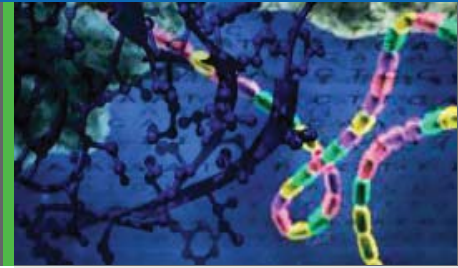


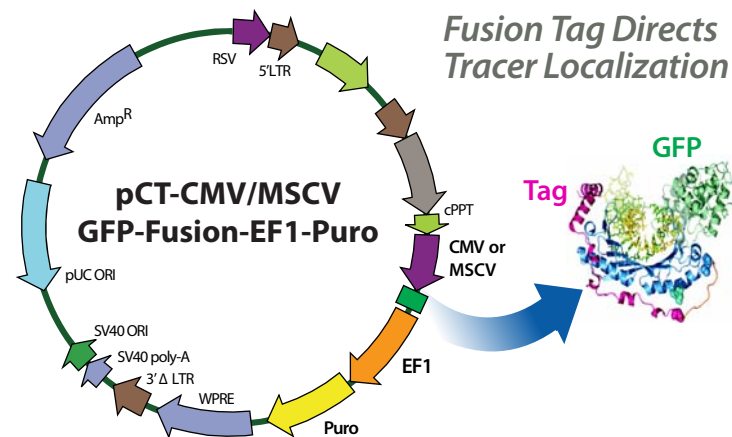
# Cyto-Tracers™

Accurately mark organelles and follow their dynamics with GFP-fusion tracer proteins expressed from integrated lentivectors



## Vivid tracking of subcellular activities made simple

Molecular trafficking is a dynamic process in eukaryotic cells and the Cyto-Tracers™ provide the ability to light up cell compartments to monitor movement and localization of organelles and to trace endocytosis and exocytosis. SBI has created a line of lentivector-based Cyto-Tracers™ that utilize GFP-fusion proteins to mark cellular compartments, organelles, vesicles and structures to enable more long-term and more in-depth experimentation. The Cyto-Tracers can be used in transfections as well as packaged into virus to create stable GFP tracer cell lines in primary cells, tumor cell lines and stem cells.



## Highlights

- Stable lentivector-based system for cell tracing
- Ideal for co-localization studies with other proteins
- Monitor protein trafficking in real-time
- Constructs for organelles, vesicles and compartments
- Bright and photostable GFP is non-disruptive to cells

*Live-cell tracing for dynamic in vitro and in vivo studies*

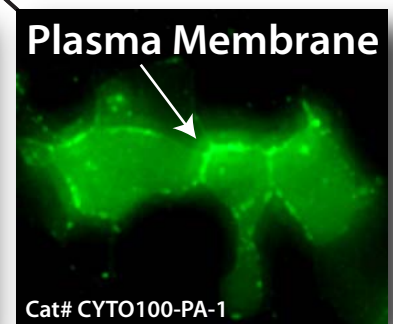
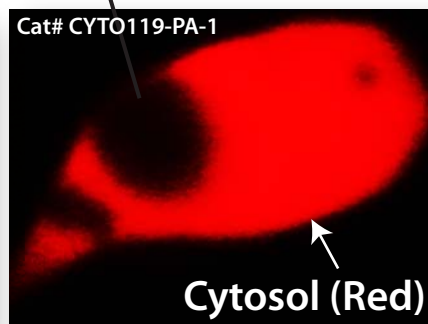
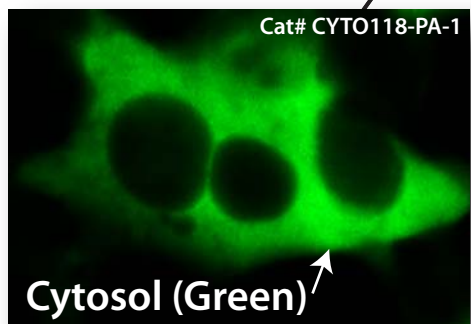
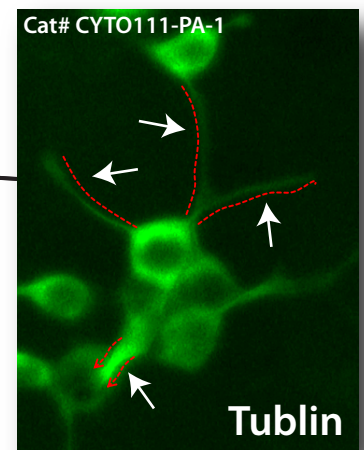
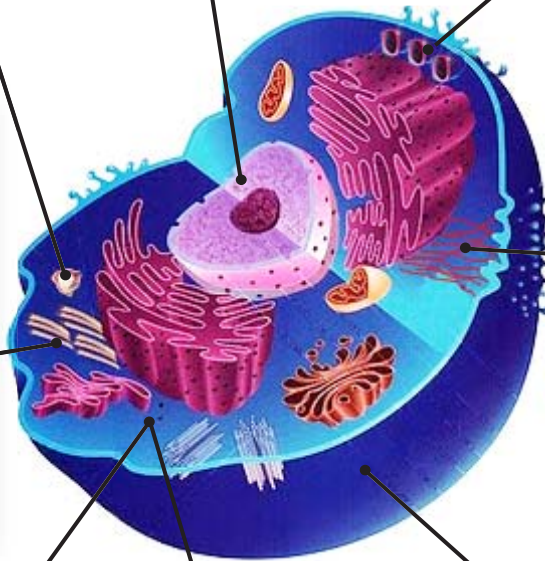
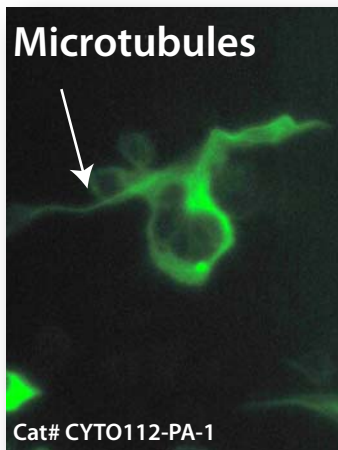
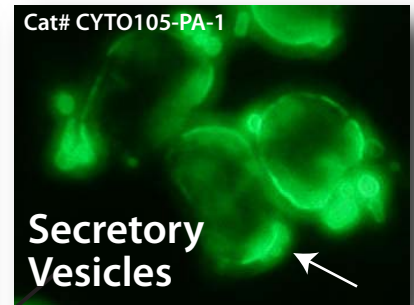
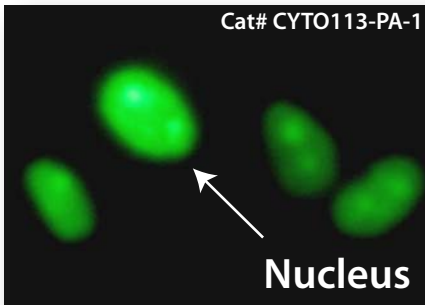
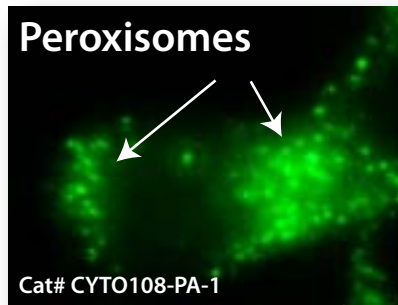
[www.systembio.com](http://www.systembio.com)

Cyto-Tracer	Target Location	Marker Peptide Tag
pCT-Mem-GFP	Plasma Membrane	Neuromodulin
pCT-InnerMem-GFP	Inner Leaflet of Membrane	Farnesylation signal
pCT-Mito-GFP	Mitochondria	Cytochrome C oxidase VIII
pCT-ER-GFP	Endoplasmic Reticulum	ER targeting consensus
pCT-Golgi-GFP	Golgi Apparatus	Galactosyltransferase
pCT-Secretory-GFP	ER-Golgi Vesicles	Secretory consensus peptide
pCT-Lyso-GFP	Lysosome	Cathepsin B
pCT-Endo-GFP	Endosome	RhoB
pCT-Pero-GFP	Peroxisome	Peroxisomal consensus signal
pCT-Autophago-GFP	Autophagosome	LC3
pCT-CD63-GFP	Exosome/Secretory	CD63 Tetraspanin

Cyto-Tracer	Target Location	Marker Peptide Tag
pCT-Actin-GFP	Cytoskeleton	β-actin
pCT-Tublin-GFP	Cytoskeleton	α-tublin
pCT-MAP4-GFP	Microtubule	Microtubule associated protein 4 (MAP4)
pCT-H2B-GFP	Nucleus	H2B
pCT-Apoptosis-Luc	Caspase 3/7 activation	Cyclic inactive luciferase
pCT-GFP-BAX	Cytosol to Mitochondria	BAX
pCT-Catenin-GFP	Cytosol to Nucleus/Cell Membrane	β-Catenin activation
pCT-CMV-PSD95-GFP	Dendrite Membranes	PSD-95
pCT-Cyto-GFP	Cytosolic Compartment	GFP-Untagged
pCT-Cyto-RFP	Cytosolic Compartment	RFP-Untagged
pCT-Cyto-GFP-Luc	GFP and Luciferase Control	GFP and Luciferase (Untagged)

# Cyto-Tracers™

Dozens of Cyto-Tracer constructs to mark your compartment of choice



## We Also Offer Custom Services

System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at [www.systembio.com/service](http://www.systembio.com/service) or call us at 888-266-5066.



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