

Certificate of Analysis for NR-51475

Vector pCAGGS Containing the Zaire Ebolavirus, SLE/2014/Makona-G3848 VP35 Gene with N-Terminal FLAG Tag

Catalog No. NR-51475

Product Description:

NR-51475 is an expression vector designed to express full length, N-terminal FLAG tagged VP35 matrix protein from Zaire ebolavirus (EBOV), SLE/2014/Makona-G3848 (GenPept: <u>AIG96560.1</u>). SLE/2014/Makona-G3848 VP35 coding gene insert was derived by site-directed mutagenesis of Zaire EBOV, Mayinga (GenBank: <u>AF086833.2</u>) VP35 gene, resulting in an amino acid sequence that is 100% identical to that of SLE/2014/Makona-G3848 VP35. The deposited plasmid was transformed into Invitrogen™ One Shot™ TOP10 *Escherichia coli* (Invitrogen™ C404003), grown in Luria-Bertani broth with ampicillin (50 µg/mL) for 1 day at 37°C in an aerobic atmosphere, extracted using a QIAGEN® Plasmid *Plus* Maxi Kit (QIAGEN® 12963) and vialed in TE buffer (10 mM Tris-HCI, 1 mM EDTA).

Lot: 70028427 Manufacturing Date: 07JUN2019

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	Report results	5855 base pairs ¹
Genotypic Analysis Sequencing of VP35 gene (1023 base pairs)	Report results	99.2% sequence identity to EBOV SLE/2014/Makona-G3848 (GenBank: KM233110.1) ²
N-terminal FLAG tag	FLAG tag sequence confirmed	FLAG tag sequence confirmed
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene bla)	bla sequence present	bla sequence present
Concentration by PicoGreen® Measurement	≥ 2 µg/mL	1.7 μg in 100 μL (17 μg/mL)
Amount per Vial	Report results	1.7 μg/vial
OD ₂₆₀ /OD ₂₈₀ Ratio (pre-vial)	1.7 to 2.1	1.9
Effective Bacterial Transformation Invitrogen™ One Shot™ TOP10 <i>E. coli</i>	≥ 50 colonies/ng	162 colonies/ng

The sequence was assembled pre-vial using *de novo* analysis. The complete plasmid sequence is provided on the BEI Resources webpage.

/Sonia Bjorum Brower/ Sonia Bjorum Brower

15 APR 2024

Technical Manager or designee, ATCC Federal Solutions

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²100% identity to EBOV SLE/2014/Makona-G3848 VP35 amino acid sequence (GenPept: AIG96560.1)