10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KCNE4 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18476c

Specification

KCNE4 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q8WWG9
Other Accession	Q9WTW3, NP_542402.2
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**23806**
Antigen Region	**58-86**

KCNE4 Antibody (Center) - 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
This KCNE4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-86 amino acids from the Central region of human KCNE4.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
KCNE4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNE4 Antibody (Center) - Protein Information

Name KCNE4 (HGNC:6244)

Function Ancillary protein that functions as a regulatory subunit of the voltage-gated potassium (Kv) channel complex composed of pore- forming and potassium-conducting alpha subunits and of regulatory beta subunits. KCNE4 beta subunit modulates the gating kinetics and enhances stability of the channel complex (PubMed:12096056, PubMed:19687231, PubMed:20533308, PubMed:27162025). Associates with KCNQ1/KVLTQ1 alpha subunit to inhibit potassium currents (PubMed:12096056, PubMed:19687231, PubMed:20533308, PubMed:27162025).

Cellular Location
Membrane; Single- pass membrane protein

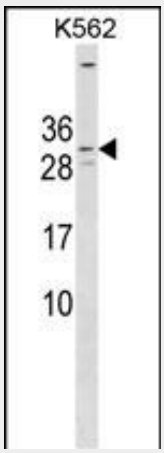
Tissue Location
Predominantly expressed in embryo and adult uterus. Low expression found in kidney, small intestine, lung and heart

KCNE4 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KCNE4 Antibody (Center) - Images



KCNE4 Antibody (Center) (Cat. #AP18476c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the KCNE4 antibody detected the KCNE4 protein (arrow).

KCNE4 Antibody (Center) - 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 (Center) - References

Levy, D.I., et al. J. Physiol. (Lond.) 588 (PT 14), 2657-2668 (2010) :
Sole, L., et al. J. Cell. Sci. 122 (PT 20), 3738-3748 (2009) :
Trevino, L.R., et al. Nat. Genet. 41(9):1001-1005(2009)
Manderfield, L.J., et al. J. Physiol. (Lond.) 587 (PT 2), 303-314 (2009) :
Levy, D.I., et al. Am. J. Physiol. Renal Physiol. 295 (2), F380-F387 (2008) :