

## MaxiKβ Polyclonal Antibody

Catalog No: YT2667

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: MaxiKβ

**Fields:** >>cGMP-PKG signaling pathway;>>Vascular smooth muscle

contraction;>>Insulin secretion

Gene Name: KCNMB4

**Protein Name:** Calcium-activated potassium channel subunit beta-4

Q86W47

Q9JIN6

Human Gene Id: 27345

**Human Swiss Prot** 

No:

Mouse Gene Id: 58802

**Mouse Swiss Prot** 

No:

Rat Gene Id: 66016

Rat Swiss Prot No: Q9ESK8

**Immunogen :** The antiserum was produced against synthesized peptide derived from human

MaxiKbeta. AA range:70-119

Specificity: MaxiKβ Polyclonal Antibody detects endogenous levels of MaxiKβ protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 24kD

**Cell Pathway:** Vascular smooth muscle contraction;

**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 poreforming 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],

**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

Subcellular Location:

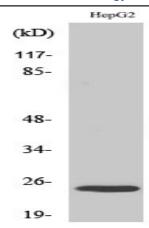
Membrane; Multi-pass membrane protein.

**Expression:** Predominantly expressed in brain. In brain, it is expressed in the cerebellum,

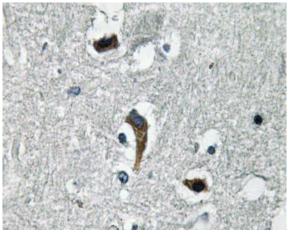
cerebral cortex, medulla, spinal cord, occipital pole, frontal lobe, temporal lobe, putamen, amygdala, caudate nucleus, corpus callosum, hippocampus, substantia

nigra and thalamus. Weakly or not expressed in other tissues.

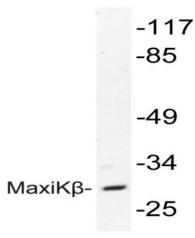
## **Products Images**



Western Blot analysis of various cells using MaxiK $\beta$  Polyclonal Antibody



Immunohistochemistry analysis of MaxiK $\!\beta$  antibody in paraffinembedded human brain tissue.



Western blot analysis of lysate from HepG2 cells, using MaxiK $\beta$  antibody.