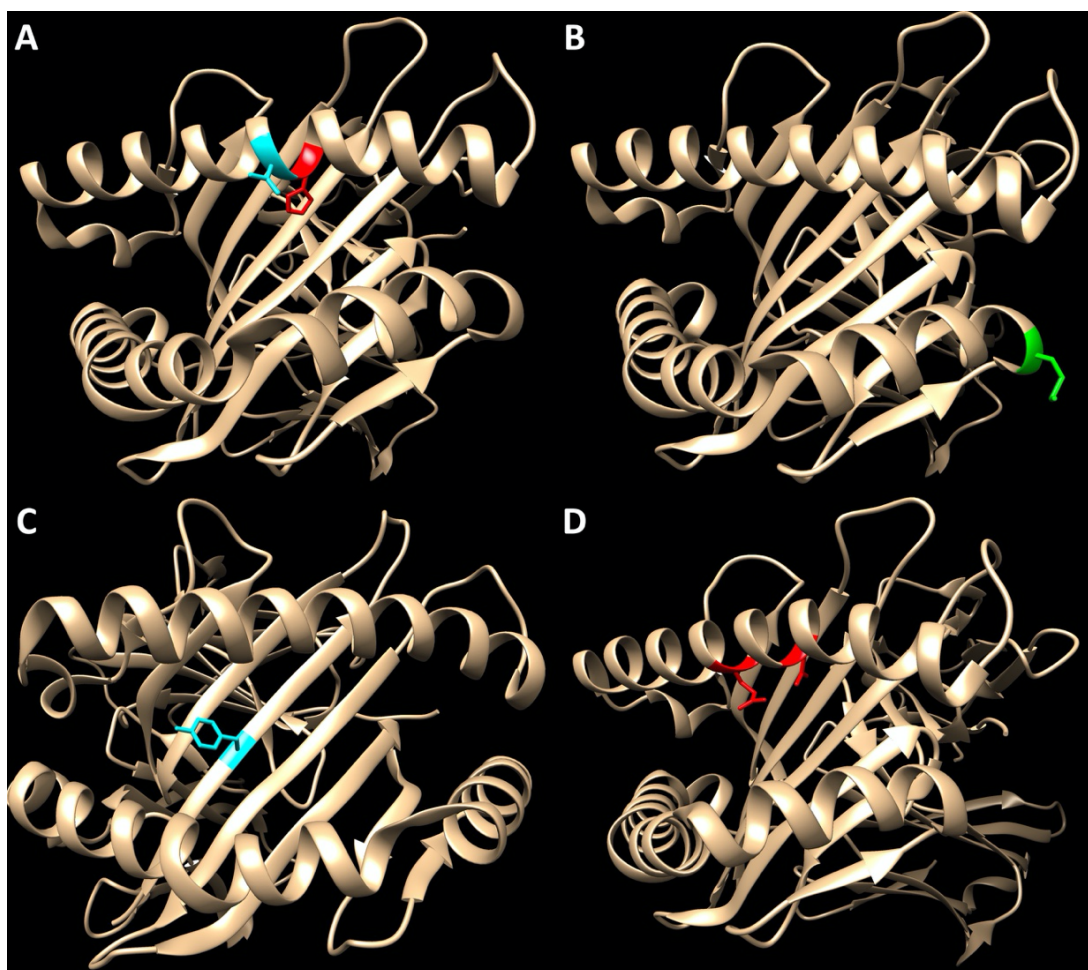


## *Supplementary Material*

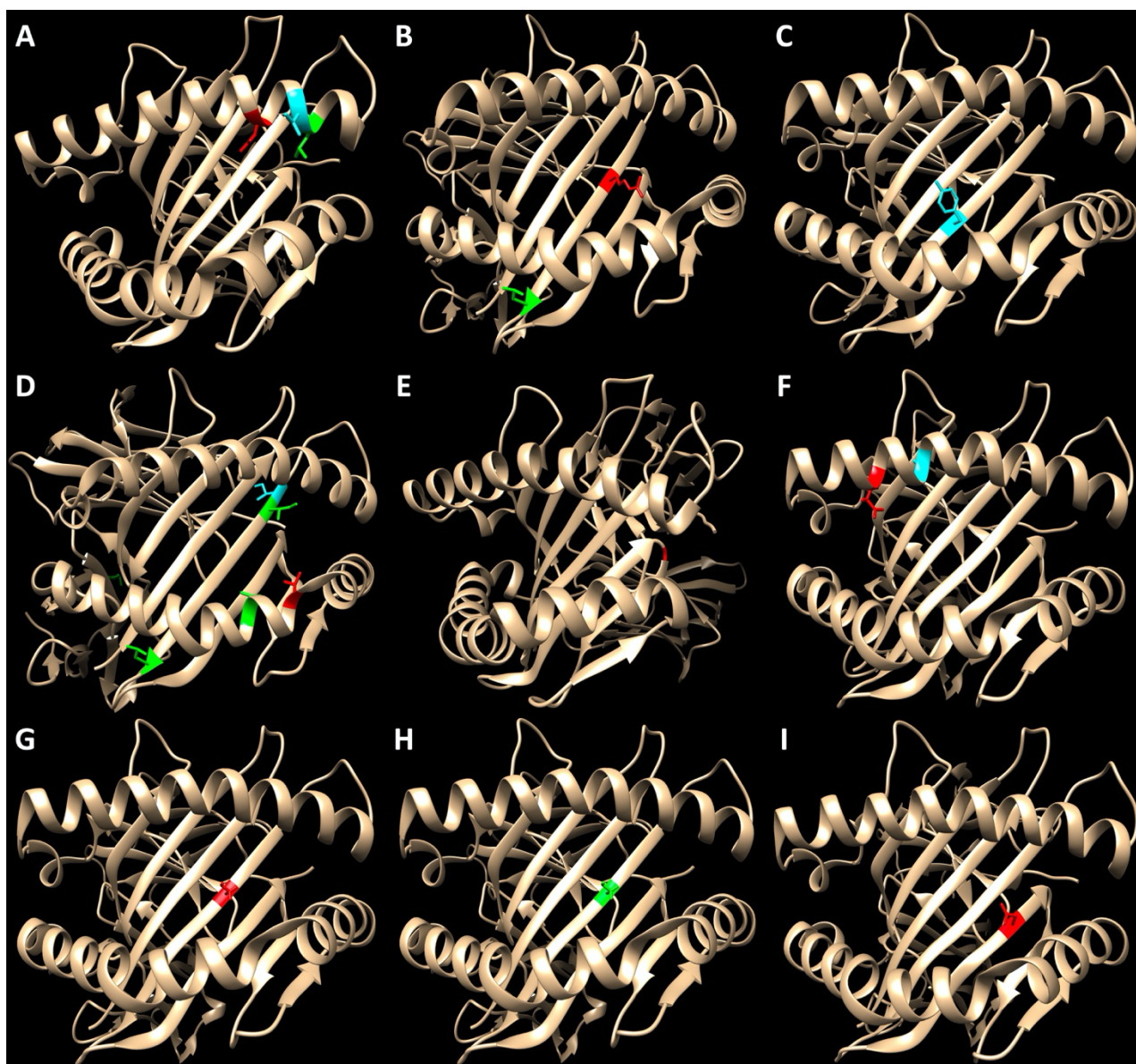
### **HLA Diversity in Ethnic Populations Can Affect Detection of Donor-Specific Antibodies by Single Antigen Beads**

Justin C. Quon, Kelli Kaneta, Nicholas Fotiadis, Jondavid Menteer, Rachel M. Lestz, Molly Weisert, Lee Ann Baxter-Lowe\*

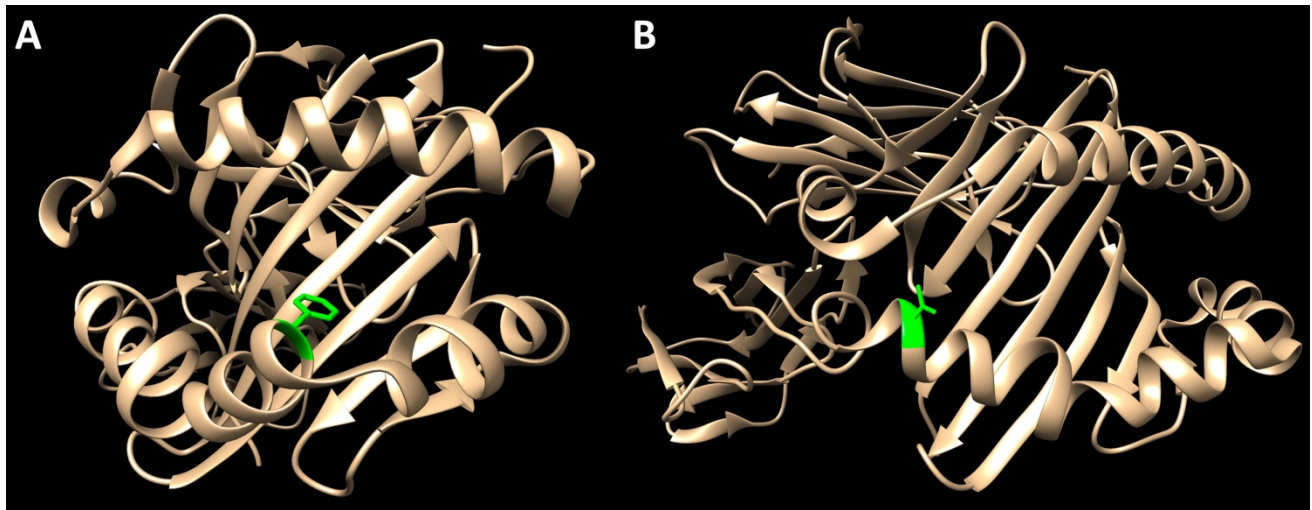
\* Correspondence: Lee Ann Baxter-Lowe: lbaxterlowe@chla.usc.edu



**Supplementary Figure 1.** Green residues indicate no charge difference between the unrepresented protein and the most similar reagent protein. Blue residues indicate a polarity difference but no charge difference. Red residues indicate an overt charge difference at that position. (A) Structure of HLA-A\*02:01 with residues 73T (blue) and 74H (red) corresponding to unrepresented HLA-A\*02:11. (B) Structure of HLA-A\*02:01 with residue 138M (green) corresponding to unrepresented HLA-A\*02:164. (C) Structure of HLA-A\*24:02 with residue 7Y (blue) corresponding to unrepresented HLA-A\*24:25. (D) Structure of HLA-A\*68:01 with residues 70Q (red) and 74D (red) corresponding to unrepresented HLA-A\*68:05.



**Supplementary Figure 2.** Green residues indicate no charge difference between the unrepresented protein and the most similar reagent protein. Blue residues indicate a polarity difference but no charge difference. Red residues indicate an overt charge difference at that position. **(A)** Structure of HLA-B\*27:05 with residues 77D (red), 80I (blue), and 81L (green) corresponding to unrepresented HLA-B\*27:02. **(B)** Structure of HLA-B\*35:01 with residues 97R (red) and 103L (green) corresponding to unrepresented HLA-B\*35:17. **(C)** Structure of HLA-B\*35:01 with residue 99Y (blue) corresponding to unrepresented HLA-B\*35:23. **(D)** Structure of HLA-B\*35:01 with residues 94I (blue), 95I (green), 103L (green), 152V (red), and 194V (green) corresponding to unrepresented HLA-B\*35:43. **(E)** Structure of HLA-B\*35:01 with residue 120G (red) corresponding to the unrepresented HLA-B\*35:116. **(F)** Structure of HLA-B\*40:02 with residues 63E (red) and 67S (blue) corresponding to unrepresented HLA-B\*40:08. **(G)** Structure of HLA-B\*40:02 with residue 97S (red) corresponding to unrepresented HLA-B\*40:11. **(H)** Structure of HLA-B\*40:02 with residue 97S (green) corresponding to unrepresented HLA-B\*40:225. **(I)** Structure of HLA-B\*44:02 with residue 116D corresponding to unrepresented HLA-B\*44:05.



**Supplementary Figure 3.** Green residues indicate no charge difference between the unrepresented protein and the most similar reagent protein. **(A)** Structure of DR11 with residue 67F (green) corresponding to unrepresented HLA-DRB1\*11:02. **(B)** Structure of DR11 with residue 85V (green) corresponding to unrepresented HLA-DRB1\*11:06.