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MaxiKα Polyclonal Antibody
Catalog # AP70849

Specification

MaxiKα Polyclonal Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q12791
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**

MaxiKα Polyclonal Antibody - Additional Information

Gene ID 3778

Other Names
KCNMA1; KCNMA; SLO; 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

Dilution
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
IHC-P~~N/A

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

MaxiKα Polyclonal Antibody - 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

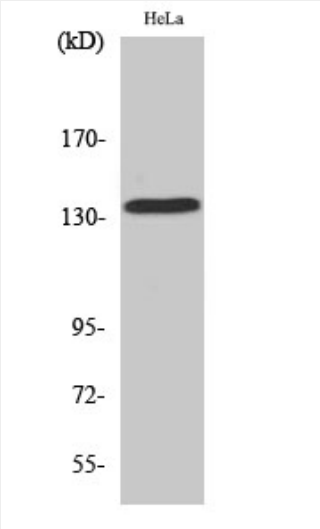
Tissue Location
Widely expressed. Except in myocytes, it is almost ubiquitously expressed.

MaxiKα Polyclonal 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

MaxiKα Polyclonal Antibody - Images



MaxiKα Polyclonal Antibody - Background

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