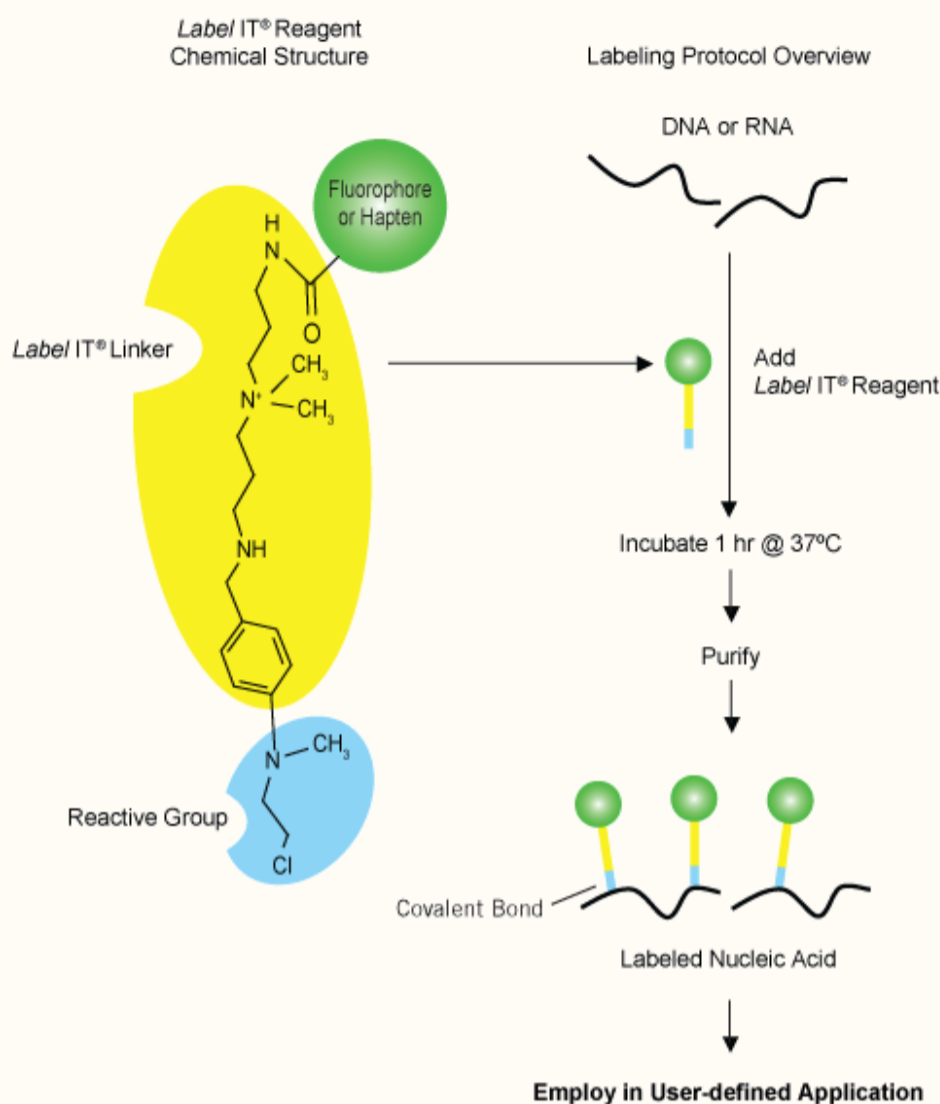
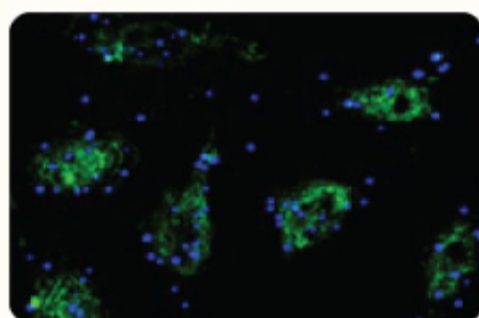


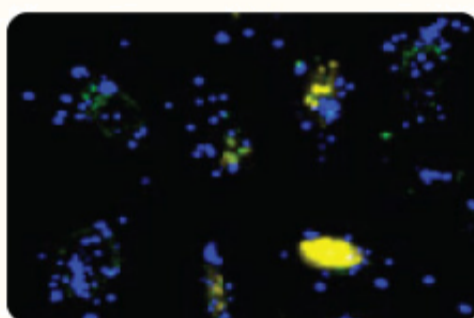
Label IT® DNA/siRNA Tracker Intracellular Localization Kits
Efficient, direct labeling for *in vitro* and *in vivo* tracking of DNA/siRNA



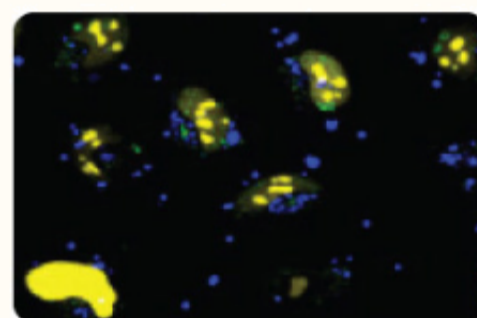
Label IT® siRNA Tracker Kits. The *Label IT®* siRNA Tracker labeling reagents are composed of three regions: the label (a fluorophore or biotin) (green), the linker (yellow) which facilitates electrostatic interactions with the siRNA and miRNA and the reactive alkylating group (blue) that covalently attaches the *Label IT®* reagents to any reactive heteroatom within the siRNA or miRNA. Attachment of the *Label IT®* Reagent to siRNA or miRNA is optimized and does not alter their structure or affect downstream target knockdown performance. The labeled siRNAs or miRNAs can be both visualized after transfection by fluorescence microscopy and simultaneously employed to knockdown target gene expression.



3 Hours

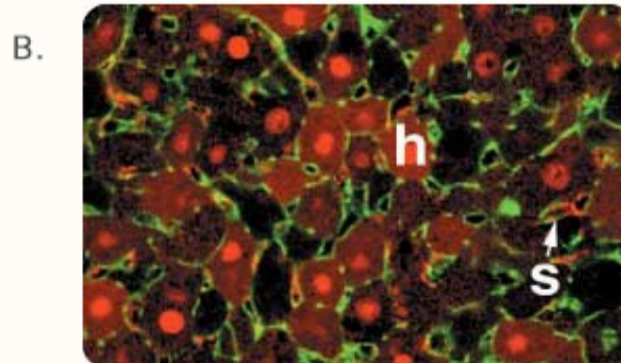
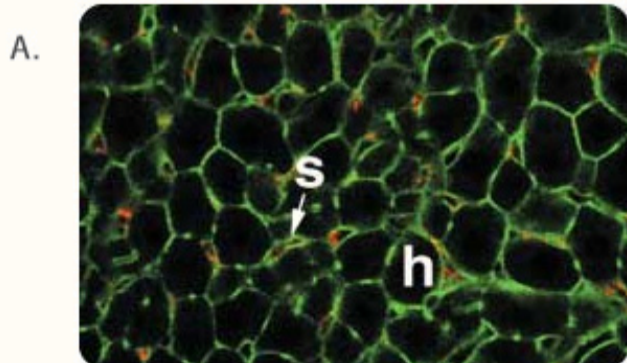


8 Hours



20 Hours

Tracking of Plasmid Localization and Expression. COS-7 cells transfected with *Label IT®* Tracker™ Cy®5 (blue) labeled pEYFP-nuc and *TransIT®*-LT1 Reagent in serum containing media. Images were acquired at 3, 8, and 20 hours post-transfection. The blue signal indicates the cellular localization of the labeled plasmid, the green signal indicates cellular autofluorescence, and the yellow signal is the expression of the nuclear yellow fluorescent protein (YFP) reporter.



Delivery of Labeled siRNA to Mouse Liver. (A) siRNA (25 µg) was labeled with *Label IT®* siRNA Tracker Cy®3 Kit and delivered to mice through the tail vein using either low volume injection conditions (100 µl) hydrodynamic injection conditions (2 ml over 6-8 seconds). (B) Mouse livers were harvested 30 minutes after injection, fixed in paraformaldehyde, sectioned (10 µm thick) and analyzed. A representative hepatocyte (h) and sinusoid (s) are indicated in each panel. The hydrodynamic injection of siRNA results in siRNA uptake by the majority of the hepatocytes in the liver.