

SMAD2 siRNA (Rat)

Catalog #	Source	Reactivity	Applications
CRR1096	Synthetic	R	RNAi
Description	siRNA to inhibit SMAD2 expression using RNA interference		
Specificity	SMAD2 siRNA (Rat) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.		
Form	Lyophilized powder		
Gene Symbol	SMAD2		
Alternative Names	MADH2; Mothers against decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; Mad-related protein 2; SMAD family member 2; SMAD 2; Smad2		
Entrez Gene	29357 (Rat)		
SwissProt	O70436 (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 SMAD2 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
-----------	---------	---------

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

WEB
www.cohesionbio.com

ORDER
order@cohesionbio.com

SUPPORT
techsupport@cohesionbio.com

CUSTOM
custom@cohesionbio.com

Product Data Sheet

SMAD2 siRNA (Rat) - A	5 nmol x 1	5 nmol x 2
SMAD2 siRNA (Rat) - B	5 nmol x 1	5 nmol x 2
SMAD2 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

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

WEB

www.cohesionbio.com

ORDER

order@cohesionbio.com

SUPPORT

techsupport@cohesionbio.com

CUSTOM

custom@cohesionbio.com

Product Data Sheet

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

WEB

www.cohesionbio.com

ORDER

order@cohesionbio.com

SUPPORT

techsupport@cohesionbio.com

CUSTOM

custom@cohesionbio.com