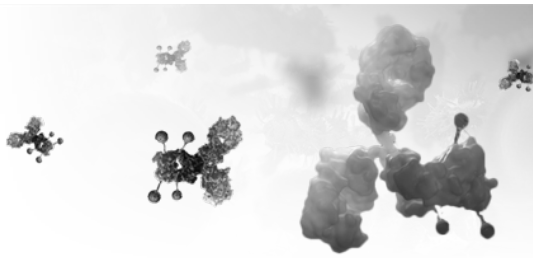

Mouse anti-Human K+ Channel α monoclonal antibody, clone 43/L Diboofm (CABT-B9223)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human K+ Channel α Subunit aa. 995-1113
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat, Human, Mouse
Clone	43/L Diboofm
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF
Format	Liquid
Concentration	250 μg/ml
Size	50 μg, 150 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Cellular excitability is modulated by the precise function of voltage-sensitive ion channels.

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Large conductance potassium channels (Maxi-K) are unique in that they are sensitive to transmembrane potential and intracellular Ca2+ concentrations. These channels, important for neuronal firing and vascular tone, share many features with voltage-dependent Na+, Ca2+, and K+ channels. Among these are the S4 region, a motif with a repeated triple sequence of one positively charged amino acid and two hydrophobic amino acids. This region is thought to be the voltage sensor. Maxi-K is subject to complex metabolic control control that also involves G proteins and phosphorylation/dephosphorylation reactions. This type of K+ channel is composed of two subunits, the pore-forming α subunit (hslo) and the regulatory β subunit. The α subunit is subject to direct phosphorylation by cyclic GMP-dependent protein kinase (PKG) and dephosphorylation by protein phosphatase 2A. The fact that the α subunit of Maxi-K channels is a substrate of PKG supports the idea that these channels perform an important function in the cellular response to potent vasodilators, such as nitrocompounds and atrial natiuretic peptide.

Keywords KCNMA1; potassium large conductance calcium-activated channel, subfamily M, alpha member 1; SLO; calcium-activated potassium channel subunit alpha-1; BK channel alpha subunit; KCa1.1; mSLO1; hSlo; k(VCA)alpha; slo homolog

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