

Simian-Human Immunodeficiency Virus Infectious Molecular Clone SHIV.YU2.375S

Catalog No. HRP-20058

Product Description:

HRP-20058 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.YU2.375S ([KU958489](#)) was constructed by a complete substitution of the *tat-rev-vpu-env(gp160)* segment of the HIV-1 B.YU2 genome for the corresponding region in SIVmac766. The Env375S allele is identical to that in the primary HIV-1.YU2 clone (GenBank: [M93258](#)). The plasmid encodes full-length, replication-competent SHIV in a [pBR322](#) backbone. The beta-lactamase gene, *bla*, provides transformant selection through ampicillin resistance in *Escherichia coli* (*E. coli*). The resulting size of the plasmid is approximately 15,010 base pairs. The purified plasmid DNA was provided vialled in TE buffer (10 mM Tris-HCl, 1 mM EDTA).

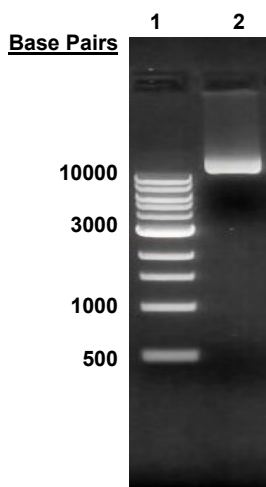
Lot: 70046701

Receipt Date: 29SEP2021

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	Report results	~ 15,010 base pairs ¹
Genotypic Analysis Sequencing of YU2.375S insert (10,615 base pairs)	≥ 99% sequence identity to depositor's sequence	100% sequence identity to depositor's sequence
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene <i>bla</i>)	<i>bla</i> sequence present	<i>bla</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
OD ₂₆₀ /OD ₂₈₀ Ratio	1.7 to 2.1	1.95

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

Figure 1: Agarose Gel of Undigested HRP-20058



Lane 1: New England Biolabs 1 Kb DNA Ladder
Lane 2: HRP-20058 undigested



Certificate of Analysis for HRP-20058

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

21 APR 2022

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