

Drug resistance interpretation: PRHIVDB 9.5.1 (2023-11-05)

PI Major Mutations:None

PI Accessory Mutations:None

PR Other Mutations:I13V100%
from:12,134 • E35D100%
from:26,385 • M36I100%
from:26,385 • **G40GV**100%
from:12,134 • R41K100%
from:26,387 • R57K100%
from:22,367 • H69K100%
from:25,332 • V82VI100%
from:12,134 • L89M100%
from:12,134

Protease Inhibitors

atazanavir/r (ATV/r)

Susceptible

darunavir/r (DRV/r)

Susceptible

lopinavir/r (LPV/r)

Susceptible

PR comments

Other

- V82I is a highly polymorphic mutation that is not selected by PIs. It is the consensus amino acid in subtype G viruses.

Mutation scoring: PRHIVDB 9.5.1 (2023-11-05)

No drug resistance mutations were found for PI.

Drug resistance interpretation: RTHIVDB 9.5.1 (2023-11-05)

NRTI Mutations:**L74LV**100%
from:1,822 • **M184V**100%
from:12,139

NNRTI Mutations:**K103N**100%
from:1,817 • **G190A**100%
from:12,145

RT Other Mutations:EEK100%
from:12,187 • K11KT100%
from:12,175 • K20R100%
from:12,188 • V21I100%
from:12,178 • V35T100%
from:12,182 • T39R100%
from:12,179 • E40K100%
from:12,176 • K43E100%
from:18,708 • E44EK100%
from:12,174 • **G45GV**100%
from:18,703 • V60I100%
from:7,171 • **D67K**100%
from:16,228 • **RT2RK**100%
from:16,225 • **G93GR**100%
from:16,505 • K101Q100%
from:16,762 • K122E100%
from:15,925 • D123N100%
from:16,503 • K173A100%
from:12,299 • D177E100%
from:12,162 • I178M100%
from:11,811 • V179I100%
from:11,818 • I195IL100%
from:12,177 • T200A100%
from:13,911 • I202V100%
from:12,098 • Q207N100%
from:15,821 • R211K100%
from:15,360 • V245Q100%
from:14,108 • E248D100%
from:12,175 •

Nucleoside Reverse Transcriptase Inhibitors

abacavir (ABC)

High-Level Resistance

zidovudine (AZT)

Susceptible

emtricitabine (FTC)

High-Level Resistance

lamivudine (3TC)

High-Level Resistance

tenofovir (TDF)

Susceptible

Non-nucleoside Reverse Transcriptase Inhibitors

doravirine (DOR)

Susceptible

efavirenz (EFV)

High-Level Resistance

etravirine (ETR)

Potential Low-Level Resistance

nevirapine (NVP)

High-Level Resistance

rilpivirine (RPV)

Low-Level Resistance

RT comments

NRTI

- L74V causes intermediate ABC resistance. L74I causes low-level ABC resistance.
- M184V/I cause high-level in vitro resistance to 3TC and FTC and low/intermediate resistance to ABC (3-fold reduced susceptibility). M184V/I are not contraindications to continued treatment with 3TC or FTC because they increase susceptibility to AZT and TDF and are associated with clinically significant reductions in HIV-1 replication.

NNRTI

- K103N is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.
- G190A is a non-polymorphic mutation that causes high-level resistance to NVP and intermediate resistance to EFV. It does not significantly reduce susceptibility to RPV, ETR, or DOR.

Other

- D67N is a non-polymorphic TAM associated with low-level resistance to AZT. D67G/E/S/T/H are non-polymorphic NRTI-selected mutations that generally occur in viruses with multiple TAMs. D67K is a highly unusual mutation at this position.
- K101Q is a relatively non-polymorphic mutation that is weakly selected in persons receiving NVP and EFV. It is of uncertain phenotypic and clinical significance.
- V179I is a polymorphic mutation that is frequently selected in persons receiving ETR and RPV. However, it has little, if any, direct effect on NNRTI susceptibility.

- This virus is predicted to have low-level reduced susceptibility to **RPV**. The use of the combination of CAB/**RPV** should be considered to be relatively contraindicated.

Mutation scoring: RTHIVDB 9.5.1 (2023-11-05)

Drug resistance mutation scores of NRTI:

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Rule	ABC	AZT	FTC	3TC	TDF
<u>L74LV</u>	30	0	0	0	0
<u>L74LV + M184V</u>	15	0	0	0	0
<u>M184V</u>	15	-10	60	60	-10
Total	60	-10	60	60	-10

Drug resistance mutation scores of NNRTI:

Download CSV

Rule	DOR	EFV	ETR	NVP	RPV
<u>K103N</u>	0	60	0	60	0
<u>G190A</u>	0	45	10	60	15
Total	0	105	10	120	15