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DATA SHEET

Reagent:	HIV-1 NL4-3 4434 Infectious Molecular Clone (p52534-2)
Catalog Number:	7406
Lot Number:	100108
Release Category:	A
Provided:	5 µg of dried purified DNA stabilized in DNAstable *Plus*
Cloning Vector:	pNLPFB Ampicillin resistant)
Cloning Site:	MscI/PflmI cloning site The size of the insert is 877 bp.
GenBank:	AY351729
Host Strain:	Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C. This construct may also be grown in other competent cells.
Description:	A full length replication competent, infectious HIV-1 chimeric molecular clone. This plasmids contains the entire HIV-1 NL4-3 genome where the wild-type RT has been replaced with a mutant RT from a patient that contains multiple drug resistance mutations. Part of panel of 12 prototypical infectious multidrug resistant HIV-1 reverse transcriptase (RT) nucleoside/nucleotide RT inhibitor (NRTI) clones. The panel includes clones with each of the published nucleoside analog RT mutations in the combinations that occur most frequently in HIV-infected individuals. The insert was amplified by RT-PCR from viral RT RNA isolated from patient plasma. A reverse primer was then used to create a PflmI restriction site in the insert. The insert was then cut with *MscI* and *PflmI* and ligated into the vector. The vector contains the entire HIV genome of the NL4-3 virus. The wild-type RT has been replaced with a mutant RT from patient and contains multiple drug resistance mutations

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Special Characteristics:

This construct is 14,831 bp including the insert.

The panel includes clones with each of the published nucleoside analog RT mutations in the combinations that occur most frequently in HIV-infected individuals. Nucleic acid sequence data of the RT as well as phenotype susceptibility results for each clone is available from the Stanford HIV Drug Resistance Database.

Table of Catalog Numbers for all members of the panel

The panel can be used for the following purposes:

1) Screening and testing new compounds designed to be effective against the most commonly isolated multidrug resistant variants.
2) Biochemical and biophysical studies that require a representative set of drug-resistant variants.

Plasmid map and sequence file lot 100108

This reagent is currently being provided as dried purified DNA stabilized in DNAstable *Plus*. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. Dried DNA Notice

Recommended Storage:

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

Contributor:

Dr. Robert W. Shafer.

References:

Johnston E., Dupnik K.M., Gonzales M.J., Winters M.A., Rhee S.Y., Imamichi T. and Shafer R.W. Panel of prototypical infectious molecular HIV-1 clones containing multiple nucleoside reverse transcriptase inhibitor resistance mutations. *AIDS* **19** (7):731-3, 2005. Abstract

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 NL4-3 4434 Infectious Molecular Clone (p52534-2) from Dr. Robert W. Shafer (cat# 7406)." Also include the reference cited above in any publications.

Last Updated:

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