

**Human Immunodeficiency Virus Type 1 (HIV-1) Infectious Molecular Clone, pSUMA.c/2821**

**Catalog No. HRP-11748**

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**Product Description:**

HRP-11748 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 pSUMA.c/2821 insert (GenBank: [JN944945.1](#)) is 9,726 base pairs, and the resulting size of the plasmid is approximately 13,810 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 vialled in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8).

**Lot: 70066962**

**Manufacturing Date: 22MAR2024**

TEST	SPECIFICATIONS	RESULTS
<b>Next-Generation DNA Sequencing</b>	~ 13,810 base pairs	13,815 base pairs <sup>1</sup>
<b>Genotypic Analysis</b> Sequencing of pSUMA.c/2821 insert (9,726 base pairs)	≥ 99% sequence identity to depositor's sequence (GenBank: JN944945.1)	100% sequence identity to depositor's sequence (GenBank: JN944945.1)
<b>Antibiotic Resistance</b> Ampicillin (encoded by beta-lactamase gene <i>bla</i> )	<i>bla</i> sequence present	<i>bla</i> sequence present
<b>Concentration by Qubit Fluorometer®</b>	Report results	2.3 µg in 100 µL/vial (23 µg/mL)
<b>Amount per Vial</b>	Report results	2.3 µg/vial
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio (pre-vial)</b>	1.7 to 2.1	1.9
<b>Effective Bacterial Transformation</b> Invitrogen™ MAX Efficiency™ Stbl2™ <i>E. coli</i>	≥ 50 colonies/ng	480 colonies/ng

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

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12 JUL 2024

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