

# Dharmacon™ Accell™ RNAi Control Reagents

## 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 with Accell siRNA delivery media, little to no delivery optimization is required.

## Product Description:

- Chemically modified for stability, target specificity, and uptake by cells without a transfection reagent
- Pooled and individual positive control siRNAs designed to silence specific target genes (Table 1)
- Pooled and individual negative control siRNAs designed to not target any genes in human, mouse, or rat (Table 3)
- Accell Green and Red Control siRNAs are labeled with a fluorophore (Table 2)
- Annealed double-stranded RNA oligonucleotides
- 3'-UU overhangs
- 5'-Phosphate on antisense strand
- Mass of each strand confirmed by MALDI-TOF mass spectrometry
- The approximate molecular weight of all controls is 13,400 g/mol

## Shipping and Storage:

- siRNA reagents are shipped as dry pellets at room temperature (23 °C). Under these conditions, they are stable for at least four weeks.
- Upon receipt, siRNA reagents should be stored at -20 °C to -80 °C. Under these conditions, they 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 – 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 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 nine 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 required for use with every Accell siRNA product, and has been validated with over 40 cell types to date. For more information on Accell siRNA Delivery medium, go to [gelifsciences.com/dharmacon](http://gelifsciences.com/dharmacon) and search for Cat. #B-005000-100.

## Accompanying Documents:

- Accell Delivery Protocol

## Publication Reference Guide:

When referencing the use of siRNA reagents, please include the following information: product name Accell SMARTpool™ or 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 <sup>-1</sup> cm <sup>-1</sup>	FITC
Accell Red	DY-547 (557 nm /570 nm)	150,000 M <sup>-1</sup> cm <sup>-1</sup>	Cy3, Rhodamine and PE

**Table 3. Accell RNAi Negative Controls:**

Product	Description	Cat. #
Accell Non-targeting siRNA #1-4	Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. 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 4 siRNA with at least 4 mismatches to any human, mouse, or rat gene. 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 4. 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.

GE, imagination at work and GE monogram are trademarks of General Electric Company. Dharmacon, Inc., a General Electric company doing business as GE Healthcare. All other trademarks are the property of General Electric Company or one of its subsidiaries. ©2017 General Electric Company—All rights reserved. First version published June 2014. GE Healthcare UK Limited, Amersham Place, Little Chalfont, Buckinghamshire, HP7 9NA, UK



Orders can be placed at:  
[gelifesciences.com/dharmacon](http://gelifesciences.com/dharmacon)

Customer Support: [cs.dharmacon@ge.com](mailto:cs.dharmacon@ge.com)  
 Technical Support: [ts.dharmacon@ge.com](mailto:ts.dharmacon@ge.com) or  
 1.800.235.9880; 303.604.9499 if you have any questions.