< HIV-1 subtype A/E > Rev Gag Vif Tat Vpu Tat Nef Pol Env LTR LTR 653 KGIGGNEQVDKLVS**SGIRKVLFL**DGIDKAQEEHERYH Pol SL9 (WT) SGIRKVLFL Pol SL9-1A **AGIRKVLFL** Pol SL9-1T TGIRKVLFL Pol SL9-1L LGIRKVLFL Pol SL9-1K KGIRKVLFL Pol SL9-1Q **QGIRKVLFL**

Figure S1. Sequences and positions of SL9 and its mutant epitope peptides.

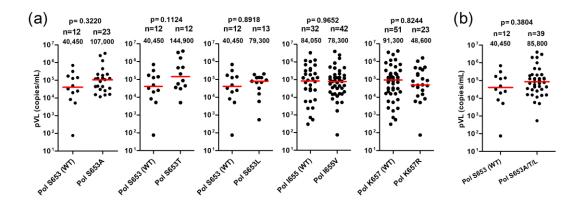


Figure S2. Effects of Pol S653A, Pol S653T, Pol S653L, Pol I655V, and Pol K657R mutations on pVL.

Comparison of pVL between HLA-C*15:05-positive individuals infected with Pol S653 (WT) virus and those with each of Pol S653A, Pol S653T, Pol S653L, Pol I655V, and Pol K657R (a) or with at least one of Pol S653A/T/L mutant viruses (b). The red lines and the values in each graph represent medians of pVL. Statistical analysis was performed by using the Mann-Whitney test.

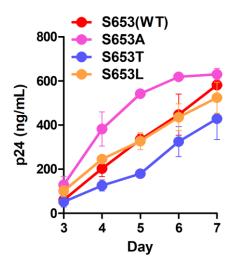


Figure S3. In vitro replication capacity of Pol S653A/T/L mutants.

721.221 cells expressing HLA-C*15:05 were infected with 5×10^7 relative luminescence units (RLU) of wild-type virus (93JP-NH1) or each of the 3 mutants (93JP-NH1_{Pol S653A}, 93JP-NH1_{Pol S653T}, and 93JP-NH1_{Pol S653L}) virus. The culture supernatant was then collected from day 3 to day 7 post-infection. The concentration of supernatant p24 antigen was measured by using ELISA. The results are shown as the means and SDs of triplicate assays. The appropriate RLU was determined by infecting the NP2/CD4 cell line carrying CXCR4 and HIV-1-LTR firefly luciferase reporter at various titers of virus and then RLU was measured by using a luciferase assay system (Promega). The NP2/CD4 cell line was provided by Dr. Y. Maeda, Department of Microbiology, Kumamoto University, Japan.