

Certificate of Analysis for HRP-11747

Human Immunodeficiency Virus Type 1 (HIV-1) Infectious Molecular Clone, pTRJO.c/2851

Catalog No. HRP-11747

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Product Description:

HRP-11747 is a full-length transmitted/founder (T/F) human immunodeficiency virus type 1 (HIV-1) subtype B infectious molecular clone (IMC). The plasmid encodes full-length, replication-competent virus in a pBR322 vector backbone. The pTRJO.c/2851 insert (GenBank: JN944947.1) is 9,767 base pairs, and the resulting size of the plasmid is approximately 13,830 base pairs. The beta-lactamase gene, *bla*, provides transformant selection through ampicillin resistance in *Escherichia coli* (*E. coli*). The deposited plasmid DNA was transformed into MAX Efficiency™ Stbl2™ *E. coli* (Invitrogen™ 10268019), grown in Luria-Bertani broth with ampicillin (100 µg/mL) for 20 hours at 30°C in an aerobic atmosphere, extracted using a Plasmid *Plus* Maxi Kit (QIAGEN® 12963) and vialed in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8).

Lot: 70066960 Manufacturing Date: 22MAR2024

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 13,830 base pairs	13,829 base pairs ¹
Genotypic Analysis Sequencing of pTRJO.c/2851 insert (9767 base pairs)	≥ 99% sequence identity to depositor's sequence (GenBank: JN944947.1)	100% sequence identity to depositor's sequence (GenBank: JN944947.1)
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene bla)	bla sequence present	bla sequence present
Concentration by Qubit Fluorometer®	Report results	0.7 μg in 100 μL/vial (7 μg/mL)
Amount per Vial	Report results	0.7 μg/vial
OD ₂₆₀ /OD ₂₈₀ Ratio (pre-vial)	1.7 to 2.1	2.0
Effective Bacterial Transformation Invitrogen™ MAX Efficiency™ Stbl2™ <i>E. coli</i>	≥ 50 colonies/ng	263 colonies/ng

¹De novo assembly of the NGS sequence was carried out pre-vial. The complete plasmid sequence and map are provided on the BEI Resources webpage.

/Kenneth R. Crawford/

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<u>10 JUL 2024</u>

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