

Specimen Collected: 22-Jun-21 14:15**HIV-1 Quant with Reflex to Genotype** | **Received: 22-Jun-21 14:17** | **Report/Verified: 22-Jun-21 14:18**

Procedure	Result	Units	Reference Interval
HIV-1 Qnt by NAAT (copies/mL)	501	cpy/mL	
HIV-1 Qnt by NAAT (log 2.70 ^{f1} copies/mL)		log cpy/mL	
HIV-1 Qnt by NAAT Interp	Detected * ⁱ¹		Not Detected

HIV-1 Drug Resistance by NGS | **Received: 22-Jun-21 14:17** | **Report/Verified: 23-Jun-21 08:38**

Procedure	Result	Units	Reference Interval
HIV-1 Drug Resistance by NGS	See Note ^{f2 i2}		
EER HIV-1 Drug Resistance by NGS	See Note ^{f3}		

Result Footnote

f1: HIV-1 Qnt by NAAT (log copies/mL)

HIV-1 Drug Resistance by Next Generation Sequencing will be added.

f2: HIV-1 Drug Resistance by NGS

Integrase Strand Transfer Inhibitor Drug Class	
Bictegravir,BIC	Susceptible
Dolutegravir,DTG	Susceptible
Elvitegravir,EVG	Susceptible
Raltegravir,RAL	Susceptible

IN drug resistance mutations identified: None

IN accessory resistance mutations identified: None

IN additional mutations identified: E10G, E11D, S17N, S39C, I72V, I84L, F100Y, L101I, T124A, T125V, K136N, G163A, V201I, K211R, L234V, D253E, D256E, S283G

Protease Inhibitor Drug Class

Atazanavir,ATV	Susceptible
Darunavir,DRV	Susceptible
Fosamprenavir,FPV	Susceptible
Indinavir,IDV	Susceptible
Lopinavir,LPV	Susceptible
Nelfinavir,NFV	Susceptible
Saquinavir,SQV	Susceptible
Tipranavir,TPV	Susceptible

PR drug resistance mutations identified: None

PR accessory resistance mutations identified: None

PR additional mutations identified: K14R, I15V, G16E, E35D, M36I, R41K, R57K, Q61N, L63V, E65D, I72T, L89M

Nucleoside Reverse Transcriptase Inhibitor Drug Class

* = Abnormal, # = Corrected, C = Critical, f = Result Footnote, H = High, i = Test Information, L = Low, t = Interpretive Text, @ = Performing lab

Unless otherwise indicated, testing performed at:**ARUP Laboratories**

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Tracy I. George, MD

ARUP Accession: 21-173-900229**Report Request ID:** 15024984**Printed:** 23-Jun-21 08:40

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Result Footnote

f2: HIV-1 Drug Resistance by NGS

Abacavir,ABC	Susceptible
Zidovudine,AZT	Susceptible
Stavudine,D4T	Susceptible
Didanosine,DDI	Susceptible
Emtricitabine,FTC	Susceptible
Lamivudine,LMV	Susceptible
Tenofovir,TDF	Susceptible

NRTI drug resistance mutations identified: None

Non-nucleoside Reverse Transcriptase Inhibitor Drug Class

Doravirine,DOR	Susceptible
Efavirenz,EFV	Susceptible
Etravirine,ETR	Susceptible
Nevirapine,NVP	Susceptible
Rilpivirine,RPV	Susceptible

NNRTI drug resistance mutations identified: None

RT accessory resistance mutations identified: None

RT additional mutations identified: V21I, V35T, T39A, K122E, I135V, I142T, K173A, K173V, Q174K, T200K, Q207E, R211K, V245Q, E248D, T286A, E291D, V292I, I293V, P294T, E297A, I329V, R356K, G359S, K366R, A376T, T377L, T377V

HIVGenotyper software version: 1.0.0.0

Stanford HIV Drug Resistance Database Version: HIVDB_8.9-1

f3: EER HIV-1 Drug Resistance by NGS

Access ARUP Enhanced Report using the link below:

-Direct access: [REDACTED]

Test Information

i1: HIV-1 Qnt by NAAT Interp

INTERPRETIVE INFORMATION: HIV-1 by Quantitative NAAT, Plasma

Normal range for this assay is "Not Detected".

The quantitative range of this assay is 1.47-7.00 log copies/mL (30-10,000,000 copies/mL).

An interpretation of "Not Detected" does not rule out the presence of inhibitors or HIV-1 RNA concentration below the level of detection of the assay. Care should be taken in the interpretation of any single viral load determination.

The clinical significance of changes in HIV-1 RNA concentration has not been fully established; however, a change of 0.5 log copies/mL may be significant.

This assay should not be used for blood donor screening, associated re-entry protocols, or for screening Human Cell, Tissues and Cellular Tissue-Based Products (HCT/P).

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Test Information

i2: HIV-1 Drug Resistance by NGS
INTERPRETIVE INFORMATION: HIV-1 Drug Resistance by NGS

This assay predicts HIV-1 resistance to protease inhibitors, nucleoside reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors and integrase inhibitors. The protease gene, integrase gene and the reverse transcriptase gene of the viral genome are sequenced using Next Generation Sequencing. Drug resistance is assigned using the Stanford hivdb database.

This test should be used in conjunction with clinical presentation and other laboratory markers. A patient's response to therapy depends on multiple factors, including patient adherence, percentage of resistant virus population, dosing, and drug pharmacology issues.

This test detects populations down to 10 percent of the total population which may account for resistance interpretation differences between methods. Some insertions or deletions may be difficult to detect using this software.

This test was developed, and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

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