TRPM8 siRNA – Transient Receptor Potential Cation Channel Subfamily M Member 8 (Human)

PRODUCT OVERVIEW

Product Name	TRPM8, siRNA
Full Product Name	TRPM8 siRNA (Human)
Product Gene Name	TRPM8 sirna
Product Synonym Names	LTRPC6; TRPP8; Transient receptor potential cation channel subfamily M member 8; Long transient receptor potential channel 6; LTrpC-6; LTrpC6; Transient receptor potential p8; Trp-p8
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	TRPM8 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	79,096 Da
OMIM	606678
3D Structure	ModBase 3D Structure for Q7Z2W7
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 TRPM8 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 TRPM8 sirna	RNA Interference (RNAi)
Related Product Information for TRPM8 sirna	MBS8214993 is an siRNA targeting TRPM8. Also known as TRPM8 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit TRPM8 expression using RNA interference
Other Notes	Small volumes of TRPM8 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 TRPM8. It may not necessarily be applicable to this product.

NCBI GI #	109689695
NCBI GeneID	79054
NCBI Accession #	NP_076985.4
UniProt Primary Accession #	Q7Z2W7
UniProt Secondary Accession #	Q3YFM7; Q6QNH9; Q8TAC3; Q8TDX8; Q9BVK1; A0AVG2
UniProt Related Accession #	Q7Z2W7
GenBank Nucleotide #	NM_024080.4
NCBI Official Full Name	transient receptor potential cation channel subfamily M member 8
NCBI Official Synonym Full Names	transient receptor potential cation channel, subfamily M, member 8
NCBI Official Symbol	TRPM8
NCBI Official Synonym Symbols	TRPP8; LTRPC6
UniProt Protein Name	Transient receptor potential cation channel subfamily M member 8
UniProt Synonym Protein Names	Long transient receptor potential channel 6; LTrpC-6; LTrpC6; Transient receptor potential p8; Trp-p8
Protein Family	Transient receptor potential cation channel subfamily
UniProt Gene Name	TRPM8
UniProt Synonym Gene Names	LTRPC6; TRPP8; LTrpC-6; LTrpC6; Trp-p8
UniProt Entry Name	TRPM8_HUMAN
NCBI Protein Information	transient receptor potential cation channel subfamily M member 8
UniProt Comments for TRPM8	TRPM8: Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage-dependent activation curves. The chemical agonists menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. Belongs to the transient receptor (TC 1.A.4) family. LTrpC subfamily. TRPM8 sub-subfamily. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, multi-pass; Channel, cation; Membrane protein, integral Chromosomal Location of Human Ortholog: 2q37.1 Cellular Component: endoplasmic reticulum membrane; integral to membrane; plasma membrane; external side of plasma membrane; lipid raft Molecular Function: protein binding; protein homodimerization activity; calcium channel activity Biological Process: cellular calcium ion homeostasis; detection of temperature stimulus; response to cold; thermoception; transmembrane transport; protein homotetramerization
Research Articles on TRPM8	**1.** Polymorphisms L250L and S419N correlate with anthropometric parameters (body mass index and waist and hip circumferences).

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.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-sirna/trpm8/8214993