

Thermo Scientific Dharmacon[®]

Accell[™] siRNA Control Kits

PLEASE READ: 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 media, 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 Media included
- Annealed double-stranded RNA oligonucleotides
- 3'-UU overhangs
- 5'-Phosphate on antisense strand
- Mass of each strand confirmed by MALDI-TOF mass spectrometry
- Duplex integrity confirmed by non-denaturing polyacrylamide gel electrophoresis
- The approximate molecular weight of all controls is 13,400 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 Media 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 – 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 mM). 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 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 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 media, go to www.thermo.com/dharmacon, and search for catalog #B-005000-100.

Accompanying Documents

- Accell Delivery Protocol

Publication Reference Guide

When referencing the use of Dharmacon siRNA reagents, please include the following information: product name (e.g. Accell Cyclophilin B Control siRNA) catalog number, Thermo Fisher Scientific, 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 TM 3, Rhodamine and PE

Table 3. Accell siRNA Control Kits Contents

Contents	Catalog #
Accell Non-targeting siRNA #1	D-001910-01-05
Accell Red or Green Non-targeting siRNA	D-001950-01-05
Accell Cyclophilin Control siRNA (human, mouse, or rat)	D-001920-0X-05
Accell GAPD Control siRNA (human, mouse, or 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, or 3 for rat	

Table 4. Accell siRNA Control Kits

Product Name	Catalog #
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	Catalog #
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	Fluorescently-labeled negative control siRNA #1 with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested.	D-001950-01-XX
Accell Red Non-targeting siRNA		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	Catalog #
Accell Cyclophilin B Control siRNA	Positive silencing control for guaranteed silencing of Cyclophilin B mRNA.	H	D-001920-01-XX
		M	D-001920-02-XX
		R	D-001920-03-XX
Accell Cyclophilin B Control Pool	Pool of 4 positive silencing control siRNA for guaranteed silencing of Cyclophilin B mRNA.	H	D-001920-10-XX
		M	D-001920-20-XX
		R	D-001920-30-XX
Accell GAPD Control siRNA	Positive silencing control for guaranteed silencing of GAPD (GAPDH) mRNA.	H	D-001930-01-XX
		M	D-001930-02-XX
		R	D-001930-03-XX
Accell GAPD Control Pool	Pool of 4 positive silencing control siRNA for guaranteed silencing of GAPD (GAPDH) mRNA.	H	D-001930-10-XX
		M	D-001930-20-XX
		R	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	D-001970-01-XX
		M	D-001970-02-XX
		R	D-001970-03-XX
Accell Red Cyclophilin B Control siRNA	Fluorescently-labeled positive silencing control for guaranteed silencing of Cyclophilin B mRNA.	H	D-001975-01-XX
		M	D-001975-02-XX
		R	D-001975-03-XX
XX=05, 20, or 50 for 5, 20, and 50 nmol amounts.			

Contact Information

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

In America/Asia 800-235-9880 303-604-9499 dharmacon.lab@thermofisher.com	In Europe/Israel 00800 73724648 32-53-85-71-84 perbio.eurotech@thermofisher.com	In Other Countries Please contact your appropriate distributor as listed on www.thermo.com/dharmacondistributors
-----------------------------------------------------------------------------------	------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------

Copyright © 2008 Thermo Fisher Scientific, Inc. All Rights Reserved.

The product(s) described herein (“Products”) are protected by patents, pending patents and other intellectual property owned or licensed by Dharmacon Inc. as set forth in Dharmacon’s Terms and Conditions (found at www.thermo.com/dharmacon or included with the Products when sold). By using the Product(s), users accept the Terms and Conditions, which expressly govern all use of the Product(s). The Product(s) are intended solely for research use and not for diagnostic, clinical or therapeutic uses. All other trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries.

Literature Code: 00163-07-J-01-U