

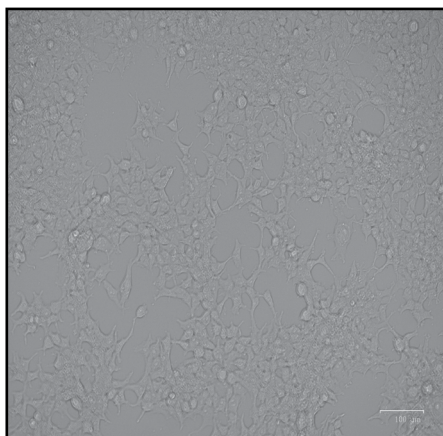
## Certificate of Analysis

### Product Description

Product Name	Cas9 Nuclease Lentivirus
Cat Number	K003
Lot Number	KL8150
Quantity	1 x 300 µl
Viral Titer	1.49 x 10 <sup>7</sup> IU/ml
QC Evaluation Cell Line	293T Cells (Cat no. LV010)

### Specifications

	Test Method	Minimum	Results
Viral Titer	qRT-PCR	1.0 x 10 <sup>7</sup> IU/ml	1.49 x 10 <sup>7</sup> IU/ml
Sterility Test	Direct Culture	***	Not detected



Brightfield Image

Transduction Duration: 72 Hours

MOI: 1.0

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.

1-3671 Viking Way,  
Richmond, BC, Canada V6V2J5  
T e l : 6 0 4 - 2 4 7 - 2 4 1 6  
F a x : 6 0 4 - 2 4 7 - 2 4 1 4  
w w w . a b m G o o d . c o m

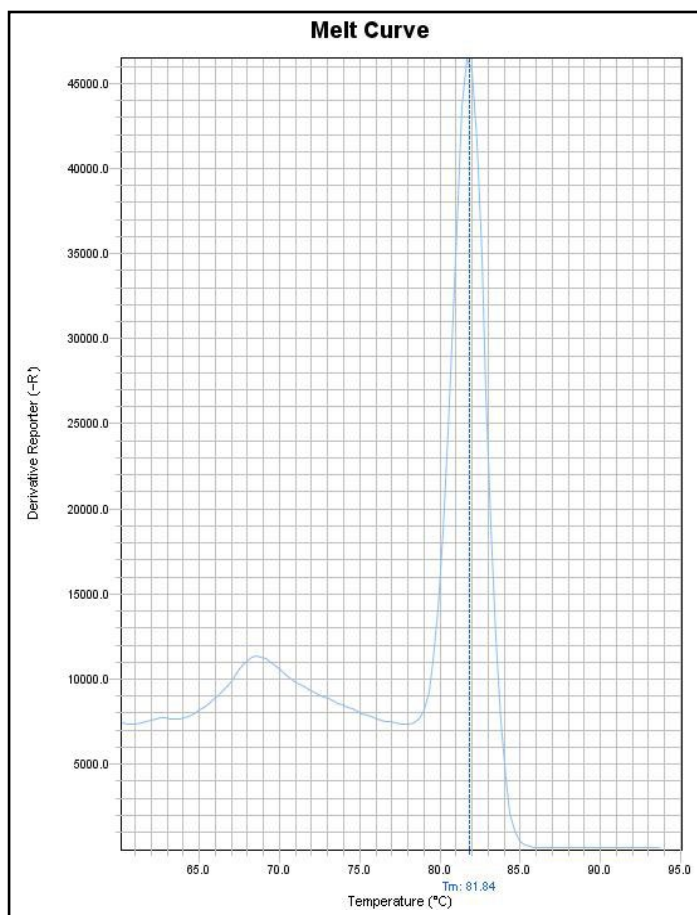
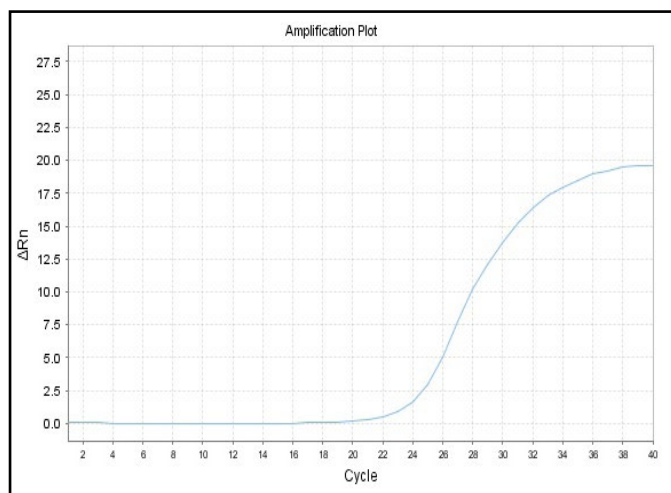
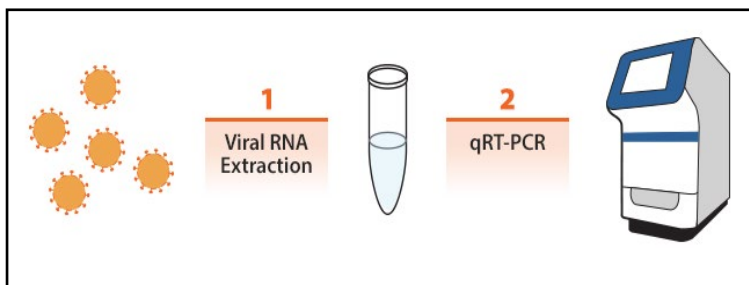
# Lentivirus qRT-PCR Titer Report

Cat No. K003

Cas9 Nuclease Lentivirus

( 05/17/2016 )

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.



<b>Block Type</b>	48well
<b>Chemistry</b>	SYBR_GREEN
<b>Experiment Run End Time</b>	05/17/2016 13:20
<b>Instrument Type</b>	ABI Step one
<b>Passive Reference</b>	ROX

Sample Name	Cas9 Nuclease Lentivirus	STD1	STD2
C <sub>T</sub> Value	24.54	15.23	18.56

**Titer of Cas9 Nuclease Lentivirus =**

$$[5 \times 10^7 / 2^{3(C_{Tx} - C_{t1}) / (C_{t2} - C_{t1})}] \times 100 = 1.49 \times 10^7 \text{ IU/ml}$$

C<sub>tx</sub>: Ct value of sample, C<sub>t1</sub>: Ct value of STD1, C<sub>t2</sub>: Ct value of STD2.

(Note: the titer equation was multiplied by 100 to account for the dilution of the lentivirus sample)