

# 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

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## ► 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)

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