

Thermo Scientific Dharmacon[®] siGENOME[®] Control siRNA Kits

Product Description

- Double-stranded, chemically synthesized oligonucleotides
- Mass of each strand confirmed by MALDI-TOF mass spectrometry
- Duplex integrity confirmed by non-denaturing polyacrylamide gel electrophoresis

Shipping and Storage

- Dharmacon RNAi controls reagents are shipped as dried pellets at room temperature (23°C). Under these conditions, they are stable for at least four weeks.
- Upon receipt, Dharmacon RNAi control reagents should be stored at –20°C to –80°C. In addition, store siGLO[®] siRNAs in the dark to avoid exposure to strong light. Under these conditions, the siRNAs are stable for at least one year.
- siRNA should be resuspended in RNase-free solutions. We recommend 1X siRNA buffer (diluted from 5X siRNA buffer – Dharmacon Products Cat. # B-002000-UB-100). RNase-free water (for short-term storage) is also appropriate for resuspension of concentrated stocks (i.e., 20-100 µM). Alternatively, an RNase-free buffer (pH 7.3-7.6) may be used such as PBS (Fisher Cat. # NC9826748)
- Upon resuspension, aliquot the siRNA into small volumes and store at –20°C to –80°C. For best results, limit freeze-thawing of each tube to no more than five events. Under these conditions, the siRNA is stable for at least 6 months.

Table 1. Spectral Properties of siGLO siRNAs

Fluorophore Absorption Max	Fluorophore Emission Max	Extinction Coefficient	Excitation Filter
557 nm	570 nm	150,000 M ⁻¹ cm ⁻¹	Cy3 [™] or Rhodamine

Table 2. Accession Numbers for Target Genes of Positive Control siRNAs

Target Gene	Human	Mouse	Rat
Cyclophilin B	NM_000942	NM_011149	NM_022536
Lamin A/C	NM_005572, NM_170707, NM_170708 (Targets all three isoforms)	NM_019390, NM_001002011 (Targets both isoforms)	NM_001002016

Handling Precautions

Oligonucleotides are susceptible to enzymatic degradation by nucleases and to chemical degradation by extreme pH and temperature. We recommend wearing gloves and maintaining nuclease-free conditions when handling the oligonucleotides.

Accompanying Documents

- Basic siRNA resuspension protocol

Supplemental Documents

Go to www.thermo.com/DharmaconProtocols to find:

- Basic and cell-line specific transfection protocols

Related Products

- DharmaFECT[®] siRNA transfection reagents are available in four formulations that are optimized for transfecting siRNA into a wide variety of cell lines. For more information, go to www.thermo.com/DharmaFECT.

Publication Reference Guide

When referencing the use of the siRNA reagents listed in this document, please include the following information: Control type, catalog number, Thermo Fisher Scientific, Lafayette, CO.

Table 3. Individual siGENOME Control siRNA Reagents

Product	Description*	Size (nmol)	Catalog #
siGENOME Lamin A/C control siRNA • human/mouse/rat	Positive silencing control for guaranteed silencing of Lamin A/C mRNA in human, mouse and rat cells. MW ~ 13,400 g/mol	5 20	D-001050-01-05 D-001050-01-20
siGENOME Cyclophilin B control siRNA • human/mouse/rat	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA in human, mouse and rat cells. MW ~ 13,400 g/mol	5 20	D-001136-01-05 D-001136-01-30
siGENOME Non-targeting siRNA #1 ^	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested.^ MW ~ 13,400 g/mol	5 20	D-001210-01-05 D-001210-01-20
siGENOME Non-targeting siRNA #2 ^	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested.^ MW ~ 13,400 g/mol	5 20	D-001210-02-05 D-001210-02-20
siGENOME Non-targeting siRNA pool #1^	Pool of 4 non-targeting siRNAs. Useful control for experiments with SMARTpool reagents.^ MW ~ 13,400 g/mol	5 20	D-001206-13-05 D-001206-13-20
siGENOME RISC-Free® Control siRNA	Non-targeting siRNA with impaired ability for RISC interaction.	5 20	D-001220-01-05 D-001220-01-20
siSTABLE Non-Targeting siRNA # 1	Negative control siRNA (chemically modified for increased stability) with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. ^ MW 13,000 g/mol	5 20	D-001700-01-05 D-001700-01-20
siGENOME Tox Transfection Control	Transfection efficiency control for optimizing relative siRNA uptake.	5 20	D-001500-01-05 D-001500-01-20
siGLO Cyclophilin B Control siRNA • human/mouse/rat	Dual purpose silencing control targeting Cyclophilin B with fluorescent label for human, mouse and rat cells. MW ~ 14,000 g/mol	5 20	D-001610-01-05 D-001610-01-20
siGLO Lamin A/C Control siRNA • human/mouse/rat	Dual purpose silencing control targeting Lamin A/C with fluorescent label for human, mouse and rat cells. MW ~ 14,100 g/mol	5 20	D-001620-01-05 D-001620-01-20
siGLO Lamin A/C Control siRNA • human • mouse • rat	Dual purpose silencing control targeting Lamin A/C with fluorescent label for human cells. MW ~ 14,100 g/mol	5 20	D-001620-02-05 D-001620-02-20
	Dual purpose silencing control targeting Lamin A/C with fluorescent label for mouse cells. MW ~ 14,100 g/mol	5 20	D-001620-03-05 D-001620-03-20
	Dual purpose silencing control targeting Lamin A/C with fluorescent label for rat cells. MW ~ 14,100 g/mol	5 20	D-001620-04-05 D-001620-04-20
siGLO RISC-Free Control siRNA	Non-targeting siRNA with fluorescent label and impaired ability for RISC interactions; a useful co-transfection marker.	5 20	D-001600-01-05 D-001600-01-20

* Both strands contain UU for 3'-overhang, and the antisense strand contains 5'-phosphate.

^ Non-targeting siRNA #1 reduces EGFR mRNA by ~50% (NM_005228), Non-Targeting siRNA #2 targets firefly luciferase (U47296), and Non-targeting Pool #1 includes both Non-targeting siRNAs #1 and #2 and targets both genes as noted above.

Table 4. siGENOME Control siRNA Kits*

Product	Size (nmol)	Catalog #
siGENOME Basic Kit – HUMAN , MOUSE, and RAT		
siGENOME Lamin A/C control siRNA (human/mouse/rat)	2	K-002800-C3-01
siGENOME Cyclophilin B control siRNA (human/mouse/rat)	5	K-002800-C4-01
siGENOME Non-targeting siRNA #1 ^		
siGENOME Non-targeting siRNA #2 ^		
siGENOME RISC-Free control siRNA		
siSTABLE Non-Targeting siRNA #1		
siGENOME Non-targeting Pool #1		
siGENOME Complete Kit – HUMAN , MOUSE, and RAT (Basic Kit plus the following siRNAs)		
siGENOME Tox Transfection Control	2	K-002800-C1-01
siGLO Lamin A/C Control siRNA (human/mouse/rat)	5	K-002800-C2-01
siGLO Cyclophilin B Control siRNA (human/mouse/rat)		
siGLO RISC-FREE Control siRNA		
siGENOME Complete Kit – HUMAN (Basic Kit plus the following siRNAs)		
siGENOME Tox Transfection Control	2	K-002800-C1-02
siGLO Lamin A/C Control siRNA (human)	5	K-002800-C2-02
siGLO Cyclophilin B Control siRNA (human/mouse/rat)		
siGLO RISC-FREE Control siRNA		
siGENOME Complete Kit – MOUSE (Basic Kit plus the following siRNAs)		
siGENOME Tox Transfection Control	2	K-002800-C1-03
siGLO Lamin A/C Control siRNA (mouse)	5	K-002800-C2-03
siGLO Cyclophilin B Control siRNA (human/mouse/rat)		
siGLO RISC-FREE Control siRNA		
siGENOME Complete Kit – RAT (Basic Kit plus the following siRNAs)		
siGENOME Tox Transfection Control	2	K-002800-C1-04
siGLO Lamin A/C Control siRNA (rat)	5	K-002800-C2-04
siGLO Cyclophilin B Control siRNA (human/mouse/rat)		
siGLO RISC-FREE Control siRNA		

^ Non-targeting siRNA #1 reduces EGFR mRNA by ~50% (NM_005228), Non-Targeting siRNA #2 targets firefly luciferase (U47296), and Non-targeting Pool #1 includes both Non-targeting siRNAs #1 and #2 and targets both genes as noted above.

Contact Information

For technical questions regarding the use of siRNA reagents, please contact Dharmacon Products Technical Support at:

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