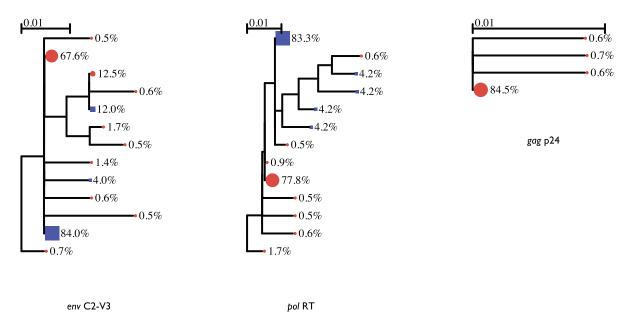
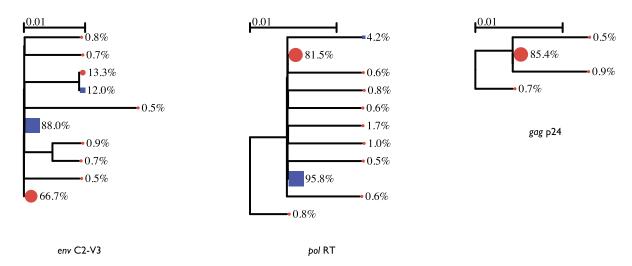
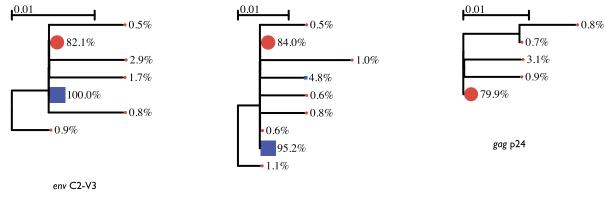
## **Supplementary Data**



**SUPPLEMENTARY FIG. 1.** Sample A, UDS duplicate 1. First year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.

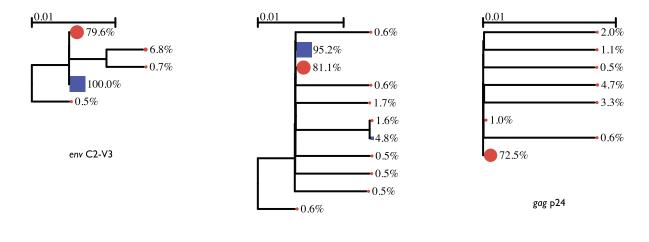


**SUPPLEMENTARY FIG. 2.** Sample A, UDS duplicate 2. First year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



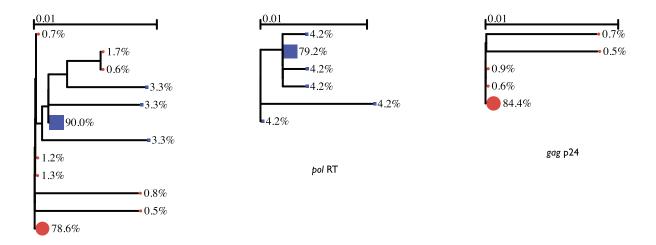
pol RT

**SUPPLEMENTARY FIG. 3.** Sample B, UDS duplicate 1. First year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



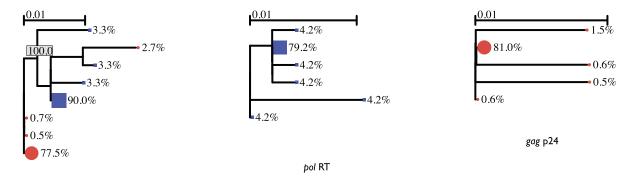
pol RT

**SUPPLEMENTARY FIG. 4.** Sample B, UDS duplicate 2. First year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



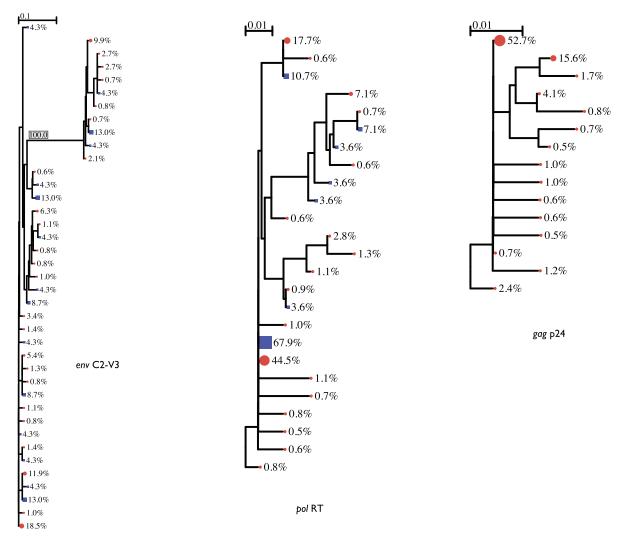
env C2-V3

**SUPPLEMENTARY FIG. 5.** Sample C, UDS duplicate 1. First year of infection. No evidence of DI. Insufficient UDS RT reads for analysis. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.

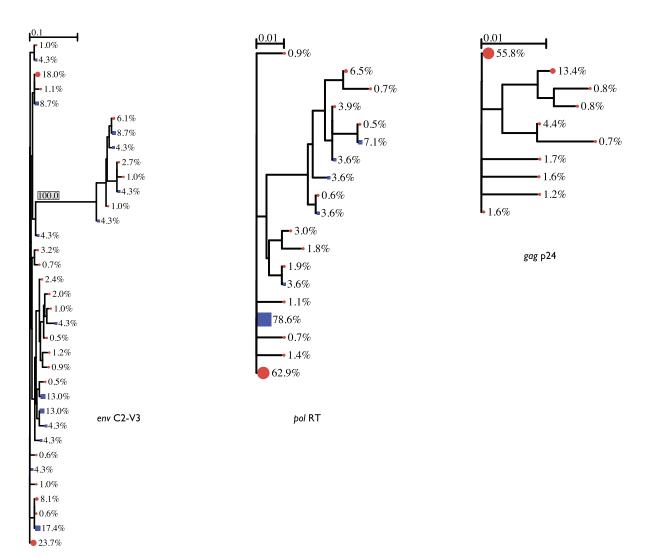


env C2-V3

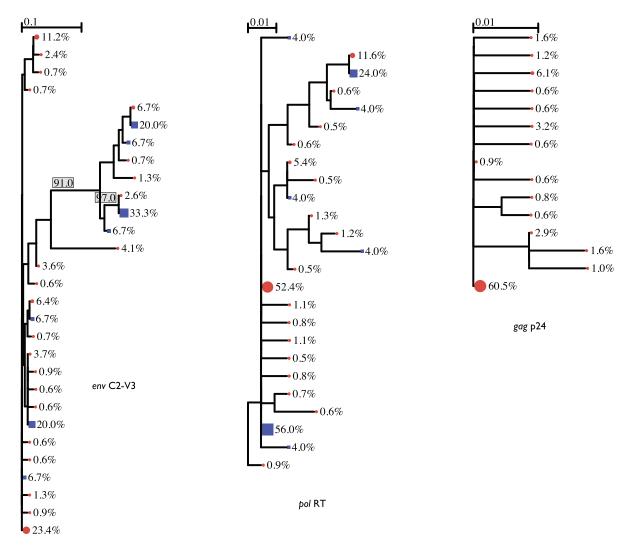
**SUPPLEMENTARY FIG. 6.** Sample C, UDS duplicate 2. First year of infection. No evidence of DI. Insufficient UDS RT reads for analysis. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



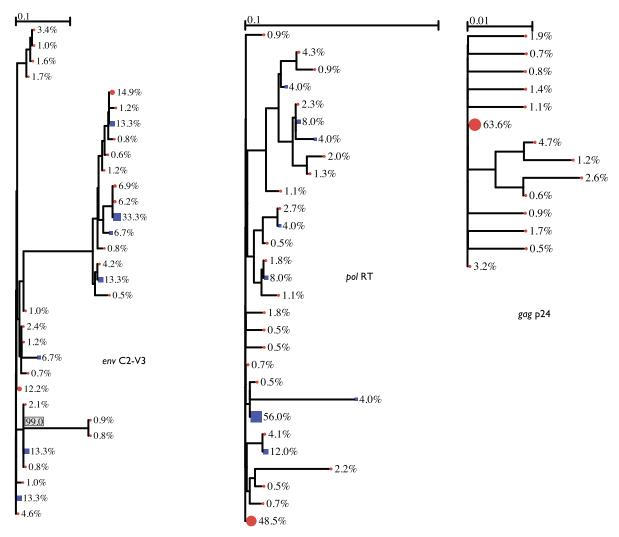
**SUPPLEMENTARY FIG. 7.** Sample D1, UDS duplicate 1. Third year of infection. DI in *env* and *pol.* UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



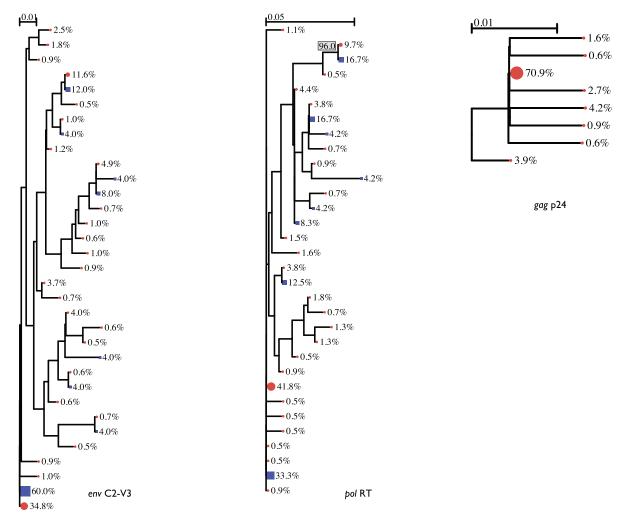
**SUPPLEMENTARY FIG. 8.** Sample D1, UDS duplicate 2. Third year of infection. DI in *env* and *pol.* UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



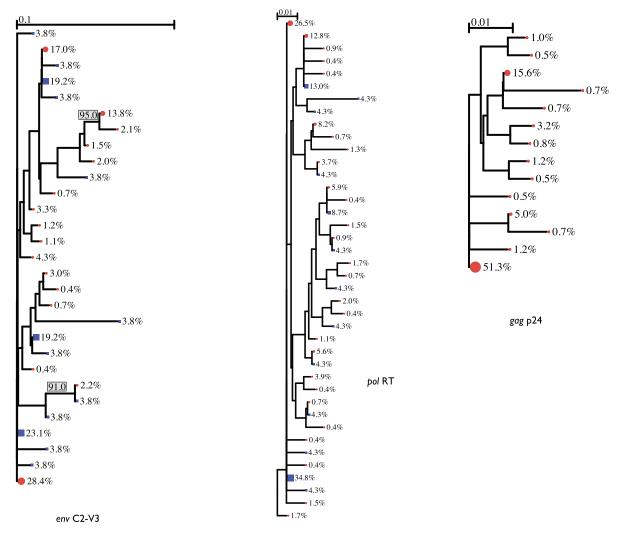
**SUPPLEMENTARY FIG. 9.** Sample D2, UDS duplicate 1. Third year of infection. DI in *env* and *pol.* UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



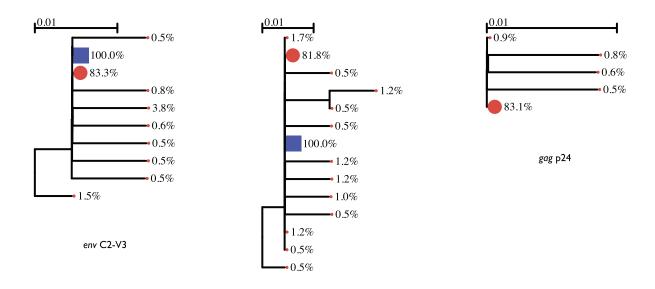
**SUPPLEMENTARY FIG. 10.** Sample D2, UDS duplicate 2. Third year of infection. DI in *env* and *pol*. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



**SUPPLEMENTARY FIG. 11.** Sample E. Fourth year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.

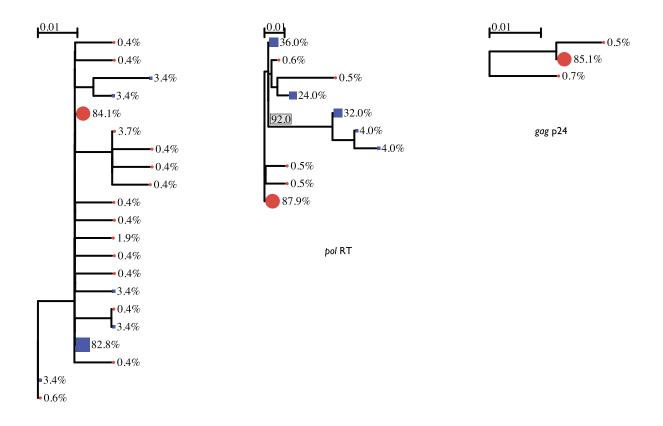


**SUPPLEMENTARY FIG. 12.** Sample F. Fifth year of infection (third year of ART). No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



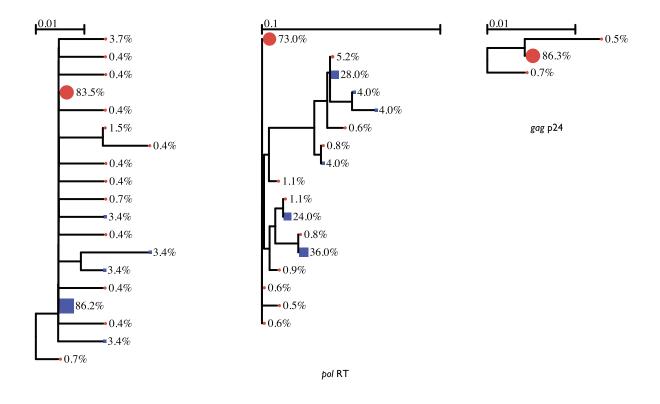
pol RT

**SUPPLEMENTARY FIG. 13.** Sample G. First year of infection. No evidence of DI. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.



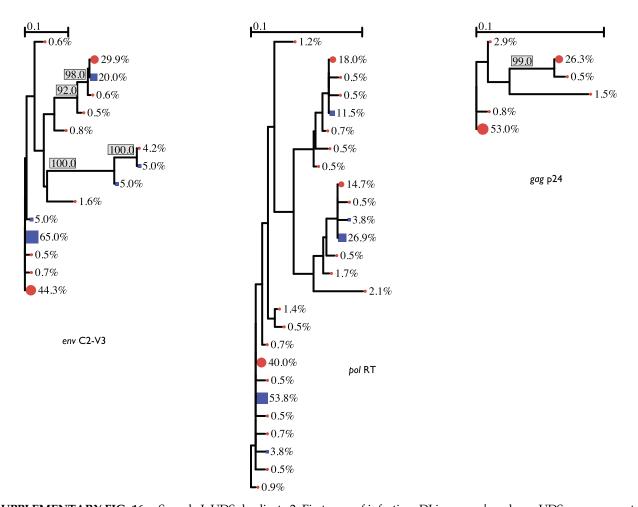
**SUPPLEMENTARY FIG. 14.** Sample H, UDS duplicate 1. Sixth year of infection (fifth year of ART). DI in *pol* only. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.

env C2-V3



**SUPPLEMENTARY FIG. 15.** Sample H, UDS duplicate 2. Sixth year of infection (fifth year of ART). DI in *pol* only. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.

env C2-V3



**SUPPLEMENTARY FIG. 16.** Sample I, UDS duplicate 2. First year of infection. DI in *env*, *pol*, and *gag*. UDS are represented as *red circles* and SGS as *blue squares*. Variant abundances per node and branches with >90% bootstrap support are labeled.