CLAIMS

1. A pharmaceutical composition comprising (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyldihydrogen phosphate, sodium citrate buffer, PEG400 and PEG3350.

2. The pharmaceutical composition of claim 1 wherein the composition is an aqueous solution.

3. The pharmaceutical composition of claim 2 wherein the aqueous solution comprises 100 mg/mL of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate, 40 mM sodium citrate buffer, 10 mg/mL PEG400 and 10 mg/mL PEG3350.

4. The pharmaceutical composition of claim 3 wherein the pH of the aqueous solution is 4.0.

5. The pharmaceutical composition of claim 1 wherein the molar ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate to sodium citrate buffer is 4.5 to 1.

6. The pharmaceutical composition of claim 1 wherein the weight ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate to PEG400 is 10 to 1.

7. The pharmaceutical composition of claim 1 wherein the weight ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate to PEG3350 is 10 to 1.

8. The pharmaceutical composition of claim 1 wherein the molar ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-

yl]butyl dihydrogen phosphate to sodium citrate buffer is 4.5 to 1, the weight ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate to PEG400 is 10 to 1 and the weight ratio of (3S)-3-({N-[(4-methoxy-1H-indol-2-yl)carbonyl]-L-leucyl}amino)-2-oxo-4-[(3S)-2-oxopyrrolidin-3-yl]butyl dihydrogen phosphate to PEG3350 is 10 to 1.

9. The pharmaceutical composition of any one of claims 1 and 5 to 8 wherein the pharmaceutical composition is a lyophile.

10. The pharmaceutical composition of claim 8 wherein the pharmaceutical composition is an amorphous lyophile with a single Tg of 76.3°C as determined by mDSC.

11. Use of a pharmaceutical composition of any one of 1 to 8 for treatment of a coronavirus infection in a patient.

12. The use of claim 1 wherein the coronavirus infection is COVID-19.