

Product Data Sheet

ACTA2 siRNA (Rat)

Catalog # Source Reactivity Applications

CRR2262 Synthetic R RNAi

Description siRNA to inhibit ACTA2 expression using RNA interference

Specificity ACTA2 siRNA (Rat) is a target-specific 19-23 nt siRNA oligo duplexes designed to

knock down gene expression.

Form Lyophilized powder

Gene Symbol ACTA2

Alternative Names ACTSA; ACTVS; Actin aortic smooth muscle; Alpha-actin-2

Entrez Gene 81633 (Rat)

SwissProt P62738 (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

ACTA2 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
ACTA2 siRNA (Rat) - A	5 nmol x 1	5 nmol x 2
ACTA2 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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ACTA2 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	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 μl	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 μl	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.

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