MRM1 siRNA – Rrna Methyltransferase 1, Mitochondrial (Human)

PRODUCT OVERVIEW

Product Name	MRM1, siRNA
Full Product Name	MRM1 siRNA (Human)
Product Gene Name	MRM1 sirna
Product Synonym Names	rRNA methyltransferase 1 mitochondrial; Mitochondrial large ribosomal RNA ribose methylase
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	MRM1 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	16,770 Da
3D Structure	ModBase 3D Structure for Q6IN84
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 MRM1 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 MRM1 sirna	RNA Interference (RNAi)
Related Product Information for MRM1 sirna	MBS8233140 is an siRNA targeting MRM1. Also known as MRM1 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit MRM1 expression using RNA interference
Other Notes	Small volumes of MRM1 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 MRM1. It may not necessarily be applicable to this product.

NCBI GI #	40068479

NCBI GeneID	79922
NCBI Accession #	NP_079140.2
UniProt Primary Accession #	Q6IN84
UniProt Secondary Accession #	Q96GK2; Q9H664; A8K8E2
UniProt Related Accession #	Q6IN84
GenBank Nucleotide #	NM_024864.4
NCBI Official Full Name	rRNA methyltransferase 1, mitochondrial
NCBI Official Synonym Full Names	mitochondrial rRNA methyltransferase 1
NCBI Official Symbol	MRM1
UniProt Protein Name	rRNA methyltransferase 1, mitochondrial
UniProt Synonym Protein Names	16S rRNA (guanosine(1145)-2'-O)-methyltransferase
Protein Family	rRNA methyltransferase
UniProt Gene Name	MRM1
UniProt Entry Name	MRM1_HUMAN
NCBI Protein Information	rRNA methyltransferase 1, mitochondrial
UniProt Comments for MRM1	MRM1: Probably methylates the ribose of guanosine G-2270 in the peptidyl transferase center of the mitochondrial large ribosomal RNA (21S). Belongs to the RNA methyltransferase TrmH family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Methyltransferase; EC 2.1.1.- Chromosomal Location of Human Ortholog: 17q12 Cellular Component: mitochondrion Molecular Function: RNA methyltransferase activity Biological Process: RNA processing; RNA methylation; rRNA processing
Research Articles on MRM1	**1.** Data show that 2'-O-methyltransferases MRM1, MRM2, and RNMTL1 are responsible for modification of large subunit rRNA at residues G1145, U1369, and G1370, respectively.
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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