progenitor as USA/WA1/2020 (2020-01-19) progenitor as Guangdong/HKU-SZ-002/2020 (2020-01-10) progenitor as Shandong/LY005-2/2020 (2020-01-24) mutations from proCoV2 (Kumar et al): T18060C, C29095T mutations from proCoV2 (Kumar et al): none mutations from proCoV2 (Kumar et al): T3171C, T18060C mutations from Wuhan-Hu-1: T3171C, C8782T, T28144C mutations from Wuhan-Hu-1: C8782T, T28144C, C29095T mutations from Wuhan-Hu-1: C8782T, C18060T, T28144C C865T C13694T A11430G C12880T C14408T C1342T C2662T T8782C C15480T A11430G C3876T C11620T A13969G A28910T G25947 C14408T C17410T A11430G C15480T C2536T T8886C C14408T C17410T G1914A C15480T C2536T T8886C G1914A __ C2536T T8886C C18828T G1914A C23271T C24023T G26526T G27225T C28887T C25317T C18828T C27213T C23271T C24023T G26526T G27225T C28887T C18828T G28878A C25317T C23271T C24023T G26526T G27225T C28887T T18488C C27213T C25317T T18996C C24370T T29029C G28878A C27213T T27618C C28706T T18488C G28878A T4402C G5062T T18996C C24370T T29029C T18488C T27618C C28706T A1691G T18996C C24370T T29029C Shangdong/LY005-2/2020 T27618C C28706T C2942T C3171T G4390T T4402C G5062T T3171C Shangdong/LY005-2/2020 C5717T T18060C A1691G T4402C G5062T G11083T C29095T C6501T T29095C A1691G C2942T C6501T [USA/WA1/2020 G4390T C5717T C865T C13694T C2942T G11083T C29095T C1342T T8782C C5717T G11083T C29095T C24034T T26729C G28077C A28792T C24034T T26729C G28077C USA/WA1/2020 C26729T C29095T C26729T C29095T C1663T G22661T C1663T G22661T C865T C13694T C3768T C1342T T8767C T8767C C17104T G26167T C17104T G26167T G29593A C24034T T26729C G28077C A28792T C12880T C12880T C26729T C29095T C1663T G22661T C2662T C2662T C3768T C29095T Guangdong/HKU-SZ-002/2020 Guangdong/HKU-SZ-002/2020 T8767C C17104T G26167T G29593A C3876T C11620T A13969G A28910T C3876T C11620T A13969G A28910T G25947T A11430G A11430G A11430G C28253T C28253T C28253T T8782C T8782C T8782C C28144T collapsed clade B collapsed clade B collapsed clade B C28144T C28144T Wuhan-Hu-1 Wuhan-Hu-1 Wuhan-Hu-1 Huanan Seafood Market other Wuhan other China outside China