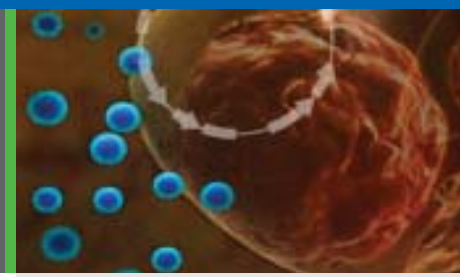
System Biosciences
Accelerating discoveries through innovations

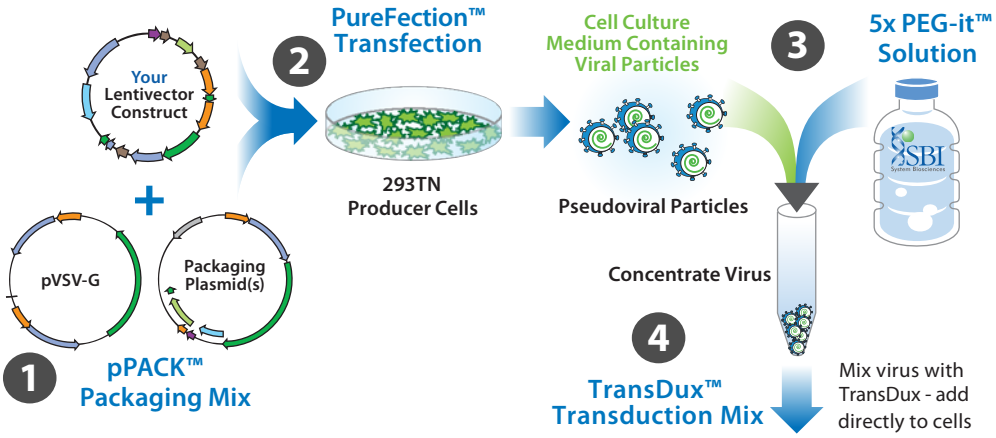
Lentiviral Technology

LentiStarter 2.0 Kit™

An easy sampler for optimal lentiviral packaging, concentration & transduction



System Biosciences' LentiStarter Kit provides all you need to experience successful packaging of your lentiviral constructs into VSV-G pseudoviral particles. Lentivector constructs are co-transfected with the pPACK™ Packaging Mix using Purefection into 293TN Producer Cells for robust virus production. Pseudoviral particles are harvested from the cell culture medium and concentrated using SBI's one-step virus concentration solution, PEG-it™. Target cells are then transduced with high titer viral particles using TransDux for stable integration and expression.



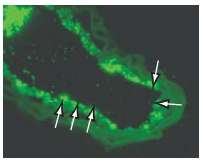
Highlights

- Convenient all-in-one sample kit to make transducible lentiviral particles
- Compatible with 3rd generation lentiviral constructs
- Highly efficient delivery of any 3rd generation lentivector construct
- Stably express lentivector constructs in a wide range of mammalian cells
- High titer enabled (>10^9 IFU/ml) —suitable for in-vivo applications
- Flexibility—each product is also available individually

LentiStarter 2.0 Kit (cat# LV051A-1)

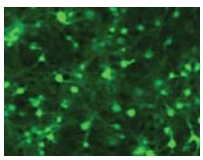
	Component	Amount
1	pPACKH1-Plamid Packaging Mix	100 µl
2	PureFection transfection reagent	120 µl
3	PEG-it virus concentration	20 ml
4	TransDux (200x)	50 µl

Animal Models



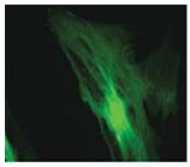
Mouse Carotid Artery (GFP)

Primary Cells

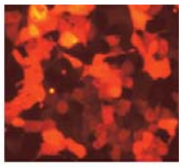


Human Primary Neurons (GFP)

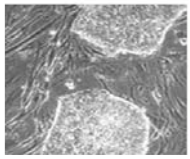
Human Astrocytes (GFP)



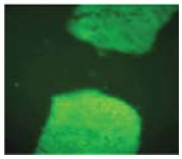
Human embryonic kidney cells (RFP)



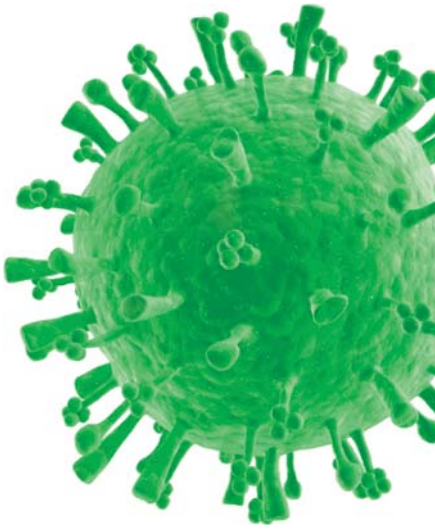
Phase contrast



GFP



Human Embryonic H9 Cells



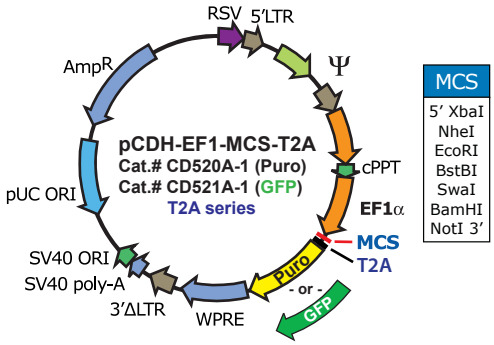
www.systembio.com/lenti

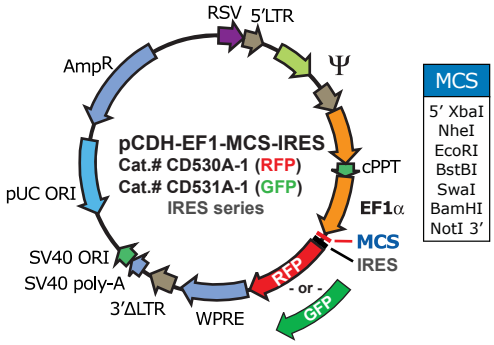
Example Lentivector Expression Formats

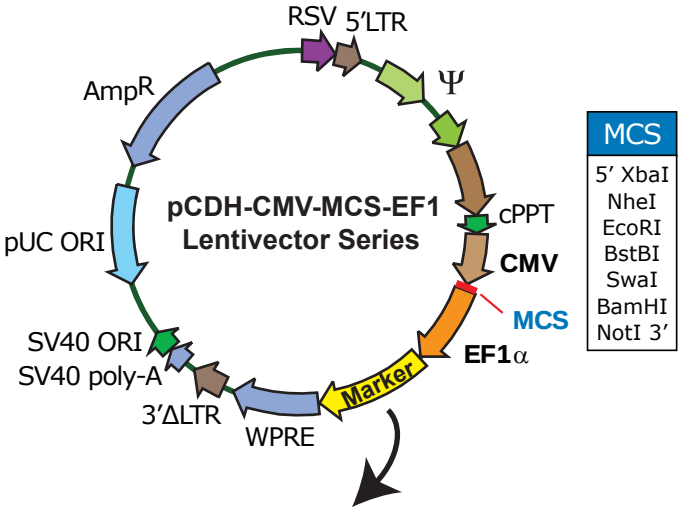
cDNA and microRNA Expression Options

Stable overexpression with lentivectors

- Strong and ubiquitous expression of the gene of interest
- Single or double expression cassette with choice of reporter gene
- Target gene expressed from CMV, EF1, or MSCV promoter
- Choose from FIV- or HIV-based vectors







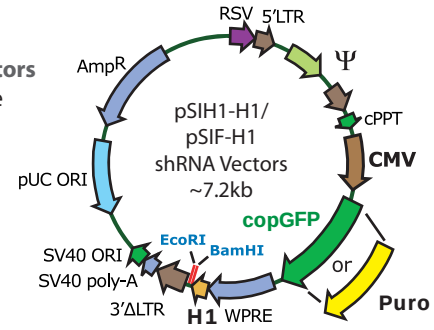
Marker Options

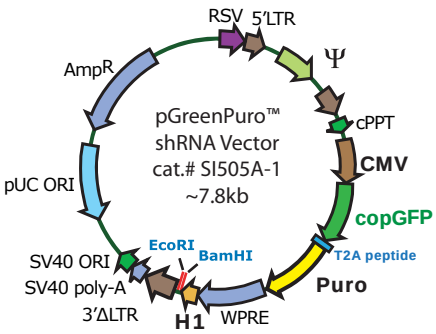
Marker	Catalog #
Puro	CD510B-1
GFP	CD511B-1
RFP	CD512A-1
Neo	CD514B-1
Hygro	CD515B-1
GFP+Puro	CD513B-1

shRNA Expression Options

Permanent RNA Knockdown with shRNA lentivectors

- Stable expression of the shRNA targeting your gene
- Choice of single or double markers
- Dissect signaling pathways
- Discover new drug targets





We Also Offer Custom Lentivirus Packaging 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 or call us at 888-266-5066.

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