

KCNMA1 Antibody (C-Term)
Peptide-affinity purified goat antibody
Catalog # AF2826a**Specification**

KCNMA1 Antibody (C-Term) - Product Information

Application	E
Primary Accession	Q12791
Other Accession	NP_001014797.1 , 3778 , 16531 (mouse) , 83731 (rat)
Predicted Host	Human, Mouse, Rat
Clonality	Goat
Concentration	Polyclonal
Isotype	0.5 mg/ml
Calculated MW	IgG
	137560

KCNMA1 Antibody (C-Term) - Additional Information**Gene ID** 3778**Other Names**

Calcium-activated potassium channel subunit alpha-1, BK channel, BKCA alpha, Calcium-activated potassium channel, subfamily M subunit alpha-1, K(VCA)alpha, KCa1.1, Maxi K channel, MaxiK, Slo-alpha, Slo1, Slowpoke homolog, Slo homolog, hSlo, KCNMA1, KCNMA, SLO

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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

KCNMA1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNMA1 Antibody (C-Term) - Protein Information**Name** KCNMA1 ([HGNC:6284](#))**Synonyms** KCNMA, SLO**Function**

Potassium channel activated by both membrane depolarization or increase in cytosolic Ca^{2+} that mediates export of K^{+} (PubMed: [14523450](http://www.uniprot.org/citations/14523450), PubMed: [29330545](http://www.uniprot.org/citations/29330545), PubMed: [31152168](http://www.uniprot.org/citations/31152168)). It is also activated by the concentration of cytosolic Mg^{2+} . Its activation dampens the excitatory events that elevate the cytosolic Ca^{2+} concentration and/or depolarize the cell membrane. It therefore contributes to repolarization of the membrane potential. Plays a key role in controlling excitability in a number of systems, such as regulation of the contraction of smooth muscle, the tuning of hair cells in the cochlea, regulation of transmitter release, and innate immunity. In smooth muscles, its activation by high level of Ca^{2+} , caused by ryanodine receptors in the sarcoplasmic reticulum, regulates the membrane potential. In cochlea cells, its number and kinetic properties partly determine the characteristic frequency of each hair cell and thereby helps to establish a tonotopic map. Kinetics of KCNMA1 channels are determined by alternative splicing, phosphorylation status and its combination with modulating beta subunits. Highly sensitive to both iberiotoxin (IbTx) and charybdotoxin (CTX). Possibly induces sleep when activated by melatonin and through melatonin receptor MTNR1A- dependent dissociation of G-beta and G-gamma subunits, leading to increased sensitivity to Ca^{2+} and reduced synaptic transmission (PubMed: [32958651](http://www.uniprot.org/citations/32958651)).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Widely expressed. Except in myocytes, it is almost ubiquitously expressed.

KCNMA1 Antibody (C-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KCNMA1 Antibody (C-Term) - Images**KCNMA1 Antibody (C-Term) - Background**

This antibody is expected to recognize isoform a (NP_001014797.1) only.

KCNMA1 Antibody (C-Term) - References

Acute alcohol tolerance is intrinsic to the BKCa protein, but is modulated by the lipid environment. Yuan C, O'Connell RJ, Wilson A, Pietrzykowski AZ, Treistman SN. J Biol Chem. 2008 Feb 22;283(8):5090-8. Epub 2007 Dec 15. PMID: 18084004