

Dharmacon™ Accell™ siRNA Control Kits

Please Read:

Dharmacon Accell siRNA is specially modified for use without a transfection reagent and works at a higher concentration than conventional siRNA with minimal disruption of the expression profile. When used with Accell siRNA delivery medium, little to no delivery optimization is required.

Product Description:

- A complete kit for the assessment of Accell siRNA in your cell type of interest (Tables 3 and 4)
 - Control siRNAs that are chemically modified for stability, target specificity and uptake by cells without a transfection reagent
 - Species-specific positive control siRNAs designed to silence specific target genes (Tables 1 and 6)
 - Accell Green or Red Non-targeting control siRNA labeled with a fluorophore (Table 2)
 - Non-targeting negative control siRNA designed to not target any genes in the human, mouse or rat genomes (Table 5)
 - 5x siRNA Buffer and Accell Delivery Medium included
- Annealed double-stranded RNA oligonucleotides
- 5'-Phosphate on antisense strand
- Mass of each strand confirmed by MALDI-TOF mass spectrometry
- The approximate molecular weight of all controls is 13,300 g/mol

Shipping and Storage:

- The Accell RNAi Control Kits are shipped cold (4-23 °C). Under these conditions, the siRNA components (dry pellets) are stable for at least four weeks, while the delivery media is stable for at least one week.
- Upon receipt, siRNA reagents should be stored at -20 °C to -80 °C. In addition, store dye-labeled siRNAs in the dark to avoid exposure to strong light. Under these conditions, they are stable for at least one year.

- Upon receipt, Accell Delivery Medium should be stored at 4 °C. Under these conditions, it is stable until its expiration date (see label).
- siRNA should be resuspended in RNase-free solutions. We recommend 1x siRNA buffer (diluted from 5x siRNA buffer – Cat. #B-002000-UB-100). RNase-free water (for short-term storage) is also appropriate for resuspension of concentrated stocks (for example, 20-100 µM). Alternatively, an RNase-free buffer (pH 7.3-7.6) may be used such as PBS.
- 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 9 months.

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.

Related Products:

Accell siRNA Delivery media is recommended for use with Accell siRNA, and has been validated with over 40 cell types to date. For more information on Accell siRNA Delivery medium, go to gelifesciences.com/dharmacon and search for Cat. #B-005000-100.

Related Products:

- Accell Delivery Protocol

Publication Reference Guide:

When referencing the use of siRNA reagents, please include the following information: product name Accell Cyclophilin B Control siRNA (Cat. #), GE Healthcare Dharmacon, Inc., Lafayette, CO.

Table 1. Accession Numbers for Target Genes of Positive Control siRNAs:

Target Gene	Human	Mouse	Rat
Cyclophilin B	NM_000942	NM_011149	NM_022536
GAPD	NM_002046	NM_008085	XM_575242

Table 2. Spectral Properties of Accell Green and Red Control siRNAs:

Accell Red & Green Control siRNAs	Fluorophore Absorption / Emission Max	Extinction Coefficient	Filter
Accell Green	6-FAM (494 nm /520 nm)	75,000 M ⁻¹ cm ⁻¹	FITC
Accell Red	DY-547 (557 nm /570 nm)	150,000 M ⁻¹ cm ⁻¹	Cy 3, Rhodamine and PE

Table 3. Accell siRNA Control Kits Contents:

Contents	Cat #
Accell Non-targeting siRNA #1	D-001910-01-05

Contents	Cat #
Accell Red <u>or</u> Green Non-targeting siRNA	D-001950-01-05
Accell Cyclophilin Control siRNA (human, mouse, <u>or</u> rat)	D-001920-0X-05
Accell GAPD Control siRNA (human, mouse, <u>or</u> rat)	D-001930-0X-05
1.5 mL 5x siRNA Buffer	B-002000-UB-015
100 mL Accell Delivery Media	B-005000-100
X=1 for human, 2 for mouse, <u>or</u> 3 for rat	

Table 4. Accell siRNA Control Kits:

Product Name	Cat #
Accell siRNA Human Control Kit (Green)	K-005000-G1-01
Accell siRNA Mouse Control Kit (Green)	K-005000-G1-02
Accell siRNA Rat Control Kit (Green)	K-005000-G1-03
Accell siRNA Human Control Kit (Red)	K-005000-R1-01
Accell siRNA Mouse Control Kit (Red)	K-005000-R1-02
Accell siRNA Rat Control Kit (Red)	K-005000-R1-03

Table 5. Accell RNAi Negative Controls:

Product	Description	Cat #
Accell Non-targeting siRNA #1-4	Negative control siRNA designed to have minimal targeting of known genes in human, mouse, and rat cells. Microarray tested.	D-001910-01-XX D-001910-02-XX D-001910-03-XX D-001910-04-XX
Accell Non-targeting Pool	Negative control pool of four siRNAs designed to have minimal targeting of known genes in human, mouse, and rat cells. Microarray tested.	D-001910-10-XX
Accell Green Non-targeting siRNA Accell Red Non-targeting siRNA	Fluorescently-labeled negative control siRNA #1 with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested.	D-001950-01-XX D-001960-01-XX
XX=05, 20, or 50 for 5, 20, and 50 nmol amounts.		

Table 6. Accell RNAi Positive Controls:

Product	Description	Species	Cat #
Accell Cyclophilin B Control siRNA	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA.	H M R	D-001920-01-XX D-001920-02-XX D-001920-03-XX
Accell Cyclophilin B Control Pool	Pool of 4 positive silencing control siRNA for guaranteed silencing of Cyclophilin B mRNA.	H M R	D-001920-10-XX D-001920-20-XX D-001920-30-XX
Accell GAPD Control siRNA	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA.	H M R	D-001930-01-XX D-001930-02-XX D-001930-03-XX
Accell GAPD Control Pool	Pool of 4 positive silencing control siRNA for guaranteed silencing of GAPD (GAPDH) mRNA.	H M R	D-001930-10-XX D-001930-20-XX D-001930-30-XX
Accell eGFP Control siRNA	Positive control siRNA silencing control for guaranteed silencing of eGFP mRNA.	N/A	D-001940-01-XX
Accell eGFP Control Pool	Pool of 4 positive control siRNA silencing control for guaranteed silencing of eGFP mRNA.	N/A	D-001940-10-XX
Accell Green Cyclophilin B Control siRNA	Fluorescently-labeled positive silencing control for guaranteed silencing of Cyclophilin B mRNA.	H M R	D-001970-01-XX D-001970-02-XX D-001970-03-XX
Accell Red Cyclophilin B Control siRNA	Fluorescently-labeled positive silencing control for guaranteed silencing of Cyclophilin B mRNA.	H M R	D-001975-01-XX D-001975-02-XX D-001975-03-XX
XX=05, 20, or 50 for 5, 20, and 50 nmol amounts.			

Each Accell siRNA product is covered by one or more of the following patents: US8252755, US8501706, US8188060 and US8415466.

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 1.800.235.9880; 303.604.9499 if you have any questions.