

siGLOTM, siGENOMETM, and ON-TARGET^{plus}TM control reagents

Product description

- Double-stranded, chemically synthesized oligonucleotides
- Antisense strands are modified with 5'-phosphate
- siGLO reagents are labeled with a fluorophore (see Table 2) on the sense strand
- Mass of each strand confirmed by MALDI-TOF mass spectrometry
- Duplex integrity confirmed by non-denaturing polyacrylamide gel electrophoresis

Shipping and storage

- RNAi Control reagents are shipped as dried pellets at room temperature (23 °C). Under these conditions, they are stable for at least four weeks.
- Upon receipt, our RNAi Controls and siGLO 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 reagents 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 Cat. #B-002000-UB-100). RNase-free water (for short-term storage) is also appropriate for resuspension of concentrated stocks (20-100 μM). Alternatively, an RNase-free buffer (pH 7.3-7.6) may be used.
- 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 one year.

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 document

Basic siRNA resuspension protocol.

Supplemental documents

Go to dharmacon.horizondiscovery.com to find basic transfection and resuspension 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, click [here](#).

Publication reference guide

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

Table 1. Accession numbers for target genes of positive control siRNA

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
GAPD	NM_002046	—	—

Table 2. Spectral properties of siGLO reagents

Absorption max.	Emission max.	Extinction coefficient	Excitation filters
557 nM	570 nM	150,000 M ⁻¹ cm ⁻¹	Cy3™, Rhodamine, or PE

Table 3. siGLO reagents

Product	Description*	Cat. #
siGLO Cyclophilin B Control siRNA <i>human/mouse/rat</i>	Dual purpose silencing control targeting, Cyclophilin B with fluorescent label for human, mouse and rat cells. MW ~ 14,000 g/mol	D-001610-01-XX
siGLO Lamin A/C Control siRNA <i>human/mouse/rat</i>	Dual purpose silencing control targeting, Lamin A/C with fluorescent label for human, mouse and rat cells. MW ~ 14,100 g/mol	D-001620-01-XX
siGLO Lamin A/C Control siRNA <i>human/mouse/rat</i>	Dual purpose silencing control targeting Lamin A/C with fluorescent label for human cells. MW ~ 14,100 g/mol	D-001620-02-XX
	Dual purpose silencing control targeting Lamin, A/C with fluorescent label for mouse cells. MW ~ 14,100 g/mol	D-001620-03-XX
	Dual purpose silencing control targeting Lamin, A/C with fluorescent label for rat cells. MW ~ 14,100 g/mol	D-001620-04-XX
siGLO RISC-Free™ Control siRNA	Non-targeting siRNA with fluorescent label and impaired processing and uptake by RISC; a useful co-transfection marker.	D-001600-01-XX

*XX=05,20, or 50 for 5, 20, and 50 nmol amounts.

Table 4. siGENOME control siRNA

Product	Description*	Cat. #
siGENOME Lamin A/C Control siRNA <i>human/mouse/rat</i>	Positive silencing control for guaranteed silencing of Lamin A/C mRNA in human, mouse and rat cells. MW ~ 13,400 g/mol	D-001050-01-XX
siGENOME Cyclophilin B Control siRNA <i>human/mouse/rat</i>	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA in human, mouse and rat cells. MW ~ 13,300 g/mol	D-001136-01-XX
siGENOME GAPD Control siRNA <i>human</i>	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA in human cells. MW ~ 13,300 g/mol	D-001140-01-XX
siGENOME Non-targeting siRNA #1	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested. [^] MW ~ 13,300 g/mol	D-001210-01-XX
siGENOME Non-targeting siRNA #2	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested. [^] MW ~ 13,300 g/mol	D-001210-02-XX
siGENOME Non-targeting siRNA #3	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested. [^] MW ~ 13,300 g/mol	D-001210-03-XX
siGENOME Non-targeting siRNA #4	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested. [^] MW ~ 13,400 g/mol	D-001210-04-XX
siGENOME Non-targeting siRNA #5	Negative control siRNA with at least 4 mismatches to any human, mouse or rat gene. Microarray tested. [^] MW ~ 13,400 g/mol	D-001210-05-XX
siGENOME Non-targeting siRNA Pool #1	Pool of 4 Non-Targeting siRNAs. Useful control for experiments with SMARTpool reagents. [^] MW ~ 13,400 g/mol	D-001206-13-XX
siGENOME Non-targeting siRNA Pool #2	Pool of 4 Non-Targeting siRNAs. Useful control for experiments with SMARTpool reagents. [^] MW ~ 13,400 g/mol	D-001206-14-XX
siGENOME RISC-Free Control siRNA	Non-Targeting siRNA with impaired ability for RISC interaction.	D-001220-01-XX

[^]Non-Targeting siRNA #1 reduces EGFR mRNA by ~ 50% (Accession NM_005228), Non-Targeting siRNA #2 reduces firefly luciferase mRNA by ~ 75% (Cat. #U47296), and the Non-Targeting Pool includes both Non-Targeting siRNAs. #1 and #2 and targets both genes as noted above. *XX=05,20, or 50 for 5, 20, and 50 nmol amounts.

Table 5. ON-TARGETplus Control siRNA

Product	Description*	Cat. #
	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA in human cells. MW ~ 13,400 g/mol	D-001820-01-XX
ON-TARGETplus Cyclophilin B Control siRNA human/mouse/rat	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA in mouse cells. MW ~ 13,400 g/mol	D-001820-02-XX
	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA in rat cells. MW ~ 13,400 g/mol	D-001820-03-XX
	Pool of 4 positive silencing control siRNA for guaranteed silencing of Cyclophilin B mRNA in human cells. Useful control for experiments with SMARTpool reagents. MW ~ 13,400 g/mol	D-001820-10-XX
ON-TARGETplus-Cyclophilin B Control Pool human/mouse/rat	Pool of 4 positive silencing control siRNA for guaranteed silencing of Cyclophilin B mRNA in mouse cells. Useful control for experiments with SMARTpool reagents. MW ~ 13,400 g/mol	D-001820-20-XX
	Pool of 4 positive silencing control siRNA for guaranteed silencing of Cyclophilin B mRNA in rat cells. Useful control for experiments with SMARTpool reagents. MW ~ 13,400 g/mol	D-001820-30-XX
	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA in human cells. MW ~ 13,300 g/mol	D-001830-01-XX
ON-TARGETplus GAPD Control siRNA human/mouse/rat	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA in mouse cells. MW ~ 13,300 g/mol	D-001830-02-XX
	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA in rat cells. MW ~ 13,300 g/mol	D-001830-03-XX

Product	Description*	Cat. #
	Pool of 4 positive silencing control siRNA for guaranteed silencing of GAPD (GAPDH) mRNA in human cells. MW ~ 13,300 g/mol	D-001830-10-XX
ON-TARGETplus GAPD Control Pool human/mouse/rat	Pool of 4 positive silencing control siRNA for guaranteed silencing of GAPD (GAPDH) mRNA in mouse cells. MW ~ 13,300 g/mol	D-001830-20-XX
	Pool of 4 positive silencing control siRNA for guaranteed silencing of GAPD (GAPDH) mRNA in rat cells. MW ~ 13,300 g/mol	D-001830-30-XX
ON-TARGETplus Non-targeting siRNA #1 human/mouse/rat	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. MW ~ 13,400 g/mol	D-001810-01-XX
ON-TARGETplus Non-targeting siRNA #2 human/mouse/rat	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. MW ~ 13,400 g/mol	D-001810-02-XX
ON-TARGETplus Non-targeting siRNA #3 human/mouse/rat	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. MW ~ 13,400 g/mol	D-001810-03-XX
ON-TARGETplus Non-targeting siRNA #4 human/mouse/rat	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. MW ~ 13,400 g/mol	D-001810-04-XX
ON-TARGETplus Non-targeting Pool human/mouse/rat	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested. 5MW ~ 13,400 g/mol	D-001810-10-XX

*XX=05,20, or 50 for 5, 20, and 50 nmol amounts.

If you have any questions, contact

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