

## **Product Data Sheet**

# MTHFR siRNA (Human)

Catalog # Source Reactivity Applications

CRH3002 Synthetic H RNAi

**Description** siRNA to inhibit MTHFR expression using RNA interference

**Specificity** MTHFR siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to

knock down gene expression.

Form Lyophilized powder

Gene Symbol MTHFR

Alternative Names Methylenetetrahydrofolate reductase

Entrez Gene 4524 (Human)

SwissProt P42898 (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 MTHFR 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
MTHFR siRNA (Human) - A	5 nmol x 1	5 nmol x 2
MTHFR 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

### **COHESION BIOSCIENCES LIMITED**



### **Product Data Sheet**

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

Storage/Stability

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

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

### **COHESION BIOSCIENCES LIMITED**