



Centre for AIDS Reagents

Data Sheet

Reagent: HIV-1 YU2 Infectious Molecular Clone

Catalog Number: 100 840

Lot Number: 130394

Provided: 5 μg of purified DNA stabilized in DNAstable *PLUS* and dried

Release Category: Commercial Restriction

Recommended Storage:

Keep the reagent at room temperature in a dry storage cabinet or in a moisture

barrier bag.

GenBank: <u>M93258</u>

Description: SalI-EcoRI (5') and EcoRI-SphI (3') fragments were ligated and cloned into

the SphI-SalI site of pTZ19R to produce the full length, nonpermuted clone

pYU2.

Special Characteristics:

This construct is 13,994 bp including the insert.

This is the first full length proviral HIV-1 clone derived directly from uncultured material. pYU2 is a replication competent, infectious molecular clone. Virus derived from this clone productively infects primary lymphocytes, primary monocytes and macrophages, and Molt-4 clone 8 cells, but does not replicate in Sup-T1 or CEMx174 cells. Growth of the bacteria at 30°C is less likely to cause deletions than growth at higher temperatures.

Source of Pro Virus: Proviral DNA was cloned directly from human brain tissue without extensive cell culture from a patient who died of AIDS dementia

complex.

<u>Plasmid map and sequence file lot 130394</u>. Please note: this plasmid has undergone recombination outside of both LTRs - the unexpected sequences are

highlighted in orange in the sequence file.

This reagent is currently being provided as purified DNA stabilized in

DNAstable PLUS and dried. Please see the notice for additional information and

the protocol for reconstitution of dried DNA reagents. <u>Dried DNA Notice</u>

Alternate names include: pYU2

Cloning Site: SphI/SalI cloning site

Cloning Vector: pTZ19R (United States Biochemical)

Ampicillin resistant

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Host Strain: JM109

Contributor: Dr. Beatrice Hahn and Dr. George M. Shaw.

References: Li Y, Hui H, Burgess CJ, Price RW, Sharp PM, Hahn BH, Shaw GM. Complete

nucleotide sequence, genome organization, and biological properties of human immunodeficiency virus type 1 in vivo: evidence for limited defectiveness and

complementation. J Virol 66:6587-6600, 1992.

Li Y, Kappes JC, Conway JA. Price RW, Shaw GM, Hahn BH. Molecular characterization of human immunodeficiency virus type 1 cloned directly from uncultured human brain tissue: identification of replication-competent and -

defective viral genomes. J Virol 65:3973-3985, 1991.

NOTE: Acknowledgment for publications should read "The following reagent was

obtained from the Centre For Aids Reagents (National Institute for Biological Standards and Control) via the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: SIVmac239 gp130-His Recombinant Protein from Dr. Klaus Uberla." Also include the reference cited above in any publications.