Activation is followed by membrane hyperpolarization. Thought to regulate neuronal excitability by contributing

to the slow component of synaptic afterhyperpolarization.

Cellular Location
Membrane; Multi-pass membrane protein.

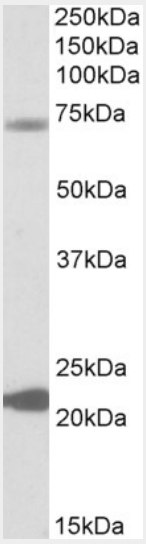
Tissue Location
Expressed in atrial myocytes (at protein level). Widely expressed.

Goat Anti-KCNN2 Antibody - Protocols

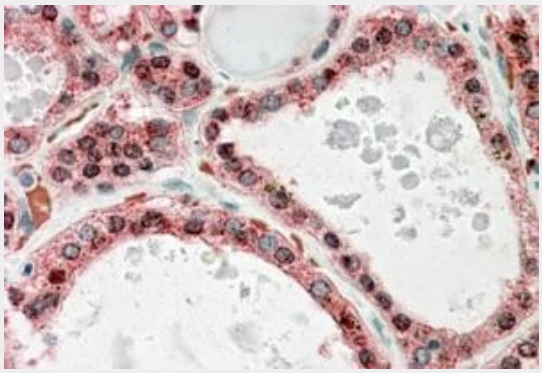
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-KCNN2 Antibody - Images



AF2211a (0.3 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2211a (3.8 µg/ml) staining of paraffin embedded Human Thyroid Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-KCNN2 Antibody - Background

Action potentials in vertebrate neurons are followed by an afterhyperpolarization (AHP) that may persist for several seconds and may have profound consequences for the firing pattern of the neuron. Each component of the AHP is kinetically distinct and is mediated by different calcium-activated potassium channels. The protein encoded by this gene is activated before membrane hyperpolarization and is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. The encoded protein is an integral membrane protein that forms a voltage-independent calcium-activated channel with three other calmodulin-binding subunits. This gene is a member of the KCNN family of potassium channel genes. Two transcript variants encoding different isoforms have been found for this gene.

Goat Anti-KCNN2 Antibody - References

Alpha-actinin2 cytoskeletal protein is required for the functional membrane localization of a Ca2+-activated K+ channel (SK2 channel). Lu L, et al. Proc Natl Acad Sci U S A, 2009 Oct 27. PMID 19815520.
Ablation of a Ca2+-activated K+ channel (SK2 channel) results in action potential prolongation in atrial myocytes and atrial fibrillation. Li N, et al. J Physiol, 2009 Mar 1. PMID 19139040.
Cell-cycle-dependent regulation of Ca2+-activated K+ channel in Jurkat T-lymphocyte. Morimoto T, et al. J Pharmacol Sci, 2007 May. PMID 17452806.
Molecular coupling of a Ca2+-activated K+ channel to L-type Ca2+ channels via alpha-actinin2. Lu L, et al. Circ Res, 2007 Jan 5. PMID 17110593.
Ca2+-activated K+ channels in human melanoma cells are up-regulated by hypoxia involving hypoxia-inducible factor-1alpha and the von Hippel-Lindau protein. Tajima N, et al. J Physiol, 2006 Mar 1. PMID 16396931.