

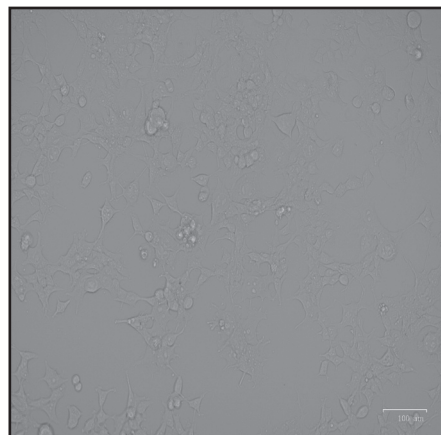
Certificate of Analysis

Product Description

Product Name	Cas9 Nuclease Lentivirus
Cat Number	K003
Lot Number	KH8154
Quantity	1 x 300 µl
Viral Titer	4.68 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	4.68 x 10 ⁸ IU/ml
Sterility Test	Direct Culture	***	Not detected



Brightfield Image

Transduction Duration: 72 Hours

MOI: 32

Multiplicity of Infection (MOI) Calculation Method:

$$\text{MOI} = \frac{\text{Product Titer (IU/ml)} \times \text{Virus Volume (ml)}}{\text{Total Cell Number}}$$

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.

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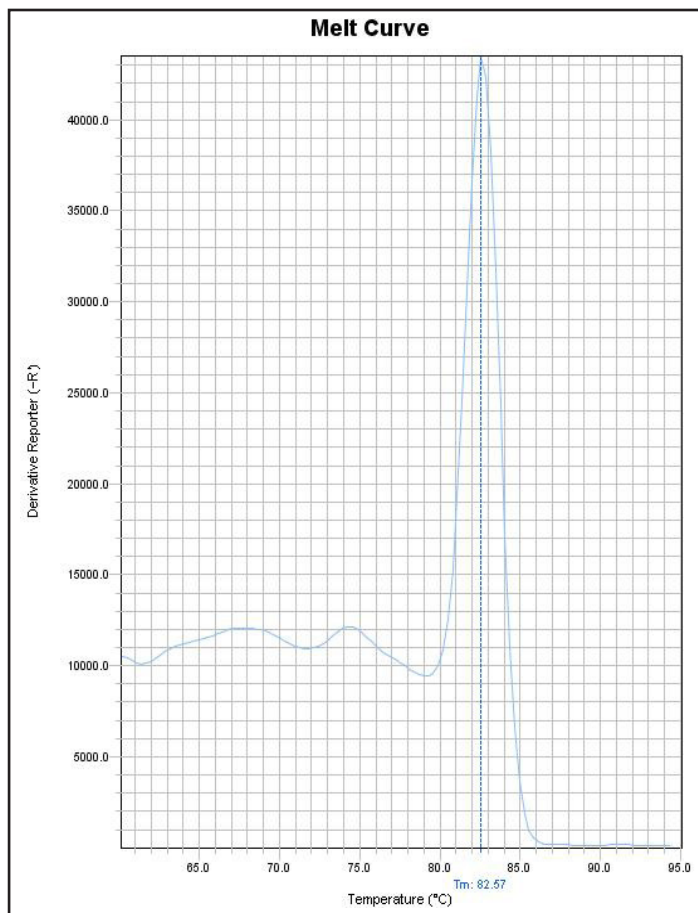
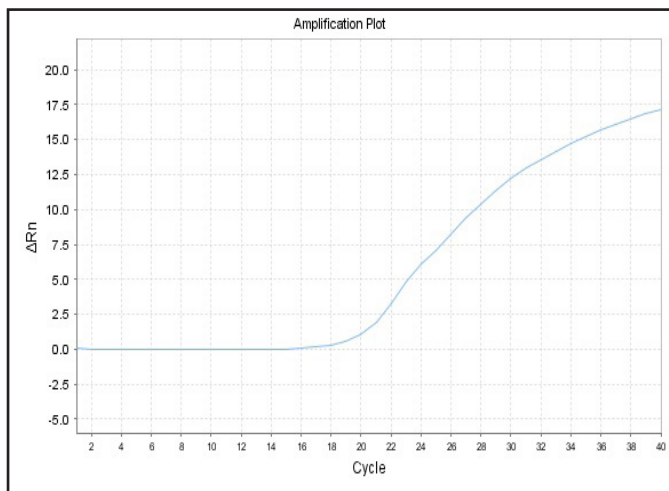
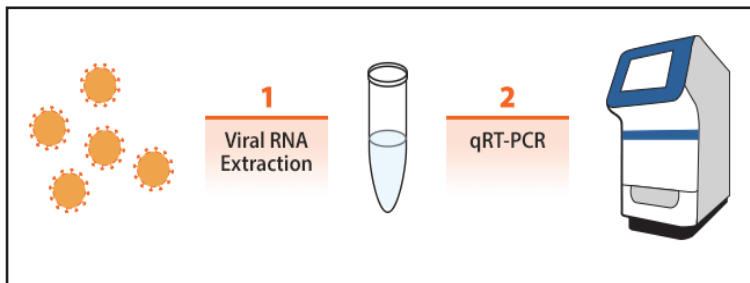
Lentivirus qRT-PCR Titer Report

Cat No. K003

Cas9 Nuclease Lentivirus

(09/21/2016)

Viral RNA was extracted from lentivirus and cDNA was generated from RT. The viral RNA samples (diluted 100 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	09/21/2016 13:20
Instrument Type	ABI Step one
Passive Reference	ROX

Sample Name	Cas9 Nuclease Lentivirus	STD1	STD2
C _T Value	19.99	16.87	19.61

Titer of Cas9 Nuclease Lentivirus =

$$\left[5 \times 10^7 / 2^{3(C_{Tx} - C_{t1}) / (C_{t2} - C_{t1})} \right] \times 100 = 4.68 \times 10^8 \text{ IU/ml}$$

C_{Tx}: 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 100 to account for the dilution of the lentivirus sample)