For research purposes only, not for human use

Product Data Sheet

PER1 siRNA (Rat)

Catalog #	Source	Reactivity	Applications
CRR3889	Synthetic	R	RNAi

Description siRNA to inhibit PER1 expression using RNA interference

Specificity PER1 siRNA (Rat) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.

Form Lyophilized powder

Gene Symbol PER1

Alternative Names Period circadian protein homolog 1; rPER1; Circadian clock protein PERIOD 1

Entrez Gene 287422 (Rat)

SwissProt Q8CHI5 (Rat)

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 rat PER1 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
PER1 siRNA (Rat) - A	5 nmol x 1	5 nmol x 2
PER1 siRNA (Rat) - 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

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PER1 siRNA (Rat) - 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.

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