Label IT® RNAi Delivery Control

Quick Reference Protocol

Instructions for MIR 7900, 7901, 7902, 7903
Full protocol, SDS and Certificate of Analysis available at mirusbio.com/7900



SPECIFICATIONS

Storage	Store Label IT® RNAi Delivery Control at –20°C, protected from light. Store the 10X RNAi Dilution Buffer at –20°C.		
Product Guarantee	The Label IT® RNAi Delivery Control and 10X RNAi Dilution Buffer are guaranteed for 1 year from the date of purchase, when properly stored and handled.		
Concentration	10 μM stock in RNAi Dilution Buffer		

The Label IT® RNAi Delivery Control is designed to facilitate visualization and optimization of dsRNA oligonucleotide delivery during *in vitro* and *in vivo* RNAi experiments. The Label IT® RNAi Delivery Control consists of either Cy®3- or fluorescein-labeled double-stranded RNA duplexes of similar length, charge and configuration as standard siRNA used in RNAi studies. The sequence of the Label IT® RNAi Delivery Control is not homologous to any known mammalian gene and is suitable for co-delivery with genespecific siRNA without affecting the RNAi-mediated inhibition of the target gene. The 10 μM Label IT® RNAi Delivery Control is supplied in 75 μl (MIR 7900, 7902) or 750 μl (MIR 7901, 7903) volumes.

Label IT® RNAi Delivery Control Product Configurations:

Product Name	Product No.	Quantity	Excitation Wavelength (nm)	Emission Wavelength (nm)
Label IT® RNAi Delivery Control, Cy®3	MIR 7900	10 μg (~0.75 nmol)	550	570
Label IT® RNAi Delivery Control, Cy®3	MIR 7901	100 μg (~7.5 nmol)	550	570
Label IT® RNAi Delivery Control, Fluorescein	MIR 7902	10 μg (~0.75 nmol)	492	518
Label IT® RNAi Delivery Control, Fluorescein	MIR 7903	100 μg (~7.5 nmol)	492	518

Label IT® Plasmid Delivery Control Applications

In Vivo Delivery

In vivo delivery of siRNA to mice via hydrodynamic tail vein injection can be monitored by complexing the Label IT® RNAi Delivery Control with Mirus Bio's <u>TransIT® QR Delivery Solution</u>. Hydrodynamic tail vein injection results in efficient delivery to liver hepatocytes with lower levels of delivery to the spleen, kidney, lungs and heart. The Label IT® RNAi Delivery Control may also be used to assess alternative methods of in vivo delivery. For example, efficient siRNA delivery to limb skeletal muscle can also be achieved using an intravenous delivery injection procedure.

In Vitro Transfection

The Label IT® RNAi Delivery Control can be directly substituted into standard *in vitro* transfection or electroporation protocols to facilitate the visual tracking of siRNA following cellular uptake. For a list of siRNA-compatible transfection reagents that can be used to deliver the Label IT® RNAi Delivery Control, see the Related Products section or visit our online transfection database, Reagent Agent®, which is a tool designed to help determine the best delivery solution for a given nucleic acid and cell type. When available, Reagent Agent® also provides detailed experimental conditions and references.

NOTE: The *Label IT®* RNAi Delivery Control fluorescent signal strength will depend on several factors including transfection efficiency, amount of control siRNA used, cell growth rate and post-transfection incubation time. It may be necessary to titrate the amount of *Label IT®* RNAi Delivery Control transfected from **10 to 100 nM** to obtain the desired fluorescent signal. Assess the distribution of the *Label IT®* RNAi Delivery Control fluorescent signal in transfected cells between 4 and 48 hours post-transfection.

For Research Use Only

▶ RELATED PRODUCTS

- TransIT-X2® Dynamic Delivery System
- TransIT-siQUEST® Transfection Reagent
- TransIT-TKO® Transfection Reagent
- TransIT®-QR Delivery Solution
- Ingenio[®] Electroporation Solution and Kits
- Label IT® Plasmid Delivery Controls
- Label IT® Tracker Intracellular Nucleic Acid Localization Kits
- Label IT® Plasmid Delivery Control
- Label IT® siRNA Tracker Intracellular Localization Kits

For details on the above mentioned products, visit www.mirusbio.com



Reagent Agent[®] is an online tool designed to help determine the best solution for nucleic acid delivery based on in-house data, customer feedback and citations.

Learn more at: mirusbio.com/ra



SDS and Certificate of Analysis available at mirusbio.com/7900

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