
Product Name: MaxiK β Rabbit Polyclonal Antibody**Catalog #: APRab13675**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	24kDa

Antigen Information

Gene Name	KCNMB4 KCNMB4; Calcium-activated potassium channel subunit beta-4; BK channel subunit beta-4;
Alternative Names	BKbeta4; Hbeta4; Calcium-activated potassium channel; subfamily M subunit beta-4; Charybdotoxin receptor subunit beta-4; K(VCA)beta-4; Maxi K channel sub
Gene ID	27345.0
SwissProt ID	Q86W47
Immunogen	The antiserum was produced against synthesized peptide derived from human MaxiKbeta. AA range:70-119

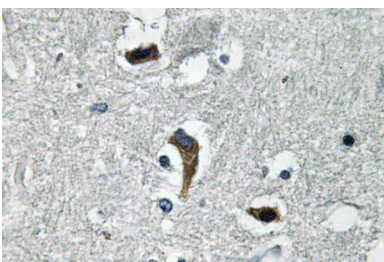
Background

MaxiK channels are large conductance, voltage and calcium-sensitive potassium channels which are fundamental to the control of smooth muscle tone and neuronal excitability. MaxiK channels can be formed by 2 subunits: the pore-forming alpha subunit and the modulatory beta subunit. The protein encoded by this gene is an auxiliary beta subunit which slows activation kinetics, leads to steeper calcium sensitivity, and shifts the voltage range of current activation to more negative potentials than does the beta 1 subunit. [provided by RefSeq, Jul 2008],domain:Resistance to charybdotoxin (CTX) toxin is mediated by the extracellular domain.,function:Regulatory subunit of the calcium activated potassium KCNMA1 (maxiK) channel. Modulates the calcium sensitivity and gating kinetics of KCNMA1, thereby contributing to KCNMA1 channel diversity. Decreases the gating kinetics and calcium sensitivity of the KCNMA1 channel, but with fast deactivation kinetics. May decrease KCNMA1 channel openings at low calcium concentrations but increases channel openings at high calcium concentrations. Makes KCNMA1 channel resistant to 100 nM charybdotoxin (CTX) toxin concentrations.,miscellaneous:Treatment with okadaic acid reduces its effect on KCNMA1.,PTM:N-glycosylated. A highly glycosylated form is promoted by KCNMA1. Glycosylation, which is not required for the interaction with KCNMA1 and subcellular location, increases protection against charybdotoxin.,PTM:Phosphorylated. Phosphorylation modulates its effect on KCNMA1 activation kinetics.,similarity:Belongs to the KCNMB family.,subunit:Interacts with KCNMA1 tetramer. There are probably 4 molecules of KCMNB4 per KCNMA1 tetramer.,tissue specificity:Predominantly expressed in brain. In brain, it is expressed in the cerebellum, cerebral cortex, medulla, spinal cord, occipital pole, frontal lobe, temporal lobe, putamen, amygdala, caudate nucleus, corpus callosum, hippocampus, substantia nigra and thalamus. Weakly or not expressed in other tissues.,

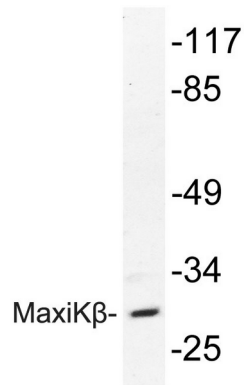
Research Area

Vascular smooth muscle contraction;

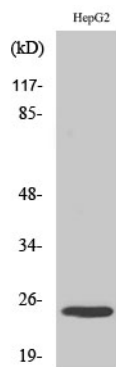
Image Data



Immunohistochemistry analysis of MaxiK β antibody in paraffin-embedded human brain tissue.



Western blot analysis of lysate from HepG2 cells, using MaxiK β antibody.



Western Blot analysis of various cells using MaxiK β Polyclonal Antibody