

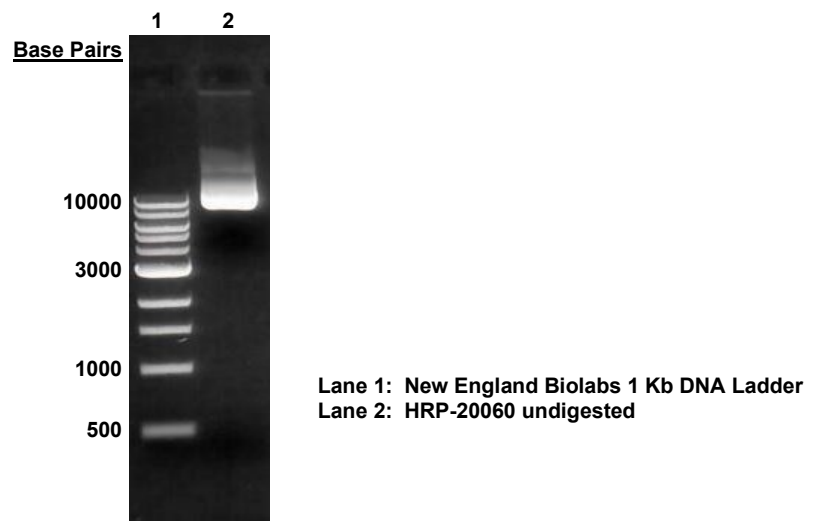
Simian-Human Immunodeficiency Virus Infectious Molecular Clone SHIV.CH848.375H.dCT
Catalog No. HRP-20060
Product Description:

HRP-20060 is a full-length molecular clone of infectious and replication-competent simian-human immunodeficiency provirus. This clone contains an amino acid residue at Env position 375 that supports virus entry and replication in primary rhesus CD4 T cells. SHIV.CH848.375H.dCT is an isogenic mutant of SHIV.CH848.375S.dCT generated by changing wildtype CH848 Env375 residue (GenBank: [KU958488](#)) from Ser to His. SHIV.CH848.375H.dCT showed increased infectivity and replication kinetics *in vitro* in Indian rhesus macaque CD4⁺ T cells and *in vivo* in Indian rhesus macaques. The plasmid encodes full-length, replication-competent SHIV in a [pCR-XL-TOPO](#) backbone. The kanamycin resistance gene, *aph*, provides transformant selection through kanamycin resistance in *Escherichia coli* (*E. coli*). The resulting size of the plasmid is approximately 13,940 base pairs. The purified plasmid DNA was provided viald in TE buffer (10 mM Tris-HCl, 1 mM EDTA).

Lot: 70046703
Receipt Date: 15SEP2021

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	Report results	~ 13,940 base pairs ¹
Genotypic Analysis Sequencing of CH848.375H insert (~ 10,540 base pairs)	≥ 99% sequence identity to depositor's sequence	100% sequence identity to depositor's sequence
Antibiotic Resistance Kanamycin (encoded by kanamycin gene <i>aph</i>)	<i>aph</i> sequence present	<i>aph</i> sequence present
Agarose Gel Electrophoresis Undigested	~ 10 kb band	~ 10 kb band (Figure 1)
Concentration by NanoDrop® Measurement	Report results	1 µg in 100 µL per vial (0.01 mg per mL)
Amount per Vial	Report results	1 µg per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.93

¹The depositor's complete plasmid sequence and map are provided on the NIH HIV Reagent Program webpage.

Figure 1: Agarose Gel of Undigested HRP-20060




Certificate of Analysis for HRP-20060

/Ken Crawford/
Ken Crawford
Lead Technical Writer, ATCC Federal Solutions

18 JUL 2022

ATCC®, on behalf of the NIH HIV Reagent Program, hereby represents and warrants that the material provided under this certificate has been subjected, by ATCC® and the contributor, to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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