Cohesion BIOSCIENCES

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Product Data Sheet

MARS siRNA (Human)

Catalog #	Source	Reactivity	Applications
CRH2814	Synthetic	H	RNAi

Description siRNA to inhibit MARS expression using RNA interference

Specificity MARS siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.

Form Lyophilized powder

Gene Symbol MARS

Alternative Names Methionine--tRNA ligase cytoplasmic; Methionyl-tRNA synthetase; MetRS

Entrez Gene 4141 (Human)

SwissProt P56192 (Human)

Purity > 97%

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.

Components We offers pre-designed sets of 3 different target-specific siRNA oligo duplexes of human MARS 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.

Component	15 nmol	30 nmol
MARS siRNA (Human) - A	5 nmol x 1	5 nmol x 2
MARS siRNA (Human) - B	5 nmol x 1	5 nmol x 2

Application key: E- ELISA, WB- Western blot, IH- Immunohistochemistry, IF- Immunofluorescence, FC- Flow cytometry, IC- Immunocytochemistry, IP- Immunoprecipitation, ChIP- Chromatin Immunoprecipitation, EMSA- Electrophoretic Mobility Shift Assay, BL- Blocking, SE- Sandwich ELISA, CBE- Cell-based ELISA, RNAi- RNA interference
Species reactivity key: H- Human, M- Mouse, R- Rat, B- Bovine, C- Chicken, D- Dog, G- Goat, Mk- Monkey, P- Pig, Rb- Rabbit, S- Sheep, Z- Zebrafish

MARS siRNA (Human) - C	5 nmol x 1	5 nmol x 2
Negative Control	2.5 nmol x 1	2.5 nmol x 2
DEPC Water	1 ml x 1	1 ml x 2

Directions for Use

We recommends transfection with 10 nM - 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 example, resuspend one tube of 5 nmol siRNA oligo in 250 µl of DEPC water to get a final concentration of 20 µM.

Plate	Final volume of medium	Final concentration of siRNA	siRNA (20 µM)	Lipofectamin 2000
96-well	100 µl	100 nM	0.5 µl	0.25 µl
		50 nM	0.25 µl	0.25 µl
		10 nM	0.05 µl	0.25 µl
24-well	500 µl	100 nM	2.5 µl	1 µl
		50 nM	1.25 µl	1 µl
		10 nM	0.25 µl	1 µl
12-well	1 ml	100 nM	5 µl	2 µl
		50 nM	2.5 µl	2 µl
		10 nM	0.5 µl	2 µl
6-well	2 ml	100 nM	10 µl	5 µl
		50 nM	5 µl	5 µl
		10 nM	1 µl	5 µl

Storage/Stability

Shipped at 4 °C. Store at -20 °C for one year.