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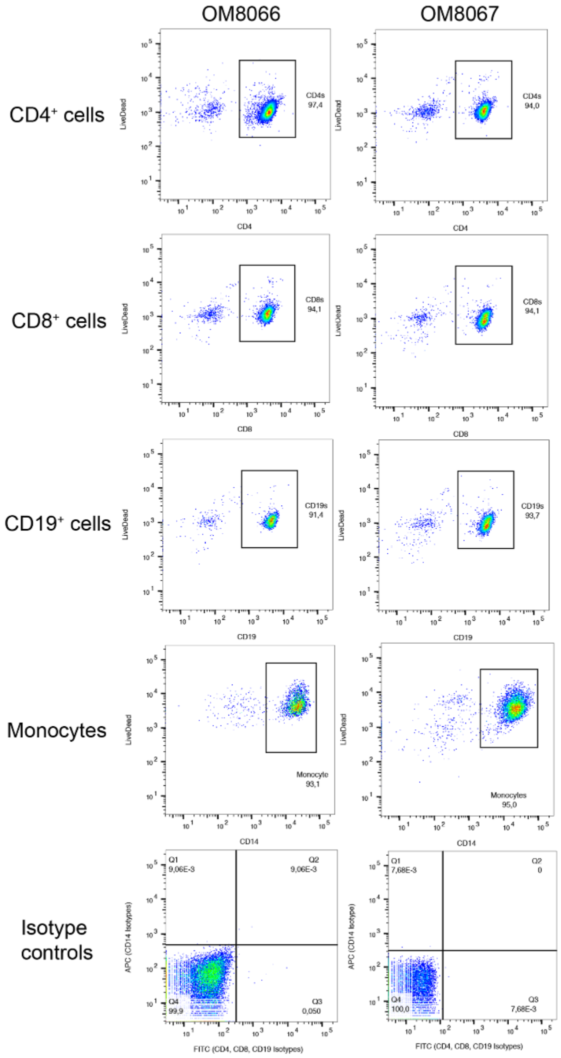
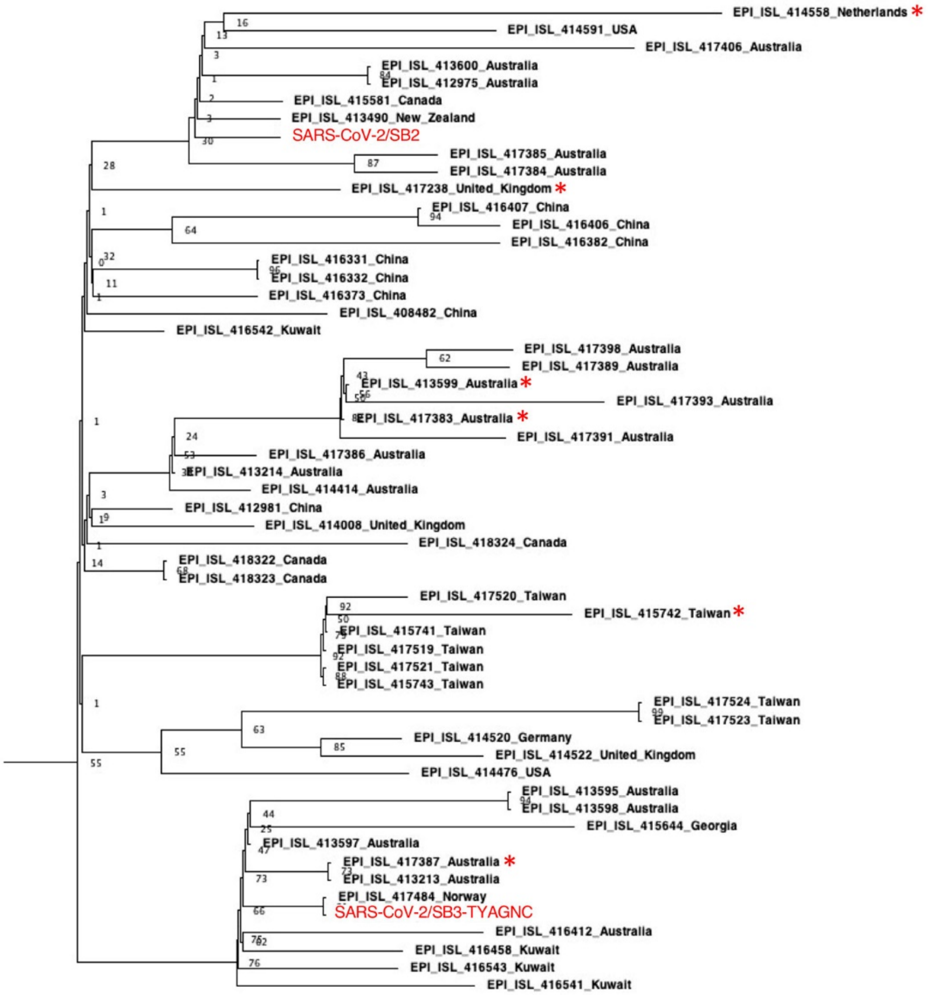
Isolation, Sequence, Infectivity, and Replication Kinetics of Severe Acute Respiratory Syndrome Coronavirus 2

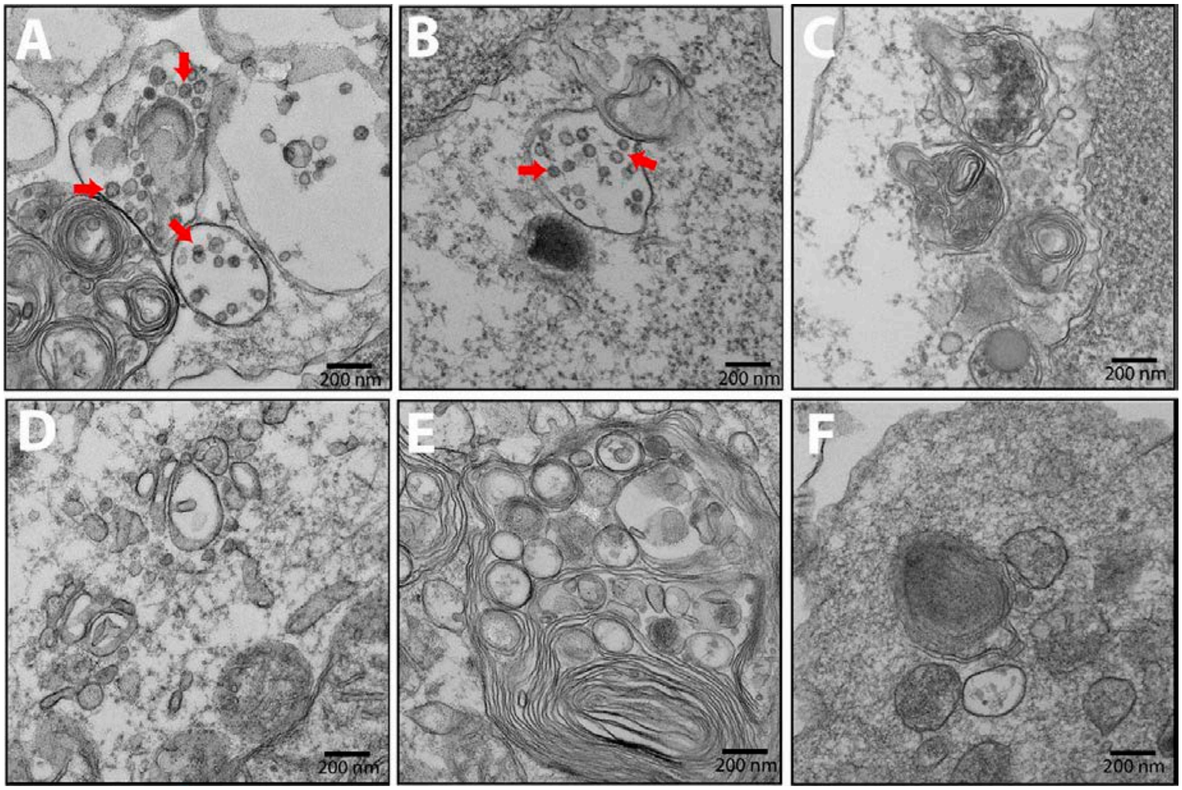
Appendix



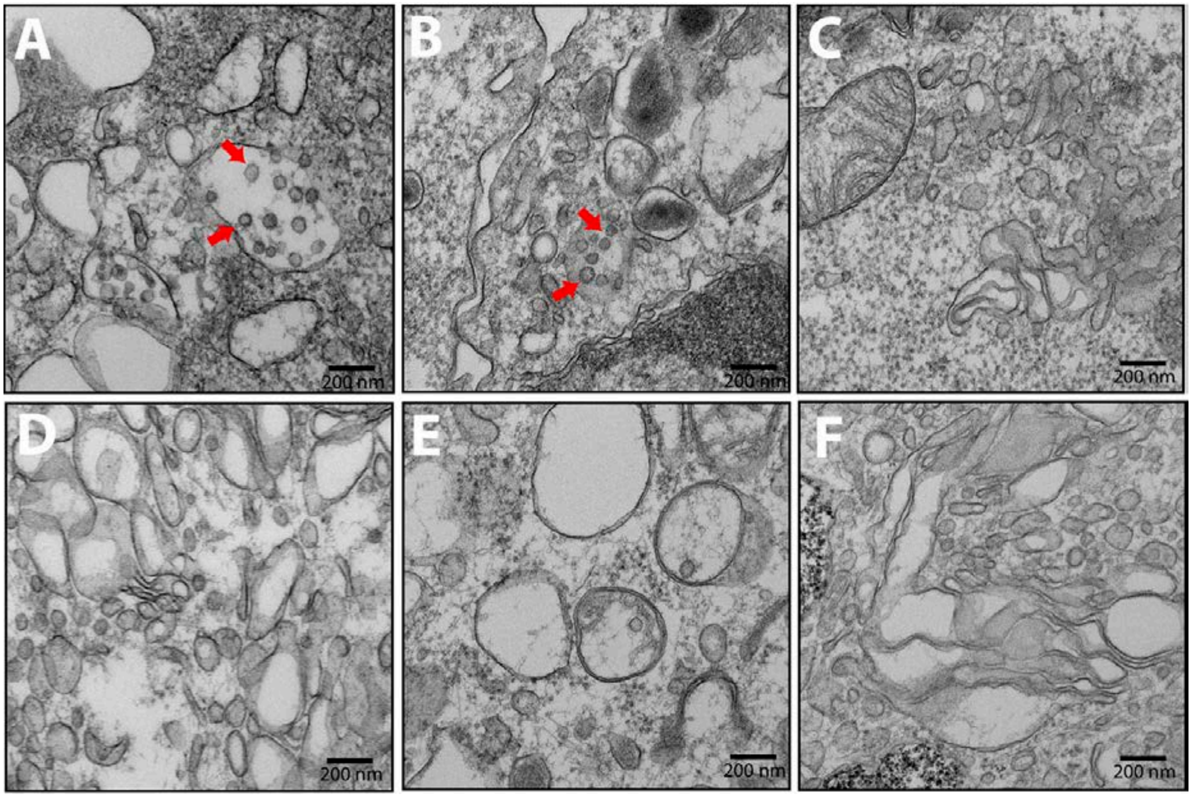
Appendix Figure 1. Percentage purities of cell populations that were purified from human PBMCs. Human PBMCs were collected (n = 2 independent healthy donors) and purified using cell-type specific purification kits (see Methods). Cells were stained for their respective markers and analyzed using flowcytometry. Percentage purity of each cell population are mentioned in the respective panels.



Appendix Figure 2. Phylogenetic relationship of SARS-CoV-2/SB2 and SARS-CoV-2/SB3-TYAGNC. Clade within a larger 1900 GSIAID isolate phylogenetic tree containing both SARS-CoV-2/SB2 and SARS-CoV-2/SB3_TYAGNC, constructed using maximum likelihood based on a multiple sequence alignment and RAxML-HPC BlackBox with GTRGAMMA + I among-site rate variation. Isolates with GSIAID metadata indicating travel history associated with the Iran outbreak are marked by a red asterisk. Branch length represent evolutionary distance, while node labels represent bootstrap support.



Appendix Figure 3. Electron micrographs of cells infected with SARS-CoV-2 for 6 hrs. To detect coronavirus-like particles in experimentally infected human structural and immune cells, we infected a range of cells with SARS-CoV-2 at a MOI of 0.01 for 6 hrs. The cells were fixed, processed and imaged using a transmission electron microscope (n = 10 fields / cell type). Representative image of each cell type is shown. Virus-like particles are indicated by red arrows. (A) Vero E6 cells. (B) CD4$^+$ PBMC. (C) CD8$^+$ PBMC. (D) CD19$^+$ PBMC. (E) Monocytes from PBMCs. (F) Other cells from PBMCs (CD4$^-$ CD8$^-$ CD19$^-$ cell populations).



Appendix Figure 4. Electron micrographs of cells infected with SARS-CoV-2 for 12 hrs. To detect coronavirus-like particles in experimentally infected human structural and immune cells, we infected a range of cells with SARS-CoV-2 at a MOI of 0.01 for 12 hrs. The cells were fixed, processed and imaged using a transmission electron microscope (n = 10 fields / cell type). Representative image of each cell type is shown. Virus-like particles are indicated by red arrows. (A) Vero E6 cells. (B) $CD4^+$ PBMC. (C) $CD8^+$ PBMC. (D) $CD19^+$ PBMC. (E) Monocytes from PBMCs. (F) Other cells from PBMCs ($CD4^-$ $CD8^-$ $CD19^-$ cell populations).