

KCNMA1 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12061**Specification**

KCNMA1 antibody - middle region - Product Information

Application	WB
Primary Accession	Q12791
Other Accession	NM_001014797 , NP_001014797
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Sheep, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Sheep, Horse, Bovine, Guinea Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	131kDa KDa

KCNMA1 antibody - middle region - Additional Information**Gene ID 3778**

Alias Symbol	BKTM, DKFZp686K1437, KCa1.1, MGC71881, MaxiK, SAKCA, SLO, SLO-ALPHA, mSLO1, SLO1, bA205K10.1
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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

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-KCNMA1 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

KCNMA1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

KCNMA1 antibody - middle region - 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, PubMed:29330545, PubMed: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).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

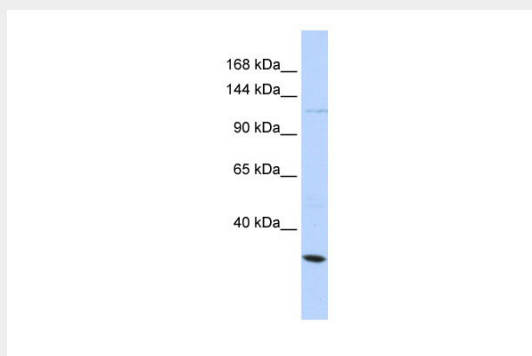
Widely expressed. Except in myocytes, it is almost ubiquitously expressed.

KCNMA1 antibody - middle region - 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 - middle region - Images



WB Suggested Anti-KCNMA1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500

Positive Control: Hela cell lysate

KCNMA1 antibody - middle region - References

Cambien, B., (2008) Int. J. Cancer 123(2), 365-371 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.