KLRC2 siRNA – NKG2-C Type II Integral Membrane Protein (Human)

PRODUCT OVERVIEW

Product Name	KLRC2, siRNA
Full Product Name	KLRC2 siRNA (Human)
Product Gene Name	KLRC2 sirna
Product Synonym Names	NKG2C; NKG2-C type II integral membrane protein; CD159 antigen-like family member C; NK cell receptor C; NKG2-C-activating NK receptor; CD antigen CD159c
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	KLRC2 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	26,072 Da
OMIM	602891
3D Structure	ModBase 3D Structure for P26717
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 KLRC2 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 KLRC2 sirna	RNA Interference (RNAi)
Related Product Information for KLRC2 sirna	MBS8206858 is an siRNA targeting KLRC2. Also known as KLRC2 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit KLRC2 expression using RNA interference
Other Notes	Small volumes of KLRC2 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 KLRC2. It may not necessarily be applicable to this product.

NCBI GI #	75709169
NCBI GeneID	3822
NCBI Accession #	NP_002251.2
UniProt Primary Accession #	P26717
UniProt Secondary Accession #	O43802; Q52M74; Q9NR42
UniProt Related Accession #	P26717
GenBank Nucleotide #	NM_002260.3
NCBI Official Full Name	NKG2-C type II integral membrane protein
NCBI Official Synonym Full Names	killer cell lectin-like receptor subfamily C, member 2
NCBI Official Symbol	KLRC2
NCBI Official Synonym Symbols	NKG2C; CD159c; NKG2-C
UniProt Protein Name	NKG2-C type II integral membrane protein
UniProt Synonym Protein Names	CD159 antigen-like family member C; NK cell receptor C; NKG2-C-activating NK receptor; CD_antigen: CD159c
Protein Family	NKG2-C type II integral membrane protein
UniProt Gene Name	KLRC2
UniProt Synonym Gene Names	NKG2C
UniProt Entry Name	NKG2C_HUMAN
NCBI Protein Information	NKG2-C type II integral membrane protein
NCBI Summary for KLRC2	Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. NK cells preferentially express several calcium-dependent (C-type) lectins, which have been implicated in the regulation of NK cell function. The group, designated KLRC (NKG2) are expressed primarily in natural killer (NK) cells and encodes a family of transmembrane proteins characterized by a type II membrane orientation (extracellular C terminus) and the presence of a C-type lectin domain. The KLRC (NKG2) gene family is located within the NK complex, a region that contains several C-type lectin genes preferentially expressed on NK cells. KLRC2 alternative splice variants have been described but their full-length nature has not been determined. [provided by RefSeq, Jul 2008]
UniProt Comments for KLRC2	KLRC2: Plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: 12p13 Cellular Component: integral to plasma membrane; plasma membrane; receptor complex Molecular Function: protein binding; transmembrane receptor activity; carbohydrate binding Biological Process: natural killer cell mediated immunity; innate immune response; cellular defense response; signal transduction
Research Articles on KLRC2	**1.** Data suggest the proinflammatory potential of NKG2C(bright) NK cells.
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