KCNK2 siRNA – Potassium Channel Subfamily K Member 2 Isoform 1 (Mouse)

PRODUCT OVERVIEW

Product Name	KCNK2, siRNA
Full Product Name	KCNK2 siRNA (Mouse)
Product Gene Name	KCNK2 sirna
Product Synonym Names	Potassium channel subfamily K member 2; Outward rectifying potassium channel protein TREK-1; TREK-1 K(+) channel subunit; Two pore potassium channel TPKC1
Host	Synthetic
Species Reactivity	Mouse
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	KCNK2 siRNA (Mouse) 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	45,328 Da
3D Structure	ModBase 3D Structure for P97438
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 mouse KCNK2 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 KCNK2 sirna	RNA Interference (RNAi)
Related Product Information for KCNK2 sirna	MBS8204179 is an siRNA targeting KCNK2. Also known as KCNK2 siRNA (Mouse). Reactive in Mouse. Host: Synthetic. siRNA to inhibit KCNK2 expression using RNA interference
Other Notes	Small volumes of KCNK2 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 KCNK2. It may not necessarily be applicable to this product.

NCBI GI #	229577199

NCBI GeneID	16526
NCBI Accession #	NP_001153322.1
UniProt Primary Accession #	P97438
UniProt Secondary Accession #	Q4VQI2
UniProt Related Accession #	P97438
GenBank Nucleotide #	NM_001159850.1
NCBI Official Full Name	potassium channel subfamily K member 2 isoform 1
NCBI Official Synonym Full Names	potassium channel, subfamily K, member 2
NCBI Official Symbol	Kcnk2
NCBI Official Synonym Symbols	TREK-1; AI848635; A430027H14Rik
UniProt Protein Name	Potassium channel subfamily K member 2
UniProt Synonym Protein Names	Outward rectifying potassium channel protein TREK-1; TREK-1 K(+) channel subunit
Protein Family	Potassium channel subfamily
UniProt Gene Name	Kcnk2
UniProt Entry Name	KCNK2_MOUSE
NCBI Protein Information	potassium channel subfamily K member 2
UniProt Comments for KCNK2	TREK-1: Outward rectifying potassium channel. Homodimer (Potential). Belongs to the two pore domain potassium channel (TC 1.A.1.8) family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Membrane protein, multi-pass; Channel, potassium Cellular Component: voltage-gated potassium channel complex; membrane; endoplasmic reticulum; plasma membrane; integral to membrane Molecular Function: voltage-gated potassium channel activity; protein binding; potassium channel activity; outward rectifier potassium channel activity; potassium ion leak channel activity; voltage-gated ion channel activity; potassium channel inhibitor activity Biological Process: G-protein coupled receptor protein signaling pathway; regulation of membrane potential; transport; ion transport; stabilization of membrane potential; potassium ion transport
Research Articles on KCNK2	**1.** In TREK1-deficient mice, brain endothelial cells displayed an inflammatory phenotype.
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