

## **Description of Additional Supplementary Files**

### **Supplementary Data 1**

**Description:** The supplementary data file includes all the normalized TCR signalling values from Figure 5 and relevant information to perform the analysis in Figure 6. This includes information on naturally occurring TL9 escapes variants, including frequency at the population level and translational mutations HIV-1 needs to pass through to reach escape mutation. Each TL9 variant and transitional mutant and its TCR recognition for all 8 TCR tested is also summarized in the data file for ease of reference.