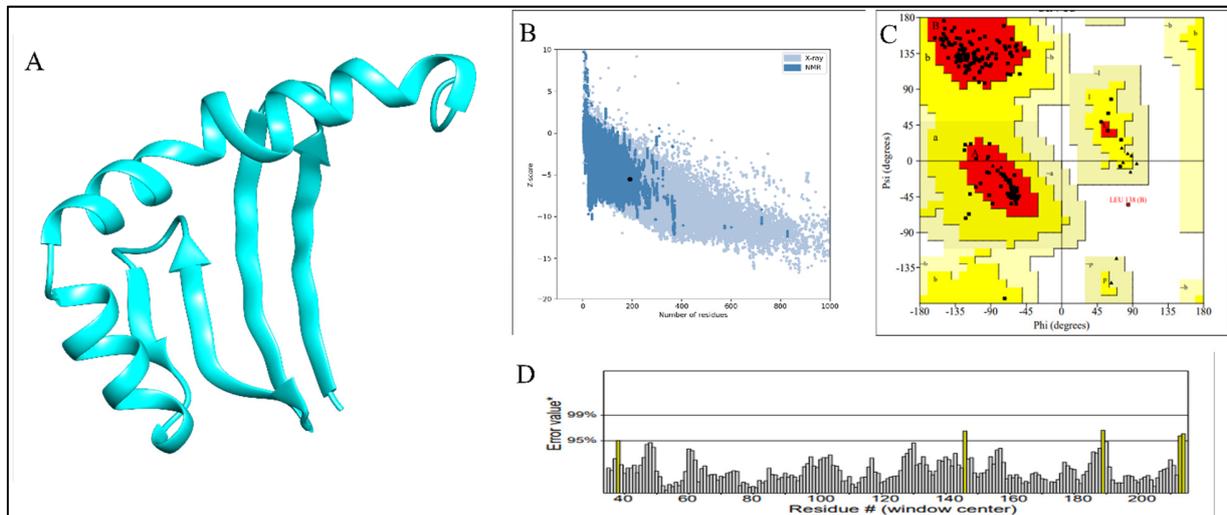
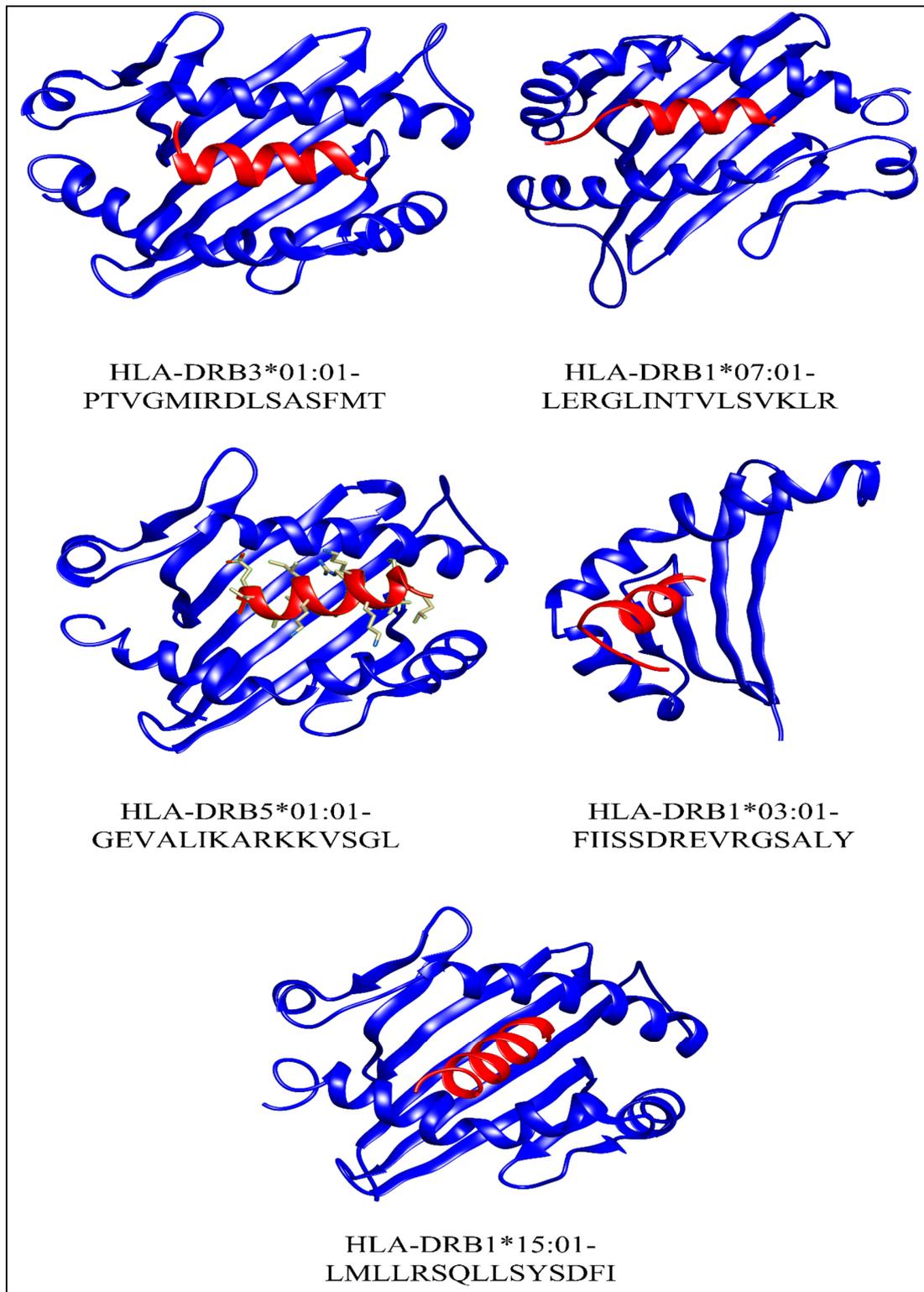


**Figure S1.** The 3D model of HLA-A\*30:02 generated by Swiss model server and its validation by ERRAT, Prosa-Web and Procheck. (A) the 3D model of HLA molecule (B) The ERRAT score of 99.41 (C) Prosa-Web quality score -7.28 and (D) Ramachandran plot by Procheck shows 91.2% residues in most favored region, 8.1% in additional allowed region, 0.6% in generously allowed region and 0.6% in disallowed region



**Figure S2.** The 3D model of HLA-DRB1\*03:01 generated by Swiss model server and its validation by ERRAT, Prosa-Web and Procheck. (A) the 3D model of HLA molecule (B) The ERRAT score of 97.2 (C) Prosa-Web quality score -5.52 and (D) Ramachandran plot by Procheck shows 90.4% residues in most favored region, 9% in additional allowed region, none of the residues in generously allowed region and 0.6% in disallowed region.



**Figure S3.** Selected HTL epitopes docking complex with respective HLAs. The epitope is shown in red color whereas the human leukocytes antigens are presented in dark blue color.