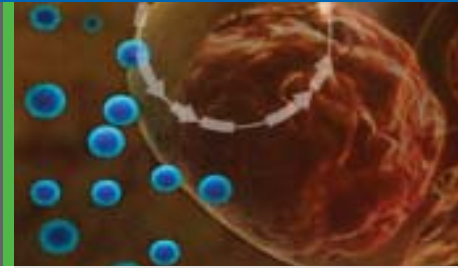


# PEG-it™ Lentivirus Concentration

Concentrate virus 100-fold and cryoprotect in one step

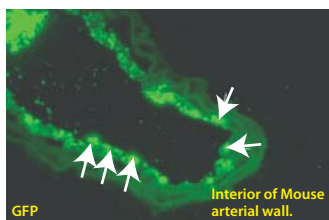


Prepare highly concentrated lentivirus directly from culture media while packaging into pseudoviral particles. PEG-it efficiently precipitates lentivirus and cryoprotects viral particles during long-term storage and even several freeze/thaw cycles. The procedure is simple and rapid and the resulting, concentrated virus has enhanced infectivity. PEG-it is non-toxic to cells and will not interfere with transductions and downstream applications. SBI also developed a superior transduction reagent called TransDux that is less toxic than standard polybrene and increases transduction efficiencies. Request free PEG-it and TransDux samples at [systembio.com](http://systembio.com).

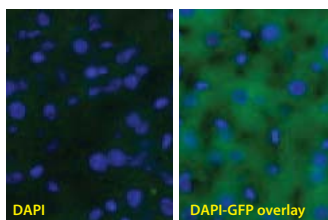
## Easy protocol with consistent results

SBI's lentiviral technologies, including PEG-it, have been featured in numerous high impact publications, establishing the company as an industry leader in the production of high quality virus. Please enjoy the transduction art gallery below, which highlights some of SBI's outstanding appearances in high profile journals.

## Sample published data using SBI's lentivirus

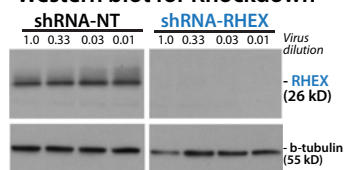


Cordes KR, Sheehy NT, White MP, Berry EC, Morton SU, Muth AN, Lee TH, Miano JM, Ivey KN, Srivastava D. miR-145 and miR-143 regulate smooth muscle cell fate and plasticity. *Nature*.

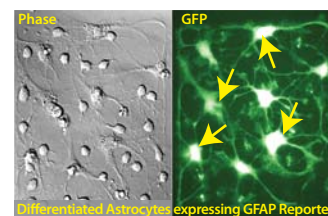


Katey J. Rayner, Yajaira Suárez, Alberto Dávalos, Saj Parathath, Michael L. Fitzgerald, Norimasa Tamehiro, Edward A. Fisher, Kathryn J. Moore, Carlos Fernández-Hernando. miR-33 Contributes to the Regulation of Cholesterol Homeostasis. *Science*. 2010 Jun 18;328(5985):1570-3.

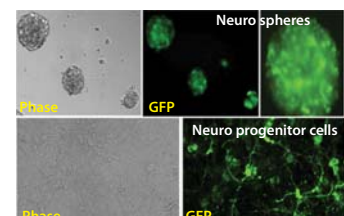
### Western blot for Knockdown



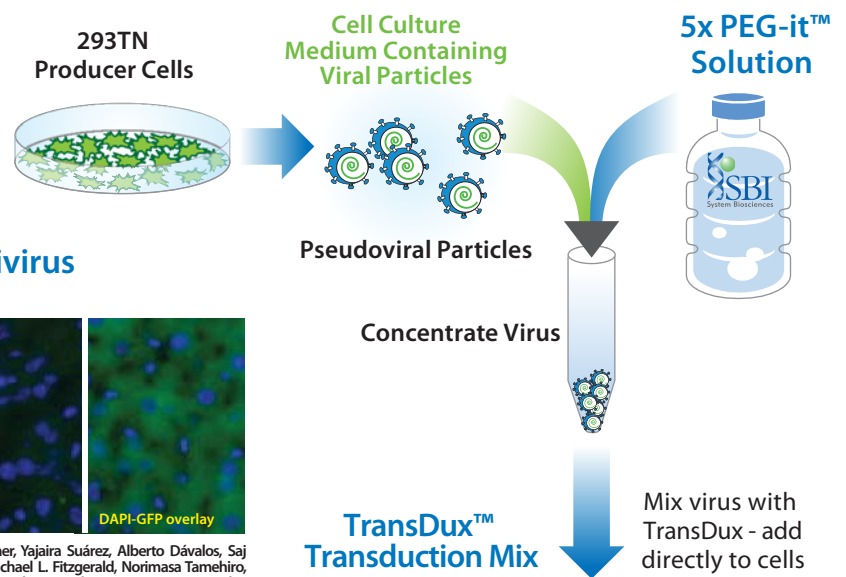
Verma R, Su S, McCrann DJ, Green JM, Leu K, Young PR, Schatz PJ, Silva JC, Stokes MP, Wojchowski DM. RHEX, a novel regulator of human erythroid progenitor cell expansion and erythroblast



Ravin R, Hoepfner DJ, Munno DM, Carmel L, Sullivan J, Levitt DL, Miller JL, Athaide C, Panchision DM, McKay RD. Potency and fate specification in CNS stem cell populations in vitro. *Cell Stem Cell*. 2008 Dec 4;3(6):670-80.



Veeraraghavalu K, Choi SH, Zhang X, Sisodia SS. Presenilin 1 mutants impair the self-renewal and differentiation of adult murine subventricular zone-neuronal progenitors via cell-autonomous mechanisms involving notch signaling. *J Neurosci*. 2010 May 19;30(20):6903-15.



## Highlights

- Easy to use, single reagent
- No ultracentrifugation required
- Cost-effective
- Non-toxic to transduced cells
- Cryoprotects virus from freeze/thaw
- PEG-it has hundreds of citations

# PEG-it™ Lentivirus Concentration

## PEG-it™ Protects Virus from Multiple Freeze/Thaw Cycles

Not only does the PEG-it virus concentrate your lenti preparations, it also acts as a cryopreservative agent. Lentivirus concentrated with PEG-it lasts longer in the freezer and also survives quite well in freeze/thaw cycles. To test this, 50,000 HepG2 or HT1080 cells were seeded in 500 microliters of DMEM media containing 10% FBS in 24 well plate formats. The next day, the media was replaced with fresh media containing 1x TransDux virus transduction reagent (Catalog # LV850A-1). Previously made frozen aliquots of packaged virus with a MSCV-GFP-T2A-RFP expression cassette (Catalog # LV605VA-1) were thawed on ice and 2 ul of virus was added to each well in triplicate. The aliquots were immediately frozen in dry ice and thawed again on regular ice and 2 ul of virus was again added to another three wells. This process was repeated three more times. Seventy two hours post transduction, cells were imaged for green fluorescence and documented. The images below show how well PEG-it protected the virus from multiple freeze/thaw cycles and produced high levels of GFP and RFP virus transgene expression.

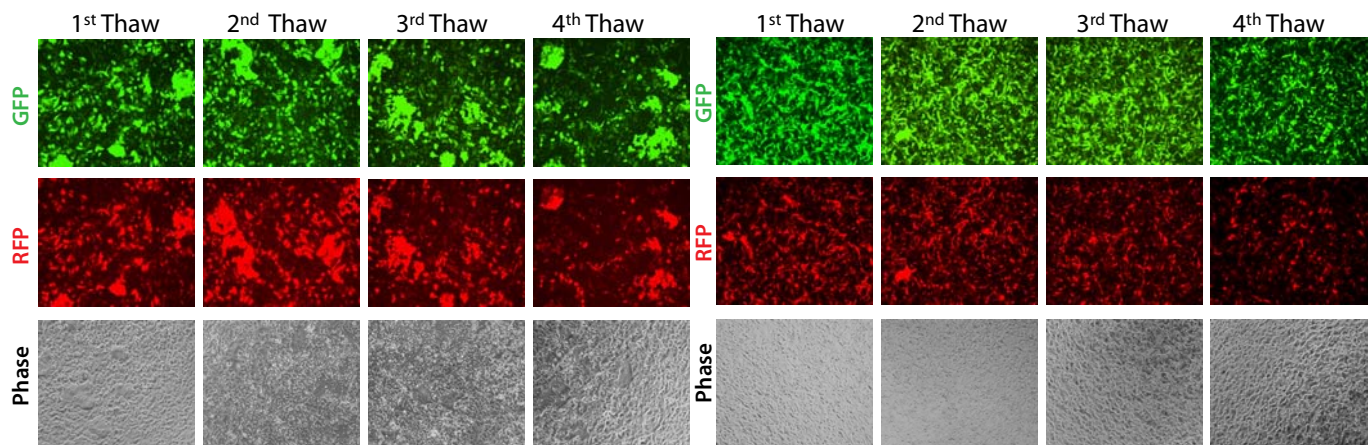
### LV605VA-1 Lentivirus



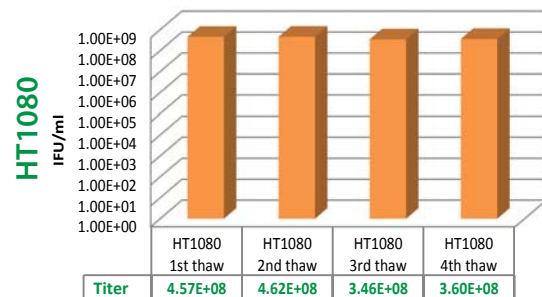
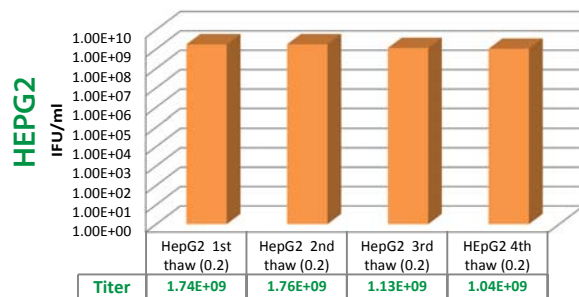
### Cell Images of LV605VA-1 Virus Transduction

HepG2 Cells transduced with LV605VA-1 after several freeze-thaw cycles

HT1080 Cells transduced with LV605VA-1 after several freeze-thaw cycles



### Infection Titring Data for LV605VA-1 Virus Stabilized by PEG-it™



## 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](http://www.systembio.com/service) or call us at 888-266-5066.