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KCNMB3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56462

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9NPA1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31604
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCNMB3
Epitope Specificity	151-250/279
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane. Multi-pass membrane protein.
SIMILARITY	Belongs to the KCNMB (TC 8.A.14.1) family. KCNMB3 subfamily.
Post-translational modifications	N-glycosylated.The extracellular domain contains disulfide bond essential for the gating mechanism.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 may partially inactivate or slightly decrease the activation time of MaxiK alpha subunit currents. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 22. [provided by RefSeq, Jul 2009]

Additional Information

Gene ID	27094
Other Names	Calcium-activated potassium channel subunit beta-3, BK channel subunit beta-3, BKbeta3, Hbeta3, Calcium-activated potassium channel, subfamily M subunit beta-3, Charybdotoxin receptor subunit beta-3, K(VCA)beta-3, Maxi K channel subunit beta-3, Slo-beta-3, KCNMB3, KCNMB2, KCNMBL
Target/Specificity	Isoform 1, isoform 3 and isoform 4 are widely expressed. Isoform 2 is expressed placenta, pancreas, kidney and heart. Isoform 1 and isoform 3 are highly expressed in pancreas and testis.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	KCNMB3
Synonyms	KCNMB2, KCNMBL
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. Alters the functional properties of the current expressed by the KCNMA1 channel. Isoform 2, isoform 3 and isoform 4 partially inactivate the current of KCNBMA. Isoform 4 induces a fast and incomplete inactivation of KCNMA1 channel that is detectable only at large depolarizations. In contrast, isoform 1 does not induce detectable inactivation of KCNMA1. Two or more subunits of KCNMB3 are required to block the KCNMA1 tetramer.
Cellular Location	Membrane; Multi-pass membrane protein.
Tissue Location	Isoform 1, isoform 3 and isoform 4 are widely expressed. Isoform 2 is expressed placenta, pancreas, kidney and heart Isoform 1 and isoform 3 are highly expressed in pancreas and testis