KCNE1L siRNA – Potassium Voltage-Gated Channel Subfamily E Regulatory Beta Subunit 5 (Human)

PRODUCT OVERVIEW

Product Name	KCNE1L, siRNA
Full Product Name	KCNE1L siRNA (Human)
Product Gene Name	KCNE1L sirna
Product Synonym Names	AMMECR2; Potassium voltage-gated channel subfamily E member 1-like protein; AMME syndrome candidate gene 2 protein
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	KCNE1L siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.
Preparation and Storage	Shipped at 4 degree C. Store at -20 degree C for one year.
Molecular Weight	14,993 Da
OMIM	300194
3D Structure	ModBase 3D Structure for Q9UJ90
Negative Control	siRNA Negative Control (Catalog# MBS8241404) is a non-targeting 21 nt siRNA recommended as a negative control for experiments using targeted siRNA transfection.
Quality Control	Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.
Directions for Use	We recommends transfection with 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For each vial, suitable for 250 transfections in 24 well plate (20 pmol for each well).
Components	We offer pre-designed sets of 3 different target-specific siRNA oligo duplexes of human KCNE1L gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot. Our siRNA oligos are also chemically modified (2'-OMe) at no extra charge for increased stability and enhanced knockdown in vitro and in vivo.
Applications Tested/Suitable for KCNE1L sirna	RNA Interference (RNAi)
Related Product Information for KCNE1L sirna	MBS829993 is an siRNA targeting KCNE1L. Also known as KCNE1L siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit KCNE1L expression using RNA interference
Other Notes	Small volumes of KCNE1L sirna vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for KCNE1L. It may not necessarily be applicable to this product.

NCBI GI #	6912442
NCBI GeneID	23630
NCBI Accession #	NP_036414.1
UniProt Primary Accession #	Q9UJ90
UniProt Secondary Accession #	Q5JWV7
UniProt Related Accession #	Q9UJ90
GenBank Nucleotide #	NM_012282.2
NCBI Official Full Name	potassium voltage-gated channel subfamily E regulatory beta subunit 5
NCBI Official Synonym Full Names	potassium channel, voltage gated subfamily E regulatory beta subunit 5
NCBI Official Symbol	KCNE5
NCBI Official Synonym Symbols	KCNE1L
UniProt Protein Name	Potassium voltage-gated channel subfamily E regulatory beta subunit 5
UniProt Synonym Protein Names	AMME syndrome candidate gene 2 protein; Potassium channel subunit beta MiRP4; Potassium voltage-gated channel subfamily E member 1-like protein
UniProt Gene Name	KCNE5
UniProt Entry Name	KCNE5_HUMAN
NCBI Protein Information	potassium voltage-gated channel subfamily E regulatory beta subunit 5
NCBI Summary for KCNE1L	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 membrane protein which has sequence similarity to the KCNE1 gene product, a member of the potassium channel, voltage-gated, isk-related subfamily. This intronless gene is deleted in AMME contiguous gene syndrome and may be involved in the cardiac and neurologic abnormalities found in the AMME contiguous gene syndrome. [provided by RefSeq, Jul 2008]
UniProt Comments for KCNE1L	KCNE1L: Defects in KCNE1L are involved in Alport syndrome with mental retardation midface hypoplasia and elliptocytosis (ATS-MR). A X-linked contiguous gene deletion syndrome characterized by glomerulonephritis, deafness, mental retardation, midface hypoplasia and elliptocytosis. Belongs to the potassium channel KCNE family. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: Xq22.3 Cellular Component: voltage-gated potassium channel complex Molecular Function: voltage-gated potassium channel activity; potassium channel regulator activity Biological Process: regulation of heart contraction; cardiac muscle contraction
Research Articles on KCNE1L	**1.** common single nucleotide polymorphism (SNP) from KCNE5, and ECG measurements and survival in postacute acute coronary syndrome patients
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