

KCNMA1 / BK Antibody (Gln770)
Rabbit Polyclonal Antibody
Catalog # ALS16581**Specification**

KCNMA1 / BK Antibody (Gln770) - Product Information

Application	IHC, WB
Primary Accession	Q12791
Other Accession	3778
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	137560

KCNMA1 / BK Antibody (Gln770) - Additional Information**Gene ID** 3778**Other Names**

KCNMA1, BA205K10.1, BKCA alpha subunit, BK channel, BKCA alpha, BKTM, HSlo, K(VCA)alpha, KCa1.1, Maxi-K channel HSLO, MaxiK, KCNMA, SAKCA, SLO-ALPHA, Slowpoke homolog, Stretch-activated Kca channel, Slo homolog, BK channel alpha subunit, Maxi K chann ...

Target/Specificity

Human KCNMA1 / BK

Reconstitution & Storage

PBS, pH 7.2, 0.05% sodium azide. Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Precautions

KCNMA1 / BK Antibody (Gln770) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNMA1 / BK Antibody (Gln770) - 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: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).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

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

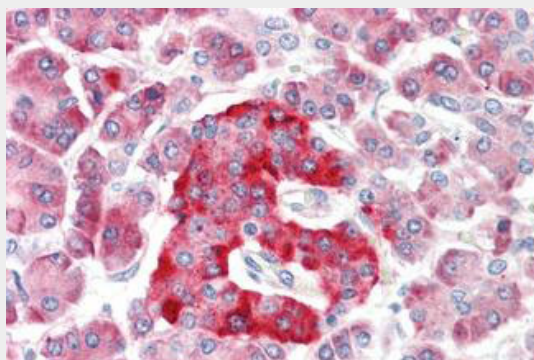
Volume

50 μl

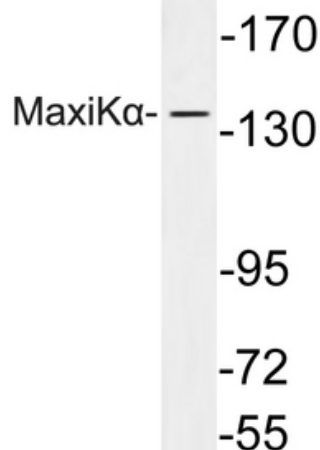
KCNMA1 / BK Antibody (Gln770) - Protocols

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 / BK Antibody (Gln770) - Images

Anti-KCNMA1 / BK antibody IHC staining of human pancreas.



Western blot of MaxiK (Q770) pAb in extracts from HeLa cells.

KCNMA1 / BK Antibody (Gln770) - Background

Potassium channel activated by both membrane depolarization or increase in cytosolic Ca^{2+} that mediates export of K^{+} . 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).

KCNMA1 / BK Antibody (Gln770) - References

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Deloukas P., et al. Nature 429:375-381(2004).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Tseng-Crank J., et al. Neuron 13:1315-1330(1994).