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KCNE4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant KCNE4.
Catalog # AT2594a

Product Information

Application	WB, E
Primary Accession	Q8WWG9
Other Accession	BC014429
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1D7
Calculated MW	23806

Additional Information

Gene ID	23704
Other Names	Potassium voltage-gated channel subfamily E member 4, MinK-related peptide 3, Minimum potassium ion channel-related peptide 3, Potassium channel subunit beta MiRP3, KCNE4
Target/Specificity	KCNE4 (AAH14429, 1 a.a. ~ 170 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	KCNE4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

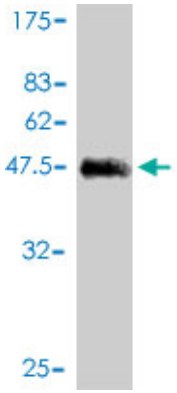
Background

Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, isk-related subfamily. This member is a type I membrane protein, and a beta subunit that assembles with a potassium channel alpha-subunit to modulate the gating kinetics and enhance stability of the multimeric complex. This gene is prominently expressed in the embryo and in adult uterus.

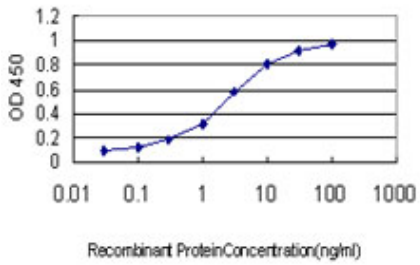
References

KCNE4 suppresses Kv1.3 currents by modulating trafficking, surface expression and channel gating. Sol? L, et al. J Cell Sci, 2009 Oct 15. PMID 19773357.Germline genomic variants associated with childhood acute lymphoblastic leukemia. Trevi?o LR, et al. Nat Genet, 2009 Sep. PMID 19684603.KCNE4 domains required for inhibition of KCNQ1. Manderfield LJ, et al. J Physiol, 2009 Jan 15. PMID 19029186.MiRP3 acts as an accessory subunit with the BK potassium channel. Levy DI, et al. Am J Physiol Renal Physiol, 2008 Aug. PMID 18463315.KCNE4 can co-associate with the I(Ks) (KCNQ1-KCNE1) channel complex. Manderfield LJ, et al. FEBS J, 2008 Mar. PMID 18279388.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (44.44 KDa) .



Detection limit for recombinant GST tagged KCNE4 is approximately 0.1ng/ml as a capture antibody.