

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

PI Major Mutations:None

PI Accessory Mutations:L33F95%
seen:1,203

PR Other Mutations:T12TA 5-10%, A-12% • I13V 95%
seen:1,712 • E35D 100%
seen:1,221 • M36I 100%
seen:1,221 • P39Q 95%
seen:1,262 • R41K 95%
seen:1,364 • K43KR 9-10%, R-10% • K45R 100%
seen:1,311 • R57K 95%
seen:1,018 • L63PS 9-10%, P-10% • C67G 100%
seen:1,149 • G68E 97%
seen:2,041 • H69K 95%
seen:2,041 • K70KR 9-12%, R-10% • L89M 100%
seen:1,301

Protease Inhibitors

atazanavir/r (ATV/r)	Susceptible
darunavir/r (DRV/r)	Susceptible
fosamprenavir/r (FPV/r)	Potential Low-Level Resistance
indinavir/r (IDV/r)	Susceptible
lopinavir/r (LPV/r)	Susceptible
nelfinavir (NFV)	Potential Low-Level Resistance
saquinavir/r (SQV/r)	Susceptible
tipranavir/r (TPV/r)	Potential Low-Level Resistance

PR comments

Accessory

- L33F is a relatively non-polymorphic accessory mutation selected by each of the PIs. In combination with other PI-resistance mutations, it is associated with reduced susceptibility to LPV, ATV, and DRV.

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

Drug resistance mutation scores of PI:

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Rule	ATV/r	DRV/r	FPV/r	IDV/r	LPV/r	NFV	SQV/r	TPV/r
L33F	5	5	10	5	5	10	5	10

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

NRTI Mutations:None

NNRTI Mutations:None

RT Other Mutations:E6D 95%
seen:1,332 • K11T 95%
seen:1,317 • K20R 95%
seen:1,402 • T2TS 95%
seen:1,406 • V35T 95%
seen:1,019 • V60I 100%
seen:1,302 • K122E 100%
seen:1,289 • D123N5 9-12%, N-10% • I135I7 7-10%, I-10% • T139TA 7-10%, A-10% • K173A 95%
seen:1,308 • Q174K 95%
seen:1,303 • D177E 100%
seen:2,262 • I178IL 1-10%, I-10% • T200A 95%
seen:1,142 • Q207A 95%
seen:421 • F214L 100%
seen:175 • A554ST 9-12%, T-10%

Nucleoside Reverse Transcriptase Inhibitors

abacavir (ABC)	Susceptible
zidovudine (AZT)	Susceptible
stavudine (D4T)	Susceptible
didanosine (DDI)	Susceptible
emtricitabine (FTC)	Susceptible
lamivudine (3TC)	Susceptible
tenofovir (TDF)	Susceptible

Non-nucleoside Reverse Transcriptase Inhibitors

doravirine (DOR)	Susceptible
efavirenz (EFV)	Susceptible
etravirine (ETR)	Susceptible
nevirapine (NVP)	Susceptible
rilpivirine (RPV)	Susceptible

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

No drug resistance mutations were found for NRTI.

No drug resistance mutations were found for NNRTI.

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

INSTI Major Mutations:None

INSTI Accessory Mutations:T97A 100%
seen:1,143

IN Other Mutations:K14R 100%
seen:411 • S175N 9-10%, N-10% • V31I 100%
seen:551 • L101I 100%
seen:210 • T112V 100%
seen:201 • T124A 95%
seen:208 • T125A 95%
seen:208 • G134N 100%
seen:411 • K136Q 95%
seen:406 • V201I 100%
seen:511 • K211R 100%
seen:514 • L234I 100%
seen:158 • D256E 95%
seen:474 • R269K 95%
seen:178 • D286DN 9-10%, N-10%

Integrase Strand Transfer Inhibitors

bictegravir (BIC)	Susceptible
cabotegravir (CAB)	Susceptible
dolutegravir (DTG)	Susceptible
elvitegravir (EVG)	Potential Low-Level Resistance
raltegravir (RAL)	Potential Low-Level Resistance

IN comments

Accessory

- T97A is a polymorphic INSTI-selected mutation that, depending on subtype, occurs in 1% to 5% of viruses from untreated persons. Alone, it has minimal effects on INSTI susceptibility but in combination with other major resistance mutations, it synergistically reduces susceptibility to each of the INSTIs.

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

Drug resistance mutation scores of INSTI:

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Rule	BIC	CAB	DTG	EVG	RAL
T97A	0	0	0	10	10