

# Label IT® Plasmid Delivery Control

## Quick Reference Protocol

Instructions for MIR 7904, 7905, 7906, 7907

Full protocol, SDS and Certificate of Analysis available at [mirusbio.com/7904](http://mirusbio.com/7904)



## SPECIFICATIONS

<b>Storage</b>	Store <i>Label IT</i> ® Plasmid Delivery Control at –20°C, protected from light.
<b>Product Guarantee</b>	The <i>Label IT</i> ® Plasmid Delivery Controls are stable for 1 year from the date of purchase, when properly stored and handled.
<b>Concentration</b>	0.5 µg/µl in TE Buffer

The *Label IT*® Plasmid Delivery Control is a tool designed to facilitate visualization and optimization of plasmid DNA delivery for *in vitro* and *in vivo* applications. The *Label IT*® Plasmid Delivery Control consists of either Cy<sup>3</sup>- or fluorescein-labeled circular plasmid DNA (2.7 kb) and is formatted for small scale *in vitro* applications (MIR 7904, 7906) or large scale *in vitro* applications as well as *in vivo* delivery of the labeled plasmid DNA (MIR 7905, 7907).

### Label IT® Plasmid Delivery Control Product Configurations:

Product Name	Product No.	Quantity	Excitation Wavelength (nm)	Emission Wavelength (nm)
<i>Label IT</i> ® Plasmid Delivery Control, Cy <sup>3</sup>	MIR 7904	10 µg in 20 µl	550	570
<i>Label IT</i> ® Plasmid Delivery Control, Cy <sup>3</sup>	MIR 7905	100 µg in 200 µl	550	570
<i>Label IT</i> ® Plasmid Delivery Control, Fluorescein	MIR 7906	10 µg in 20 µl	492	518
<i>Label IT</i> ® Plasmid Delivery Control, Fluorescein	MIR 7907	100 µg in 200 µl	492	518

### Label IT® Plasmid Delivery Control Applications

#### In Vivo Delivery

Efficient *in vivo* delivery of plasmid DNA to mice via hydrodynamic tail vein injection with *TransIT*® EE or *TransIT*® QR Delivery Solution can be monitored using the *Label IT*® Plasmid Delivery Control. Hydrodynamic tail vein injection results in efficient nucleic acid delivery to liver hepatocytes with lower levels of delivery to the spleen, kidney, lungs and heart. The *Label IT*® Plasmid Delivery Control may also be used to assess alternative methods of *in vivo* delivery.

#### In Vitro Transfection

The *Label IT*® Plasmid Delivery Controls can be directly substituted into standard *in vitro* transfection or electroporation protocols to facilitate the visual tracking of plasmid DNA following cellular uptake. For a list of broad-spectrum and cell line-specific transfection reagents that can be used to deliver the *Label IT*® Plasmid 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 more detailed experimental conditions and references.

**NOTE:** The strength of the *Label IT*® Plasmid Delivery Control fluorescent signal will depend on several factors including transfection efficiency, amount of labeled plasmid used, growth rate of the cells, and incubation time post-transfection. To obtain the desired fluorescent signal, it may be necessary to titrate the amount of *Label IT*® Plasmid Delivery Control transfected. Assess the distribution of the *Label IT*® Plasmid Delivery Control fluorescent signal in transfected cells between 4 and 48 hours post-transfection.

### For Research Use Only

Mirus Bio LLC

[www.mirusbio.com](http://www.mirusbio.com) | [techsupport@mirusbio.com](mailto:techsupport@mirusbio.com) | Toll Free (U.S.): 844.MIRUSBIO | Direct: +1.608.441.2852

## ► RELATED PRODUCTS

- *TransIT*-X2® Dynamic Delivery System
- *TransIT*®-LT1 Transfection Reagent
- *TransIT*®-2020 Transfection Reagent
- *TransIT*-TKO® Transfection Reagent
- *TransIT*® Cell Line Specific Reagents and Kits
- *TransIT*®-QR Delivery Solution
- *TransIT*®-EE Delivery Solution
- *Ingenio*® Electroporation Solution and Kits
- *Label IT*® RNAi Delivery Controls
- *Label IT*® Tracker Intracellular Nucleic Acid Localization Kits
- *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/7904](http://mirusbio.com/7904)

©1996-2017 All rights reserved. Mirus Bio LLC. All trademarks are the property of their respective owners.  
For terms and conditions, visit [www.mirusbio.com](http://www.mirusbio.com)

Rev.A 1216

**Mirus Bio LLC**

[www.mirusbio.com](http://www.mirusbio.com) | [techsupport@mirusbio.com](mailto:techsupport@mirusbio.com) | Toll Free (U.S.): 844.MIRUSBIO | Direct: +1.608.441.2852