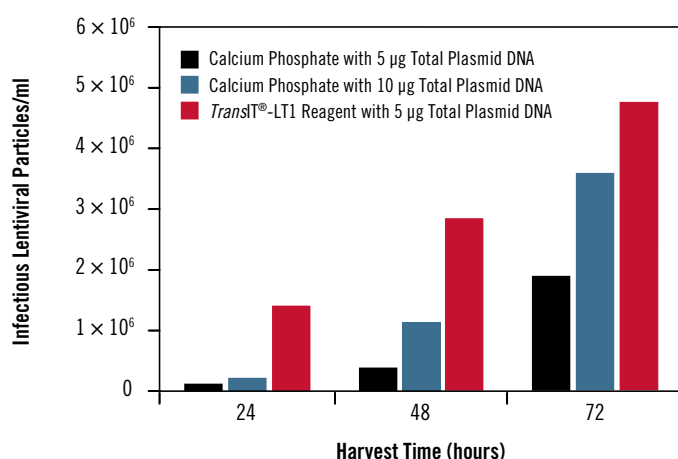


## *TransIT*<sup>®</sup>-LT1: Achieve Higher Recombinant Virus Titers

- ▷ **Optimal Virus Yields** - Up to 150% greater lentivirus yield compared to calcium phosphate co-precipitation
- ▷ **Broad Spectrum Virus Production** - Suitable for production of any virus that can be produced by cDNA/DNA plasmid transfection including lentiviruses, retroviruses, influenza, VSV or Ebola
- ▷ **Multiple Plasmid Co-transfection** - Deliver up to 17 different plasmids in fewer steps with no medium change and less DNA compared to calcium phosphate co-precipitation

### Achieve Superior Lentivirus Yield With Less DNA



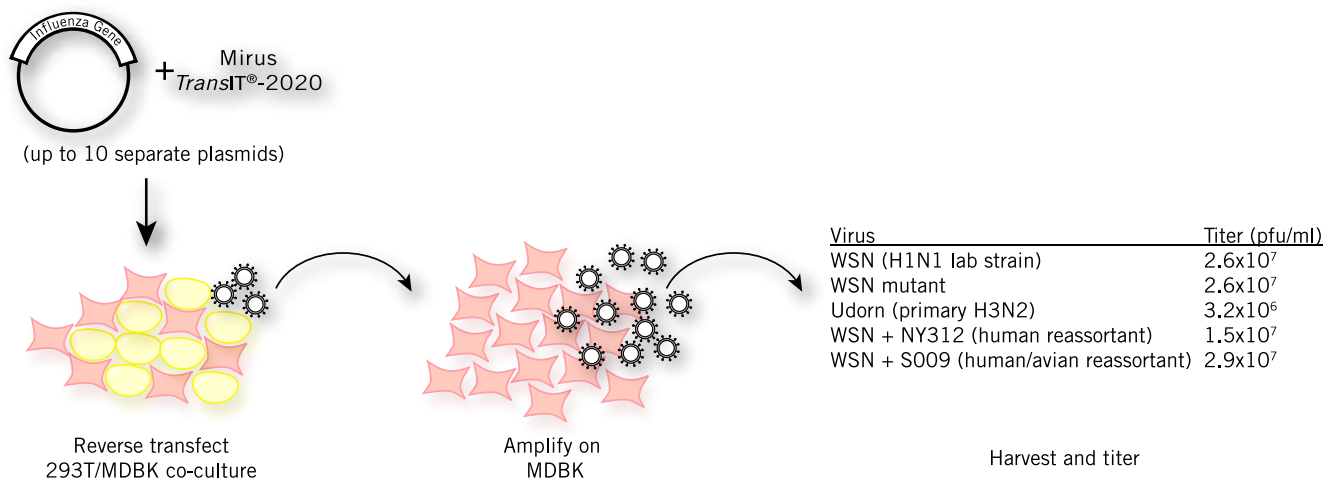
**Figure 1. *TransIT*<sup>®</sup>-LT1 Reagent Produces Lentivirus More Efficiently than Calcium Phosphate Co-precipitation.** Lentivirus was produced by transfecting HEK 293FT cells with three lentiviral vectors using either calcium phosphate co-precipitation or *TransIT*<sup>®</sup>-LT1 Transfection Reagent without a medium change. Culture supernatants were harvested 24, 48, and 72 hours post-transfection and assayed for infectious lentivirus particles.

### Example Recombinant Viruses Produced Using *TransIT*<sup>®</sup> products

Virus	Cell Type	Product	Citation
Lentivirus	293T/c17	<i>TransIT</i> <sup>®</sup> -LT1	Offer <i>et al.</i> Mol Cancer Ther 2014; 13(3).
	293T	<i>TransIT</i> <sup>®</sup> -LT1	Huang <i>et al.</i> PLoS Pathog. 2012; 8(6): e1002766.
	293T	<i>TransIT</i> <sup>®</sup> -LT1	Chuang <i>et al.</i> Nucleic Acids Res 2012; 40: 4914-4924.
Retrovirus	293T	<i>TransIT</i> <sup>®</sup> -LT1	Moon <i>et al.</i> Hum Mol Genet 2014; 23(2):449-66.
Reovirus	BHK-T7	<i>TransIT</i> <sup>®</sup> -LT1	Stebbing <i>et al.</i> J Virol 2014; 88: 2572-2583.
Influenza virus	293T/MDBK	<i>TransIT</i> <sup>®</sup> -2020	Tran <i>et al.</i> J Virol 2013; 87: 13321-13329.
Chandipura virus	BSRT-7/5	<i>TransIT</i> <sup>®</sup> -LT1	Stock <i>et al.</i> J Gen Virol 2014; 95: 38-43.
HPV Pseudovirus	293TT	<i>TransIT</i> <sup>®</sup> -2020	Jagu <i>et al.</i> J Virol 2013; 87: 6127-6136.
LACV and JCV/LACV	BHK	<i>TransIT</i> <sup>®</sup> -LT1	Bennett <i>et al.</i> J Virol 2012; 86: 420-426.
HIV	293T/C-33A	<i>TransIT</i> <sup>®</sup> -LT1	L'hernault <i>et al.</i> J Virol 2012; 86: 5867-5876.

**Table 1. Recent Citations for DNA Mediated Virus Production Using *TransIT*<sup>®</sup>-LT1 and *TransIT*<sup>®</sup>-2020 Transfection Reagents.** Further citations can be found using the citations database at [www.mirusbio.com/citations](http://www.mirusbio.com/citations).

# TransIT<sup>®</sup>-2020: Efficient Recombinant Virus Production



**Figure 2. Rescue of Influenza Virus by Reverse Transfection With TransIT<sup>®</sup>-2020 Transfection Reagent.** 293T and MDBK cells are reverse transfected with up to 10 separate influenza virus rescue plasmids per experiment. Reagent:Total DNA complexes are prepared with TransIT<sup>®</sup>-2020 Transfection Reagent at a 3:1 ratio of reagent to total DNA. Virus containing supernatants are harvested 48-96 hr post-transfection. Titters from transfected cells can be as high as 10<sup>7</sup> pfu/ml. Rescued virus is then amplified on MDBK cells to increase titer and total yield. Viral stocks are subsequently titered by plaque assay on MDCK cells. Titters from representative rescue experiments with different viral strains and reassortants are shown. This experimental strategy is adapted from Neumann, *et al.* 2005 PNAS.

Data courtesy of Andrew Mehle, University of Wisconsin-Madison.

## TransIT<sup>®</sup>-LT1 Transfection Reagent

PRODUCT NO.	QUANTITY
MIR 2300	1ml
MIR 2304	0.4ml
MIR 2305	5 X 1ml
MIR 2306	10 X 1ml

## TransIT<sup>®</sup>-2020 Transfection Reagent

PRODUCT NO.	QUANTITY
MIR 5400	1ml
MIR 5404	0.4ml
MIR 5405	5 X 1ml
MIR 5406	10 X 1ml

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FLIVIRUS-10/2014

## Prove it to Yourself with a **FREE Sample**



Don't see your cell type? Use the Reagent Agent<sup>®</sup> transfection database to determine the best solution for your virus production needs: [mirusbio.com/ra](http://mirusbio.com/ra)

### Two ways to request a sample:

1. Visit us at [www.mirusbio.com](http://www.mirusbio.com)
2. Call us at 888.530.0801