

A curated public database to represent, store and analyze HIV drug resistance data.

# 1. userinput unamed sample: 1

#### Sequence summary

 Sequence includes PR:
 codons 1 - 99

 Sequence includes RT:
 codons 1 - 560

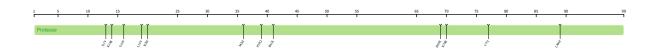
 Sequence includes IN:
 codons 1 - 288

 Subtype:

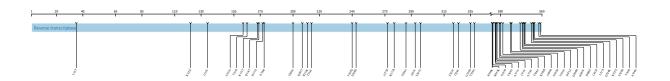
 ☐ CRF02\_AG (5.32%)

### Sequence quality assessment

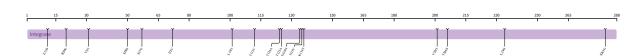
### Protease (PR)



### Reverse transcriptase (RT)



### Integrase (IN)



There are no known sequence quality issues.

## Drug resistance interpretation: PR

HIVDB 9.8 (2025-01-05)

PI Major Mutations: None PI Accessory Mutations: None

### **Protease Inhibitors**

 atazanavir/r (ATV/r)
 Susceptible

 darunavir/r (DRV/r)
 Susceptible

 lopinavir/r (LPV/r)
 Susceptible

### PR comments

#### Other

• K20I is the consensus amino acid in subtype G and CRF02\_AG. In subtypes B and C, K20I is a PI-selected mutation of uncertain effects on currently used PIs.

Mutation scoring: PR HIVDB 9.8 (2025-01-05)

No drug resistance mutations were found for PI.

Drug resistance interpretation: RT

HIVDB 9.8 (2025-01-05)

NRTI Mutations: None NNRTI Mutations: None

RT Other Mutations: V35T • K122E • I135V • S162A • T165I • K173T • Q174T • D177E • I178M • T200A • Q207T • R211K • F214L • V245Q • E248D •

A272P • K277R • T286A • I293V • E297A • S322A • I326V • G335D • T338A • R356K • M357K • G359S • T369A • A371V • I375V • A376V • T386A • K390R • A400S • E432D • V435A • D471E • Q480H • H483Y • D488E • L491P • L517I • Q524K • K527E • E529D •

V548I • A554N

Nucleoside Reverse Transcriptase Inhibitors Non-nucleoside Reverse Transcriptase Inhibitors

doravirine (DOR) abacavir (ABC) Susceptible Susceptible zidovudine (AZT) efavirenz (EFV) Susceptible Susceptible emtricitabine (FTC) Susceptible etravirine (ETR) Susceptible lamivudine (3TC) Susceptible nevirapine (NVP) Susceptible tenofovir (TDF) Susceptible rilpivirine (RPV) Susceptible

Mutation scoring: RT HIVDB 9.8 (2025-01-05)

No drug resistance mutations were found for NRTI.

No drug resistance mutations were found for NNRTI.

Drug resistance interpretation: IN

HIVDB 9.8 (2025-01-05)

INSTI Major Mutations: None INSTI Accessory Mutations: None

IN Other Mutations: E11D • R20K • V31I • M50I • S57G • I72V • L101I • T112V • T124A • T125A • G134N • I135V • K136T • V201I • T206S • L234I •

S283G

**Integrase Strand Transfer Inhibitors** 

 bictegravir (BIC)
 Susceptible

 cabotegravir (CAB)
 Susceptible

 dolutegravir (DTG)
 Susceptible

 elvitegravir (EVG)
 Susceptible

 raltegravir (RAL)
 Susceptible

### IN comments

## Other

• M50I is a highly polymorphic mutation, which has a prevalence of 3% to 34% in INSTI-naïve persons depending on subtype. It has been selected in vitro by DTG and BIC in combination with R263K. It also appears to frequently occur in combination with R263K in patients receiving DTG and BIC. It is uncertain whether it contributes to reduced DTG and CAB susceptibility in combination with R263K.

Mutation scoring: IN HIVDB 9.8 (2025-01-05)

No drug resistance mutations were found for INSTI.

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