

**Figure S7.** (A). Homology model of N-terminal domain (NTD) of spike protein from SARS-related coronavirus BtKY72 (Acc no: APO40579) based on available experimental structure of SARS coronavirus BJ012 spike protein (PDB: 5x58). The location of identified 1 aa deletion is highlighted. Detailed species distribution information for the 1 aa deletion in Figure S2A. (B). Homology model of RBD of SARS-related coronavirus BtKY72 spike protein (Acc no: APO40579) based on available experimental structure of SARS coronavirus BJ012 spike protein (PDB: 5x58). The receptor binding domain (RBD) domain is highlighted as green and extended C-terminal region as pale green. The locations of identified signature indels are highlighted red and labelled. Detailed species distribution information for the 1 aa insert and 2 aa insert in RBD in Figure S2B and S2C.