

## MAPK3 siRNA (Rat)

Catalog #	Source	Reactivity	Applications
CRR1414	Synthetic	R	RNAi
<b>Description</b>	siRNA to inhibit MAPK3 expression using RNA interference		
<b>Specificity</b>	MAPK3 siRNA (Rat) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.		
<b>Form</b>	Lyophilized powder		
<b>Gene Symbol</b>	MAPK3		
<b>Alternative Names</b>	ERK1; PRKM3; Mitogen-activated protein kinase 3; MAP kinase 3; MAPK 3; ERT2; Extracellular signal-regulated kinase 1; ERK-1; Insulin-stimulated MAP2 kinase; MAP kinase isoform p44; p44-MAPK; MNK1; Microtubule-associated protein 2 kinase; p44-ERK1		
<b>Entrez Gene</b>	50689 (Rat)		
<b>SwissProt</b>	P21708 (Rat)		
<b>Purity</b>	> 97%		
<b>Quality Control</b>	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.		
<b>Components</b>	We offers pre-designed sets of 3 different target-specific siRNA oligo duplexes of rat MAPK3 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.		

**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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# Product Data Sheet

Component	15 nmol	30 nmol
MAPK3 siRNA (Rat) - A	5 nmol x 1	5 nmol x 2
MAPK3 siRNA (Rat) - B	5 nmol x 1	5 nmol x 2
MAPK3 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

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10 nM

1  $\mu$ l

5  $\mu$ l

**Storage/Stability**

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

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