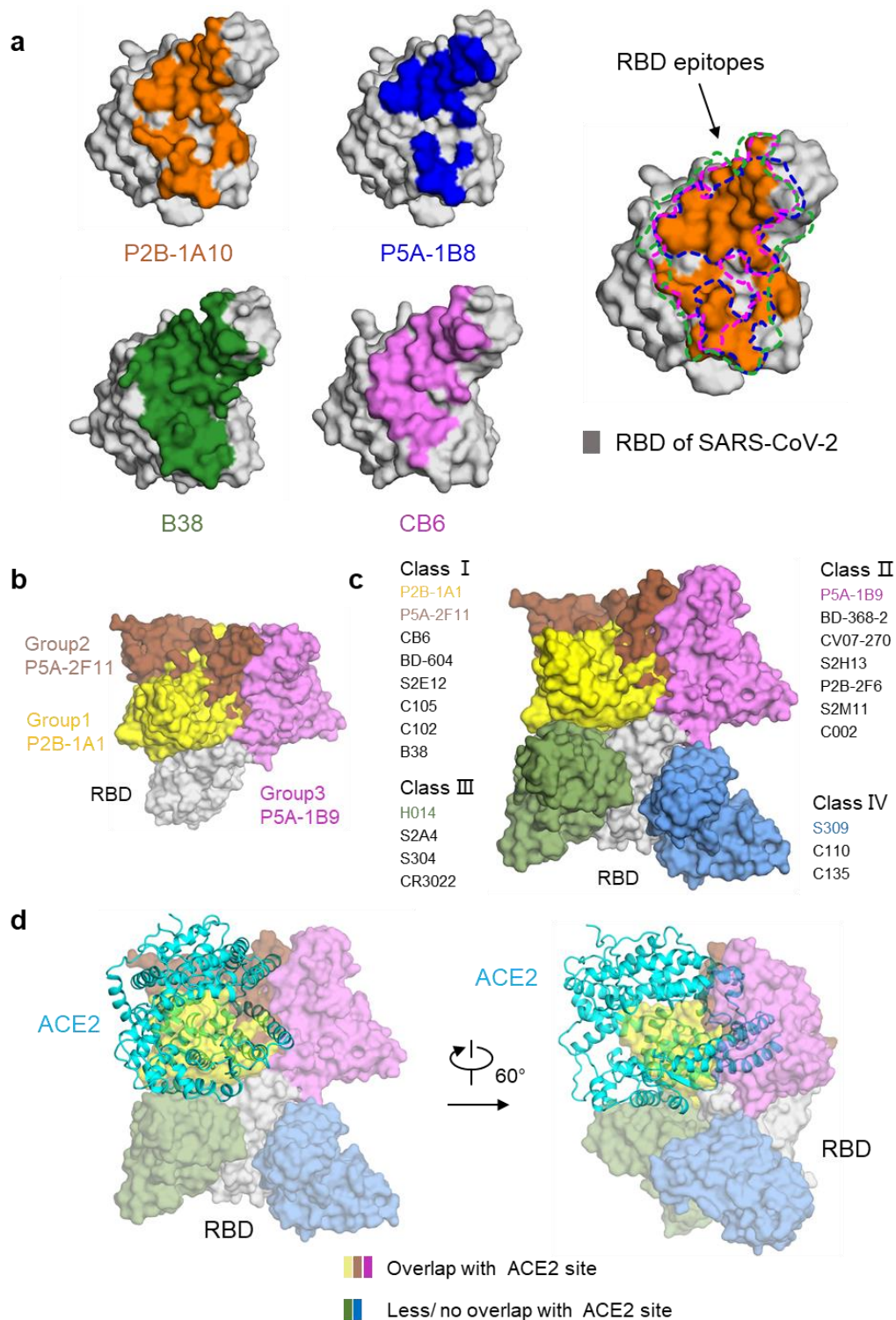




Supplementary information, Fig. S12 | Comparison and classification of nAbs.

a Here are shown the RBD epitopes of nAbs from IGHV3-53 V genes such as P2B-1A10 (orange), P5A-1B8 (blue) and other reported antibodies such as B38 (green) and CB6 (violet). Right panel is the superposition of RBD epitopes of nAbs. **b**

Structural comparison of epitopes of nAbs from group 1, group 2 and group 3 bound to RBD, which show the representative nAbs such as P2B-1A1 (yellow), P5A-2F11 (brown) and P5A-1B9 (violet), respectively. **c** Structural classification of some representative nAbs from each class binding its RBD epitope. The typical antibodies of four classes are shown as P2B-1A1 (yellow) and P5A-2F11 (brown) of class 1, P5A-1B9 (violet) of class 2, H014 (green) of class 3 and S309 (blue) of class 4. **d** Structural classification between nAbs from four classes and ACE2. There are overlaps between class1 or class2 and ACE2, while there are nearly no overlaps between class3 or class4 and ACE2.