

Anti-KCMB3 antibody



Description Unconjugated Rabbit polyclonal to KCMB3

Model STJ190627

Host Rabbit

Reactivity Human

Applications ELISA, WB

Gene ID 27094

Gene Symbol KCNMB3

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity KCMB3 Polyclonal Antibody detects endogenous levels of protein.

Tissue 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.

Purification KCMB3 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name 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 VCAbeta-3 M

Molecular Weight 30 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6287OMIM:605222</u>

Alternative 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 VCAbeta-3 M

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.

Sequence and Domain Family Isoform 4 cytoplasmic N-terminal domain participates in the partial

inactivation of KCNMA1, possibly by binding to a receptor site.; The extracellular domain forms gates to block ion permeation, providing a mechanism by which current can be rapidly diminished upon cellular

repolarization.

Cellular Localization Membrane. Multi-pass membrane protein.

Post-translational N-glycosylated. The extracellular domain contains disulfide bond essential for

Modifications the gating mechanism.

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