b|e|i RESOURCES

SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for HRP-11742

Human Immunodeficiency Virus Type 1 (HIV-1) Infectious Molecular Clone, pCH077.t/2627

Catalog No. HRP-11742

This reagent is the tangible property of the U.S. Government.

Product Description:

HRP-11742 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 pCR-XL-TOPO vector backbone. The pCH077.t/2627 insert (GenBank: JN944941) is 9,760 base pairs and the resulting size of the plasmid is approximately 13,160 base pairs. The kanamycin resistance gene, *aph*, provides transformant selection through kanamycin 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 kanamycin (50 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 8.0).

Lot: 70067135 **Manufacturing Date: 12JUN2024**

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 13,160 base pairs	13,163 base pairs[1]
Genotypic Analysis Sequencing of pCH077.t/2627 insert (9760 base pairs)	≥ 99% sequence identity to depositor's sequence (GenBank: JN944941.1)	100% sequence identity to depositor's sequence (GenBank: JN944941.1)
Antibiotic Resistance Kanamycin (encoded by *aph* gene)	*aph* sequence present	*aph* sequence present
Concentration by Qubit Fluorometer®	Report results	1.56 µg in 100 µL/vial (15.6 µg/mL)
Amount per Vial	Report results	1.56 µg/vial
OD_{260}/OD_{280} Ratio (pre-vial)	1.7 to 2.1	1.9
Effective Bacterial Transformation Invitrogen™ MAX Efficiency™ Stbl2™ *E. coli*	≥ 50 colonies/ng	474 colonies/ng

[1]The sequence was assembled pre-vial using the depositor's predicted sequence as the reference sequence. The complete plasmid sequence and map are provided on the BEI Resources webpage.

/Kenneth R. Crawford/
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HIV REAGENT PROGRAM Support Provided by NIAID

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