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KCNE4 Antibody (monoclonal) (M01)

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

Specification

KCNE4 Antibody (monoclonal) (M01) - Product Information

Application	**WB, E**
Primary Accession	Q8WWG9
Other Accession	BC014429
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 kappa**
Calculated MW	**23806**

KCNE4 Antibody (monoclonal) (M01) - 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.

KCNE4 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

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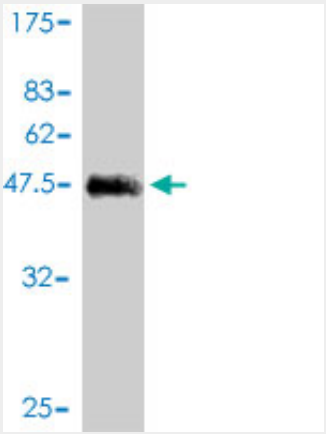
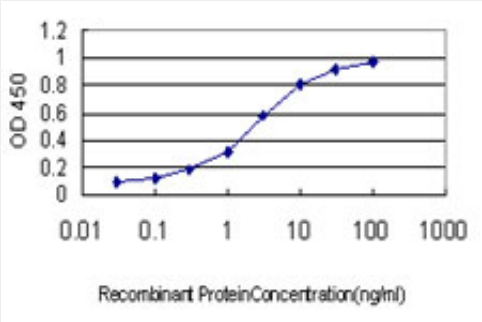
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KCNE4 Antibody (monoclonal) (M01) - 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.

KCNE4 Antibody (monoclonal) (M01) - 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.

KCNE4 Antibody (monoclonal) (M01) - 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.