

## **Product Data Sheet**

# **USMG5 siRNA (Rat)**

Catalog # Source Reactivity Applications

CRR3322 Synthetic R RNAi

**Description** siRNA to inhibit USMG5 expression using RNA interference

Specificity USMG5 siRNA (Rat) is a target-specific 19-23 nt siRNA oligo duplexes designed to

knock down gene expression.

Form Lyophilized powder

Gene Symbol USMG5

Alternative Names DAPIT; Up-regulated during skeletal muscle growth protein 5; Diabetes-associated

protein in insulin-sensitive tissues

Entrez Gene 171069 (Rat)

SwissProt Q9JJW3 (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

USMG5 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    |
|-----------------------|------------|------------|
| USMG5 siRNA (Rat) - A | 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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| USMG5 siRNA (Rat) - B | 5 nmol x 1   | 5 nmol x 2   |
|-----------------------|--------------|--------------|
| USMG5 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 μΙ       | 100 nM              | 0.5 μΙ        | 0.25 μΙ      |
|         |              | 50 nM               | 0.25 μl       | 0.25 μΙ      |
|         |              | 10 nM               | 0.05 μΙ       | 0.25 μΙ      |
| 24-well | 500 μΙ       | 100 nM              | 2.5 μΙ        | 1 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  | 2 ml         | 100 nM              | 10 μΙ         | 5 μΙ         |
|         |              | 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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