



MaxiK β Polyclonal Antibody

Catalog No	YP-Ab-16464
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	KCNMB4
Protein Name	Calcium-activated potassium channel subunit beta-4
Immunogen	The antiserum was produced against synthesized peptide derived from human MaxiKbeta. AA range:70-119
Specificity	MaxiK β Polyclonal Antibody detects endogenous levels of MaxiK β protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	KCNMB4; Calcium-activated potassium channel subunit beta-4; BK channel subunit beta-4; BKbeta4; Hbeta4; Calcium-activated potassium channel; subfamily M subunit beta-4; Charybdotoxin receptor subunit beta-4; K(VCA)beta-4; Maxi K channel sub
Observed Band	24kD
Cell Pathway	Membrane; Multi-pass membrane protein.
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.
Function	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.,PT

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],

matters needing attention

Avoid repeated freezing and thawing!

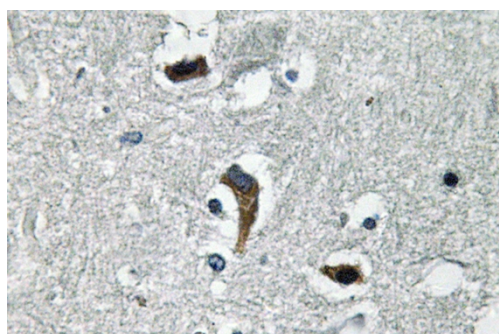
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

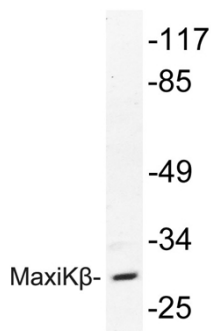
Products Images



Western Blot analysis of various cells using MaxiK β Polyclonal Antibody



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



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