

# 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](http://mirusbio.com/7900)



## SPECIFICATIONS

<b>Storage</b>	Store <i>Label IT</i> ® RNAi Delivery Control at –20°C, protected from light. Store the 10X RNAi Dilution Buffer at –20°C.
<b>Product Guarantee</b>	The <i>Label IT</i> ® RNAi Delivery Control and 10X RNAi Dilution Buffer are guaranteed for 1 year from the date of purchase, when properly stored and handled.
<b>Concentration</b>	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 gene-specific 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)
<i>Label IT</i> ® RNAi Delivery Control, Cy®3	MIR 7900	10 µg (~0.75 nmol)	550	570
<i>Label IT</i> ® RNAi Delivery Control, Cy®3	MIR 7901	100 µg (~7.5 nmol)	550	570
<i>Label IT</i> ® RNAi Delivery Control, Fluorescein	MIR 7902	10 µg (~0.75 nmol)	492	518
<i>Label IT</i> ® 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 [TransIT® QR Delivery Solution](#). 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

Mirus Bio LLC

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## ► 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](http://www.mirusbio.com)



## Reagent Agent®

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](http://mirusbio.com/ra)



SDS and Certificate of Analysis available at [mirusbio.com/7900](http://mirusbio.com/7900)

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