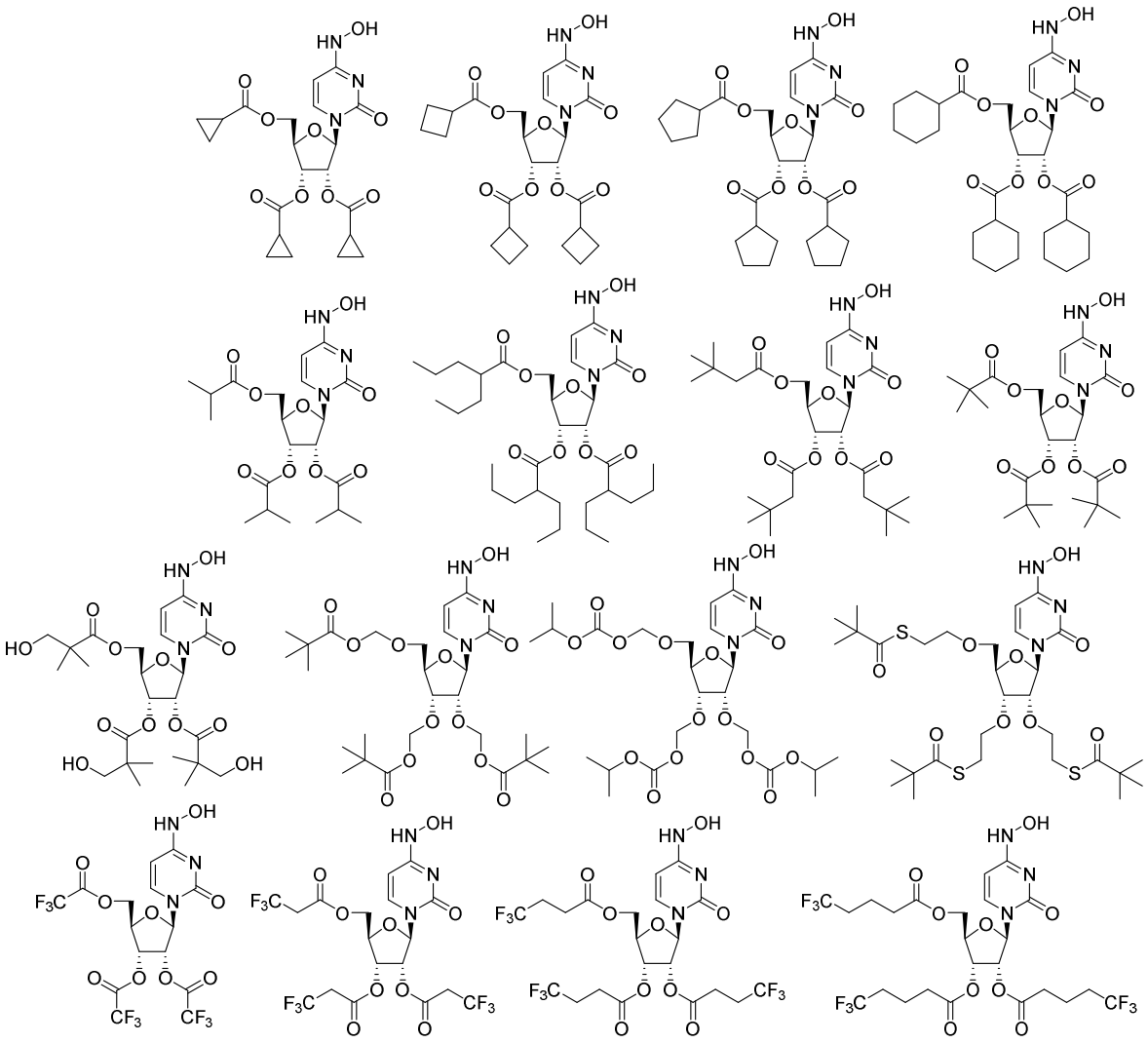
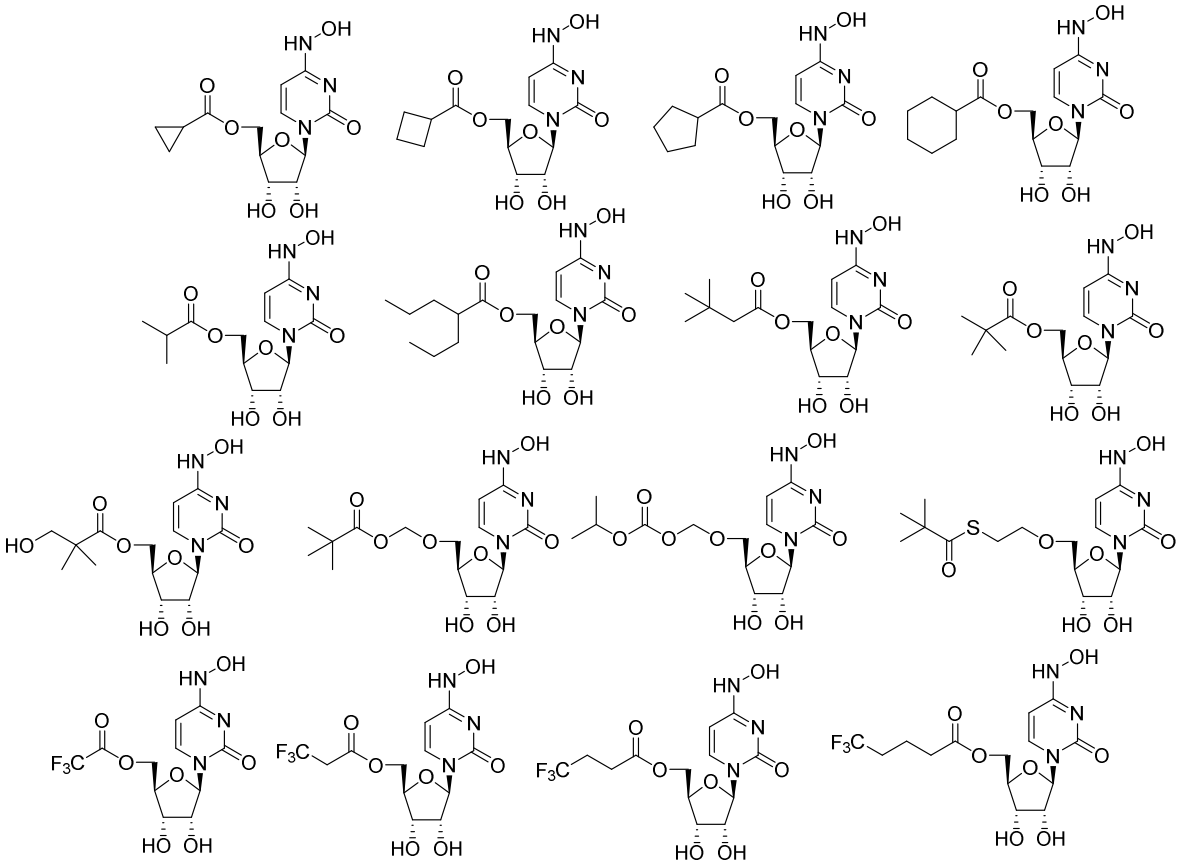
CLAIMS

1. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound represented by the formula:



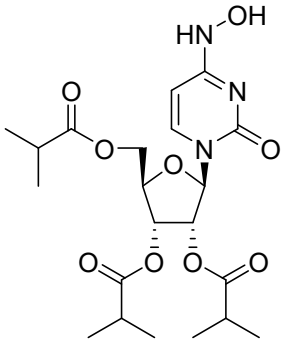
or a pharmaceutically acceptable salt thereof.

2. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound represented by the formula:



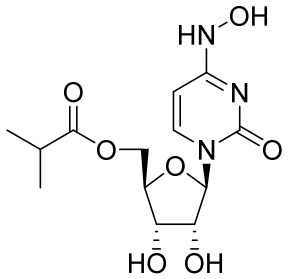
or a pharmaceutically acceptable salt thereof.

3. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound represented by the formula:



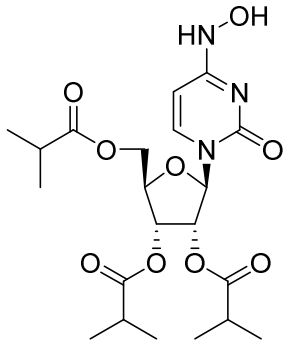
or a pharmaceutically acceptable salt thereof.

4. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound represented by the formula:



or a pharmaceutically acceptable salt thereof.

5. A pharmaceutical composition for use in treating or preventing a viral infection in a patient, wherein the composition comprises a pharmaceutically effective amount of a compound represented by the formula:



or a pharmaceutically acceptable salt thereof.

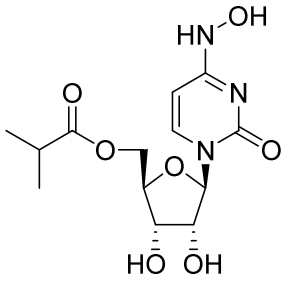
6. The pharmaceutical composition of claim 5, wherein the viral infection is caused by a human coronavirus, Eastern equine encephalitis virus, Western equine encephalitis virus, Venezuelan equine encephalitis virus, Chikungunya virus, Ross River virus, RSV virus, influenza A virus, influenza B virus, or Ebola virus infection.

7. The pharmaceutical composition of claim 5 or claim 6, wherein the viral infection is caused by a human coronavirus

8. The pharmaceutical composition of any of claims 5-7, wherein the viral infection is caused by a SARS coronavirus or MERS coronavirus.

9. The pharmaceutical composition of any of claims 5-8, wherein the viral infection is caused by a SARS coronavirus.

10. A pharmaceutical composition for use in treating or preventing a viral infection, wherein the composition comprises a pharmaceutically effective amount of a compound represented by the formula:



or a pharmaceutically acceptable salt thereof.

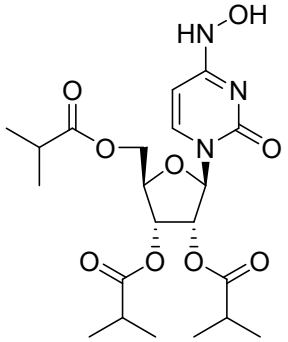
11. The pharmaceutical composition of claim 10, wherein the viral infection is caused by a human coronavirus, Eastern equine encephalitis virus, Western equine encephalitis virus, Venezuelan equine encephalitis virus, Chikungunya virus, Ross River virus, RSV virus, influenza A virus, influenza B virus, or Ebola virus infection.

12. The pharmaceutical composition of claim 10 or claim 11, wherein the viral infection is caused by a human coronavirus

13. The pharmaceutical composition of any of claims 10-12, wherein the viral infection is caused by a SARS coronavirus or MERS coronavirus.

14. The pharmaceutical composition of any of claims 10-13, wherein the viral infection is caused by a SARS coronavirus.

15. A compound represented by the formula:



or a pharmaceutically acceptable salt thereof for use in treating or preventing a viral infection in a patient.

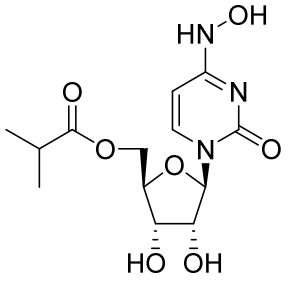
16. The compound of claim 15, wherein the viral infection is caused by a human coronavirus, Eastern equine encephalitis virus, Western equine encephalitis virus, Venezuelan equine encephalitis virus, Chikungunya virus, Ross River virus, RSV virus, influenza A virus, influenza B virus, or Ebola virus infection.

17. The compound of claim 15 or claim 16, wherein the viral infection is caused by a human coronavirus

18. The compound of any of claims 15-17, wherein the viral infection is caused by a SARS coronavirus or MERS coronavirus.

19. The compound of any of claims 15-18, wherein the viral infection is caused by a SARS coronavirus.

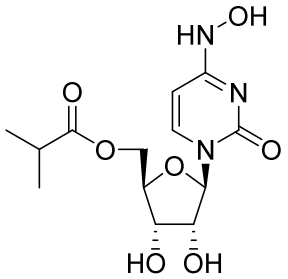
20. A compound represented by the formula:



or a pharmaceutically acceptable salt thereof for use in treating or preventing a viral infection in a patient.

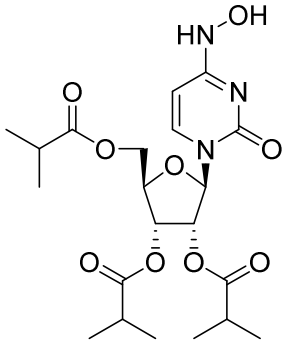
21. The compound of claim 20, wherein the patient is a human.

22. A compound represented by the formula:



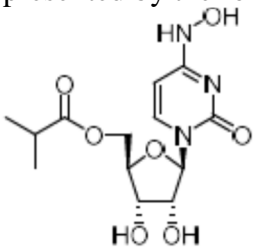
or a pharmaceutically acceptable salt thereof.

23. A compound represented by the formula:



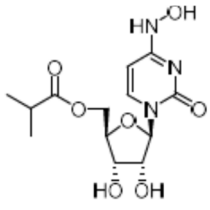
or a pharmaceutically acceptable salt thereof.

24. The compound of claim 22, represented by the formula:



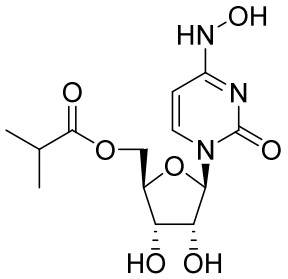
.

25. The compound of claim 22, wherein the compound is a pharmaceutically acceptable salt of



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26. A compound represented by the formula:



or a pharmaceutically acceptable salt thereof for use in the treatment of a human coronavirus, Eastern equine encephalitis virus, Western equine encephalitis virus, Venezuelan equine encephalitis virus, Chikungunya virus, Ross River virus, RSV virus, influenza A virus, influenza B virus, or Ebola virus infection.

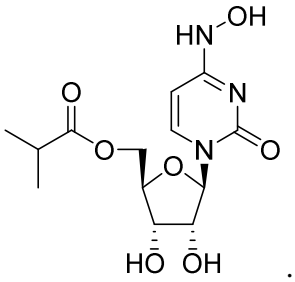
27. The compound of claim 26, wherein the viral infection is caused by a human coronavirus

28. The compound of claim 26 or claim 27, wherein the viral infection is caused by a SARS coronavirus or MERS coronavirus.

29. The compound of any of claims 26-28, wherein the viral infection is caused by a SARS coronavirus.

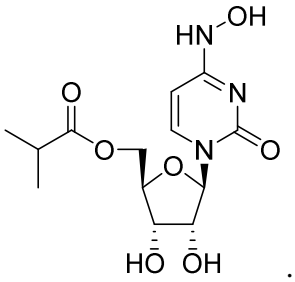
30. The compound of any one of claims 26-29, wherein the patient in need thereof is human.

31. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a pharmaceutically acceptable salt of a compound represented by the formula:



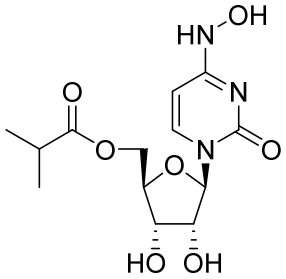
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32. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound represented by the formula:



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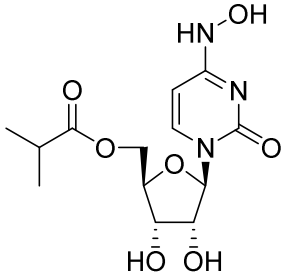
33. A compound represented by the formula:



or a pharmaceutically acceptable salt thereof for use in the treatment of a human coronavirus infection in a patient in need thereof.

34. The compound of claim 33, wherein the patient in need thereof is human.

35. A compound represented by the formula:



for use in the treatment of a human coronavirus infection in a patient in need thereof.

36. The compound of claim 35, wherein the patient in need thereof is human.