SMDT1 siRNA – Essential MCU Regulator, Mitochondrial (Mouse)

PRODUCT OVERVIEW

Product Name	SMDT1, siRNA
Full Product Name	SMDT1 siRNA (Mouse)
Product Gene Name	SMDT1 sirna
Product Synonym Names	EMRE; Essential MCU regulator mitochondrial; Single-pass membrane protein with aspartate-rich tail 1 mitochondrial
Host	Synthetic
Species Reactivity	Mouse
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	SMDT1 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	11,542 Da
3D Structure	ModBase 3D Structure for Q9DB10
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 SMDT1 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 SMDT1 sirna	RNA Interference (RNAi)
Related Product Information for SMDT1 sirna	MBS8217113 is an siRNA targeting SMDT1. Also known as SMDT1 siRNA (Mouse). Reactive in Mouse. Host: Synthetic. siRNA to inhibit SMDT1 expression using RNA interference
Other Notes	Small volumes of SMDT1 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 SMDT1. It may not necessarily be applicable to this product.

NCBI GI #	58037137
NCBI GeneID	69029
NCBI Accession #	NP_081190.1
UniProt Primary Accession #	Q9DB10
UniProt Secondary Accession #	Q58EA5
UniProt Related Accession #	Q9DB10
GenBank Nucleotide #	NM_026914.1
NCBI Official Full Name	essential MCU regulator, mitochondrial
NCBI Official Synonym Full Names	single-pass membrane protein with aspartate rich tail 1
NCBI Official Symbol	Smdt1
NCBI Official Synonym Symbols	Emre; 1500032L24Rik
UniProt Protein Name	Essential MCU regulator, mitochondrial
UniProt Synonym Protein Names	Single-pass membrane protein with aspartate-rich tail 1, mitochondrial
UniProt Gene Name	Smdt1
UniProt Synonym Gene Names	Emre
UniProt Entry Name	EMRE_MOUSE
NCBI Protein Information	essential MCU regulator, mitochondrial
UniProt Comments for SMDT1	EMRE: Belongs to the UPF0466 family. Protein type: Membrane protein, integral Cellular Component: membrane; mitochondrion; mitochondrial inner membrane; integral to membrane; integral to mitochondrial inner membrane Biological Process: mitochondrial calcium ion homeostasis; transport; calcium ion transport; ion transport; mitochondrial calcium ion transport
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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