

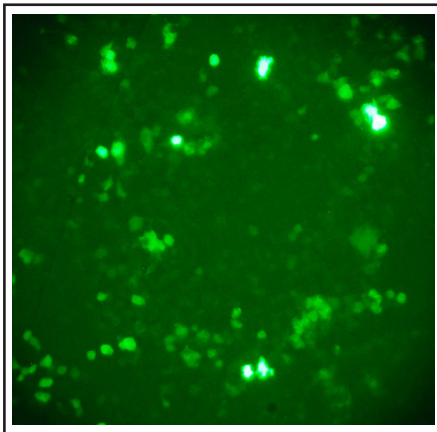
Certificate of Analysis

Product Description

Product Name	Lenti-III-mir-GFP Control Virus
Cat Number	m002
Lot Number	VH7953
Quantity	2 x 50 µl
Fluorescence Tag	GFP
Viral Titer	2.24 x 10 ⁷ IU/ml
QC Evaluation Cell Line	293T Cells (Cat no. LV010)

Specifications

	Test Method	Minimum	Results
Viral Titer	qRT-PCR	1.0 x 10 ⁷ IU/ml	2.24 x 10 ⁷ IU/ml
Transduction Efficiency	Fluorescence Evaluation	>60%	80%
Sterility Test	Direct Culture	***	Not detected



Transduction Duration: 72 Hours

MOI: 10

Multiplicity of Infection (MOI) Calculation Method:

$$\text{MOI} = \frac{\text{Product Titer} \times \text{Infection Sample Volume}}{\text{Final Volume}} \times \frac{1}{\text{Total Cell Number}}$$

This product is for research use only and is not intended for therapeutic or diagnostic applications.
Please contact a technical service representative for more information.

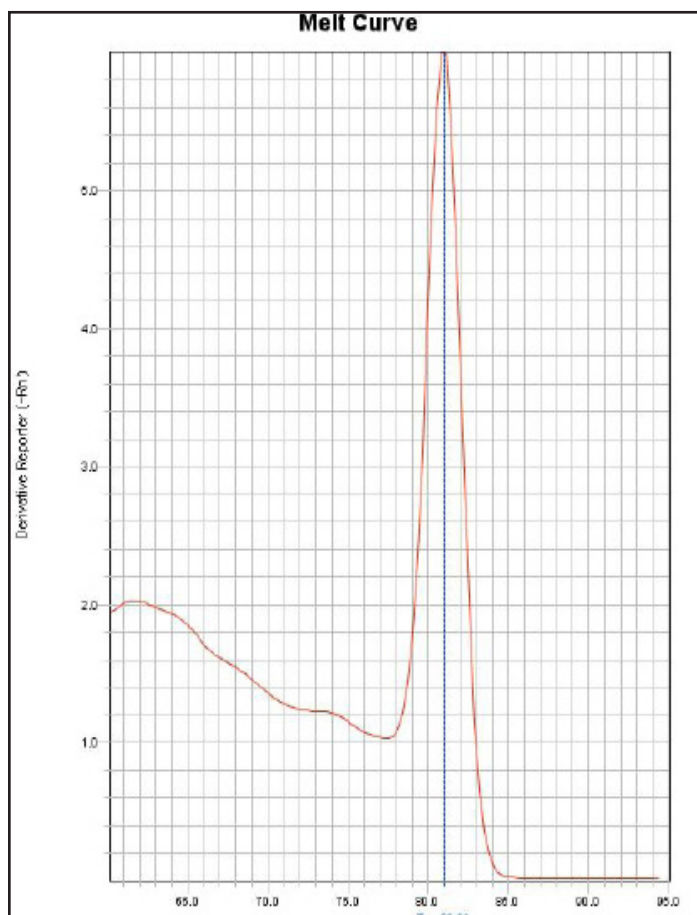
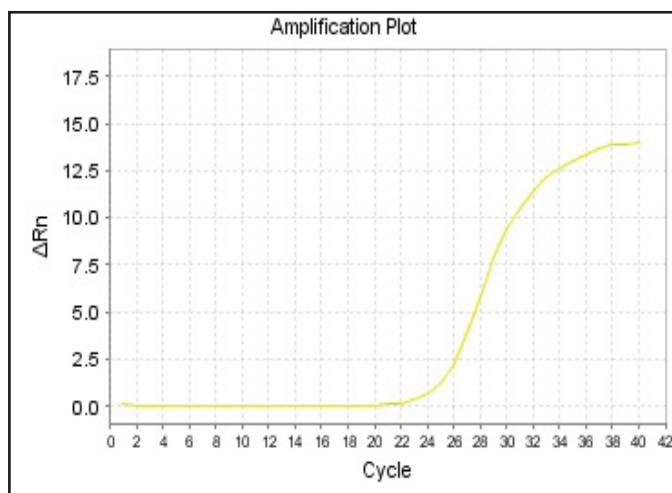
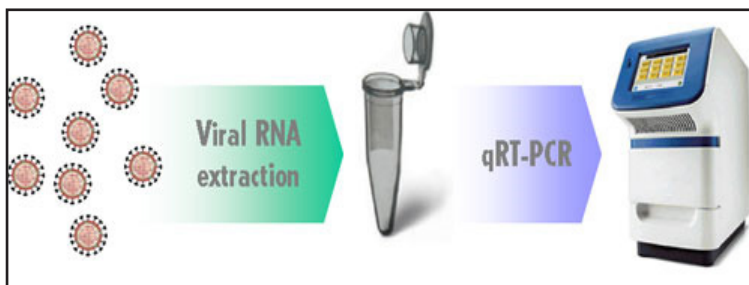
Lentivirus qRT-PCR titer Report

Cat. No. m002

Lenti-III-mir-GFP Control Virus

(08/25/2014)

Viral RNA was extracted from lentivirus and cDNA was generated from RT. The viral RNA samples (diluted 10 folds) and the lentiviral RNA STD1 and STD2 are subjected to qRT-PCR to determine threshold cycle (Ct) values. Real-time PCR was processed using lentivirus specific primers. With Ct values, the titers of lentivirus were determined by our lenti-titer calculator.



Block Type	48well
Chemistry	SYBR_GREEN
Experiment Run End Time	08/25/2014 14:35
Instrument Type	ABI Step one
Passive Reference	ROX

Sample Name	Lenti-III-mir-GFP Control Virus	STD1	STD2
C _T Value	21.44	16.965	19.965

$$\text{Titer of Lenti-III-mir-GFP Control Virus} = [5 \times 10^7 / 2^{3(Ct_x - Ct_1) / (Ct_2 - Ct_1)}] \times 10 = 2.24 \times 10^7 \text{ IU/ml}$$

C_T_x: C_T value of sample, C_T₁: C_T value of STD1, C_T₂: C_T value of STD2

(Note: the titer equation was multiplied by 10 to account for the dilution of the lentivirus sample)