RHCE siRNA – Blood Group Rh(ce) Polypeptide Isoform 1 (Human)

PRODUCT OVERVIEW

Product Name	RHCE, siRNA
Full Product Name	RHCE siRNA (Human)
Product Gene Name	RHCE sirna
Product Synonym Names	RHC; RHE; Blood group Rh(CE) polypeptide; Rh polypeptide 1; RhPI; Rh30A; RhIXB; Rhesus C/E antigens; CD antigen CD240CE
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	RHCE 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	26,852 Da
OMIM	111690
3D Structure	ModBase 3D Structure for P18577
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 RHCE 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 RHCE sirna	RNA Interference (RNAi)
Related Product Information for RHCE sirna	MBS8207186 is an siRNA targeting RHCE. Also known as RHCE siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit RHCE expression using RNA interference
Other Notes	Small volumes of RHCE 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 RHCE. It may not necessarily be applicable to this product.

NCBI GI #	301129227
NCBI GeneID	6006
NCBI Accession #	NP_065231.3
UniProt Primary Accession #	P18577
UniProt Secondary Accession #	A7DW68; B7UDF3; B7UDF4; B7UDF5; B7UDF6; B7UDF7; B7UDF8; B7UDF9; B7UDG0; B7UDG1; B7UDG2
UniProt Related Accession #	P18577
GenBank Nucleotide #	NM_020485.4
NCBI Official Full Name	blood group Rh(CE) polypeptide isoform 1
NCBI Official Synonym Full Names	Rh blood group, CcEe antigens
NCBI Official Symbol	RHCE
NCBI Official Synonym Symbols	RH; RHC; RHE; Rh4; RHPI; RhVI; RH30A; RHIXB; RhVIII; CD240CE; RhIVb(J)
UniProt Protein Name	Blood group Rh(CE) polypeptide
UniProt Synonym Protein Names	Rh polypeptide 1; RhPI; Rh30A; RhIXB; Rhesus C/E antigens; CD_antigen: CD240CE
Protein Family	Blood group Rh(CE) polypeptide
UniProt Gene Name	RHCE
UniProt Synonym Gene Names	RHC; RHE; RhPI
UniProt Entry Name	RHCE_HUMAN
NCBI Protein Information	blood group Rh(CE) polypeptide
NCBI Summary for RHCE	The Rh blood group system is the second most clinically significant of the blood groups, second only to ABO. It is also the most polymorphic of the blood groups, with variations due to deletions, gene conversions, and missense mutations. The Rh blood group includes this gene which encodes both the RhC and RhE antigens on a single polypeptide and a second gene which encodes the RhD protein. The classification of Rh-positive and Rh-negative individuals is determined by the presence or absence of the highly immunogenic RhD protein on the surface of erythrocytes. A mutation in this gene results in amorph-type Rh-null disease. Alternative splicing of this gene results in four transcript variants encoding four different isoforms. [provided by RefSeq, Jul 2008]
UniProt Comments for RHCE	RHCE: May be part of an oligomeric complex which is likely to have a transport or channel function in the erythrocyte membrane. Belongs to the ammonium transporter (TC 2.A.49) family. Rh subfamily. 14 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, multi-pass; Membrane protein, integral Chromosomal Location of Human Ortholog: 1p36.11 Cellular Component: integral to plasma membrane Molecular Function: ammonium transmembrane transporter activity Disease: Blood Group--rhesus System E Polypeptide
Research Articles on RHCE	**1.** These data showed the presence of the (C)ce(s) haplotype at a low frequency (0.625%) compared to that among Africans in whom it is common. Nevertheless, the presence of RHD-CE-D(s) in Tunisians, even at a lower frequency
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/rhce/8207186