## Drug resistance interpretation: PR

HIVDB 9.5.1 (2023-11-05)

PI Major Mutations: None
PI Accessory Mutations: K20T
PR Other Mutations: T12M • I13S • K14V • I15D • G16S • Q18K • E35D • M36I • R41K • K43R • R57K • Y59* • D60V • H69K • N83X • L89M

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

**PR comments**

**Accessory**

- **K20T** is a non-polymorphic accessory PI-selected mutation associated with reduced susceptibility to ATV and LPV.

## Mutation scoring: PR

HIVDB 9.5.1 (2023-11-05)

*Drug resistance mutation scores of PI:* Download CSV

| Rule | ATV/r | DRV/r | FPV/r | IDV/r | LPV/r | NFV | SQV/r | TPV/r |
|---|---|---|---|---|---|---|---|---|
| K20T | 5 | 0 | 5 | 5 | 0 | 15 | 5 | 0 |

## Drug resistance interpretation: RT

HIVDB 9.5.1 (2023-11-05)

NRTI Mutations: M184V
NNRTI Mutations: K103N
RT Other Mutations: P1Q • V35T • P55S • V60I • K122E • D123N • I135T • K173A • Q174K • D177E • I178V • T200X • Q207K • R211K • F214L • K219X • K238Q • Q242X • V245Q • P247L • D250N • S251T • T253D • V254C • N255H • I257L • K259N • L264S • N265T • W266R • A267V • I274L • K275X • L283S

| Nucleoside Reverse Transcriptase Inhibitors | |
|---|---|
| **abacavir (ABC)** | Low-Level Resistance |
| **zidovudine (AZT)** | Susceptible |
| **stavudine (D4T)** | Susceptible |
| **didanosine (DDI)** | Potential Low-Level Resistance |
| **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)** | Susceptible |
| **nevirapine (NVP)** | High-Level Resistance |
| **rilpivirine (RPV)** | Susceptible |

**RT comments**

**NRTI**

- **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.

**Other**

- K238T/N are uncommon non-polymorphic mutations selected in persons receiving NVP and EFV usually in combination with K103N. Alone, K238T/N appear to have minimal effects on NNRTI susceptibility. **K238Q** is a highly unusual mutation at this position.

Mutation scoring: RT

HIVDB 9.5.1 (2023-11-05)

*Drug resistance mutation scores of NRTI:* Download CSV

| Rule | ABC | AZT | D4T | DDI | FTC | 3TC | TDF |
|---|---|---|---|---|---|---|---|
| M184V | 15 | -10 | -10 | 10 | 60 | 60 | -10 |

*Drug resistance mutation scores of NNRTI:* Download CSV

| Rule | DOR | EFV | ETR | NVP | RPV |
|---|---|---|---|---|---|
| K103N | 0 | 60 | 0 | 60 | 0 |