

Drug resistance interpretation: PR		HIVDB 9.5.1 (2023-11-05)
PI Major Mutations:	None	
PI Accessory Mutations:	None	
PR Other Mutations:	I13V 16% <small>seen:1,814</small> • K20R 14% <small>seen:1,382</small> • E35D 100% <small>seen:12,502</small> • M36I 100% <small>seen:12,503</small> • R41K 99% <small>seen:11,341</small> • K43R 99% <small>seen:12,298</small> • R57K 99% <small>seen:12,275</small> • H69K 99% <small>seen:12,343</small> • L89M 100% <small>seen:12,352</small>	
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)	Susceptible	
saquinavir/r (SQV/r)	Susceptible	
tipranavir/r (TPV/r)	Susceptible	
PR comments		
Other		
<ul style="list-style-type: none"><li>K20R is a highly polymorphic PI-selected accessory mutation that increases replication fitness in viruses with PI-resistance mutations.</li></ul>		

Mutation scoring: PR	HVDB 9.5.1 (2023-11-05)
No drug resistance mutations were found for PI.	

Drug resistance interpretation: RT		HIVDB 9.5.1 (2023-11-05)	
NRTI Mutations:	None		
NNRTI Mutations:	None		
RT Other Mutations:	K20R 100% <small>seen:8,230</small> • V35T 99% <small>seen:6,203</small> • T39K 99% <small>seen:6,586</small> • T69N 1% 99% <small>seen:4,314</small> A: 12% <small>seen:4,314</small> • K122ER 1% 72% <small>seen:6,262</small> R: 23% <small>seen:6,262</small> • D123S 99% <small>seen:6,308</small> • K173S 99% <small>seen:7,238</small> • D177G 99% <small>seen:7,285</small> • V179I 100% <small>seen:7,278</small> • T200A 100% <small>seen:6,302</small> • I202V 100% <small>seen:6,713</small> • Q207AD 1% 76% <small>seen:4,347</small> A: 19% <small>seen:4,347</small> D: 12% <small>seen:4,347</small> • V245Q 100% <small>seen:1,630</small> • E248DN 1% 71% <small>seen:1,211</small> R: 23% <small>seen:1,211</small> • K312KNQ 1% 81% <small>seen:2,628</small> R: 19% <small>seen:2,628</small> N: 14% <small>seen:2,628</small> • L517I 99% <small>seen:4,285</small> • S519N 99% <small>seen:6,285</small> • Q524K 99% <small>seen:6,293</small> • K527E 100% <small>seen:6,297</small> • E529D 99% <small>seen:6,650</small> • A534S 99% <small>seen:6,279</small> • A554S 100% <small>seen:7,701</small> • V559I 99% <small>seen:7,617</small>		
Nucleoside Reverse Transcriptase Inhibitors		Non-nucleoside Reverse Transcriptase Inhibitors	
abacavir (ABC)	Susceptible	doravirine (DOR)	Susceptible
zidovudine (AZT)	Susceptible	efavirenz (EFV)	Susceptible
stavudine (D4T)	Susceptible	etravirine (ETR)	Susceptible
didanosine (DDI)	Susceptible	nevirapine (NVP)	Susceptible
emtricitabine (FTC)	Susceptible	rilpivirine (RPV)	Susceptible
lamivudine (3TC)	Susceptible		
tenofovir (TDF)	Susceptible		
RT comments			
Other			
<ul style="list-style-type: none"><li>T69N/S/A/I/E are relatively non-polymorphic mutations weakly selected in persons receiving NRTIs. They may minimally contribute reduced AZT susceptibility.</li><li>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.</li></ul>			

Mutation scoring: RT	HVDB 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: IN		HVDB 9.5.1 (2023-11-05)
INSTI Major Mutations:	None	
INSTI Accessory Mutations:	None	
IN Other Mutations:	K14R 99% <small>seen:6,710</small> • L45Q 99% <small>seen:6,881</small> • I60M 100% <small>seen:6,277</small> • T112V 100% <small>seen:6,288</small> • I113V 100% <small>seen:6,292</small> • T124A 99% <small>seen:6,308</small> • T125A 100% <small>seen:6,308</small> • G134N 100% <small>seen:6,425</small> • K136Q 99% <small>seen:6,430</small> • V201I 99% <small>seen:6,661</small> • I208IM 1% 90% <small>seen:6,760</small> R: 17% <small>seen:6,760</small> • Y227F 99% <small>seen:6,578</small> • S255G 99% <small>seen:6,212</small> • S283G 100% <small>seen:6,788</small>	
Integrase Strand Transfer Inhibitors		
bictegravir (BIC)	Susceptible	
cabotegravir (CAB)	Susceptible	
dolutegravir (DTG)	Susceptible	
elvitegravir (EVG)	Susceptible	
raltegravir (RAL)	Susceptible	
Mutation scoring: IN		
No drug resistance mutations were found for INSTI.		