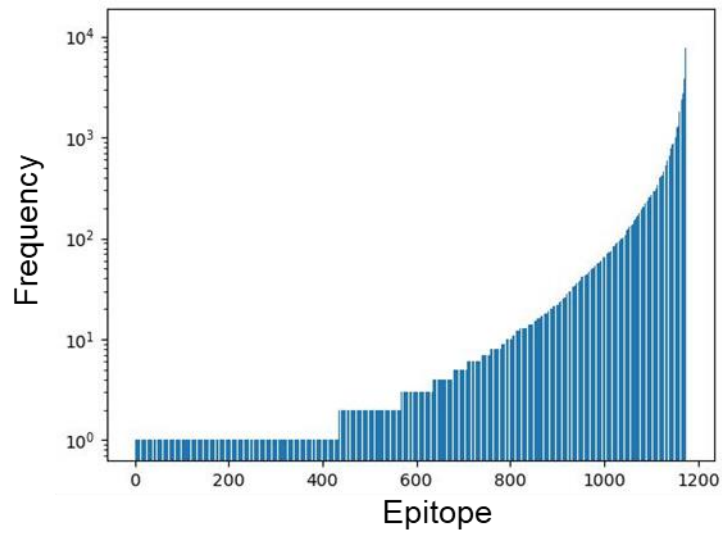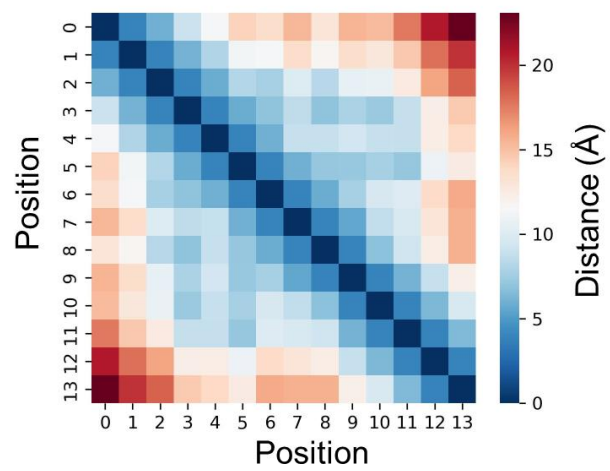Supplementary Figure 1: Data cleaning process.

Supplementary Figure 2: Frequencies of CDR3-β corresponding to different epitopes.

Supplementary Figure 3: An example illustration of residue contacts matrices.