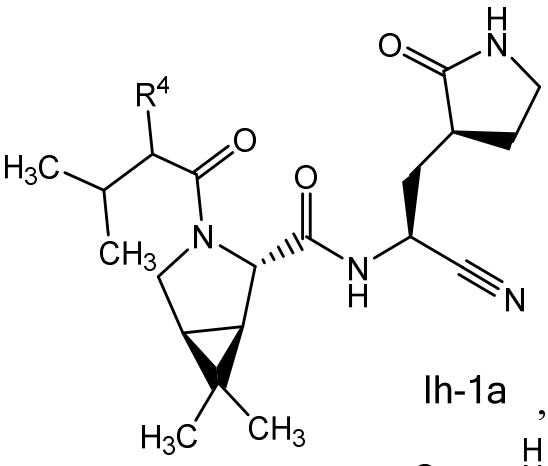
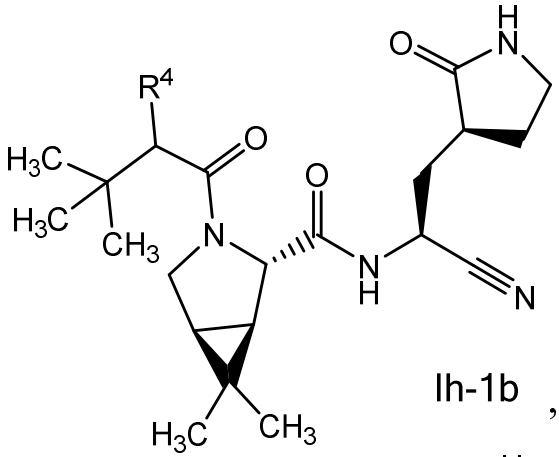
Claims

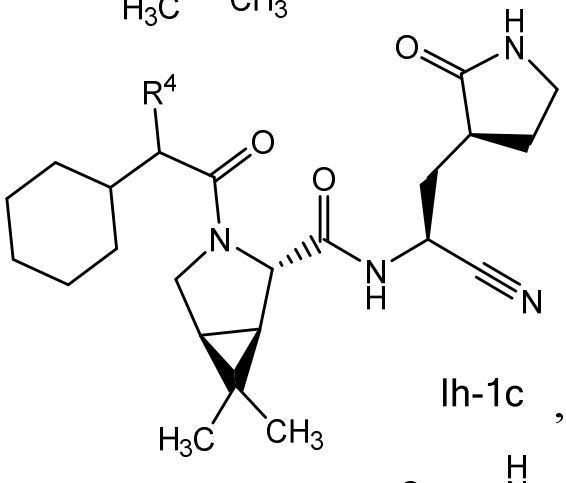
1. A compound selected from the group consisting of



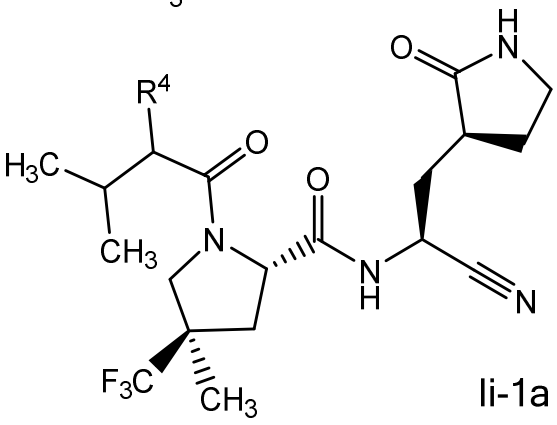
Ih-1a ,



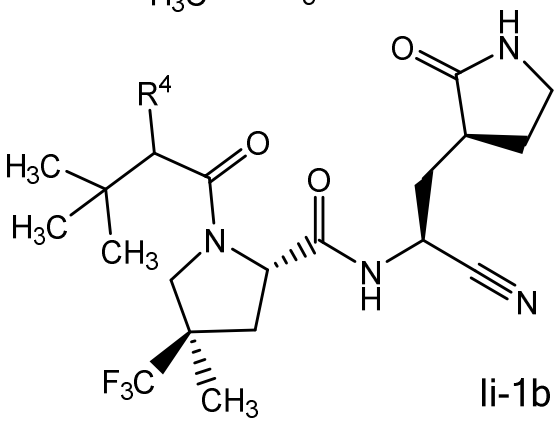
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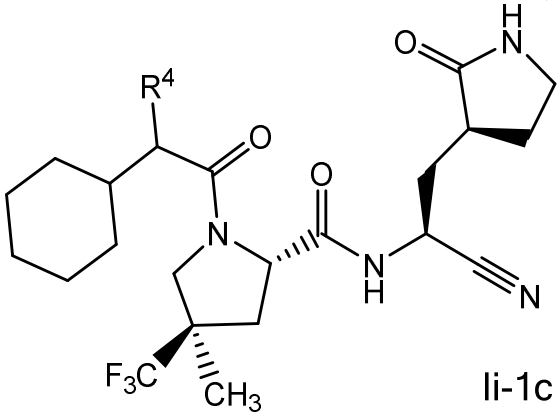
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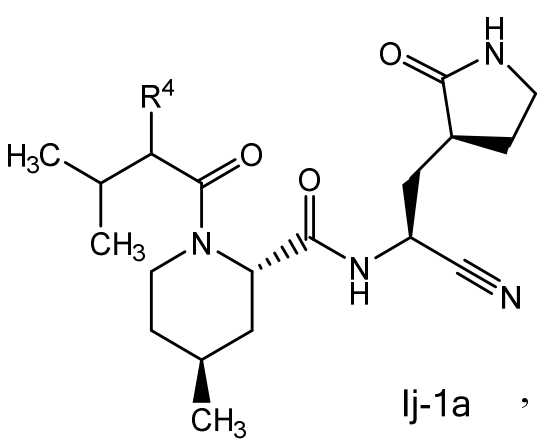
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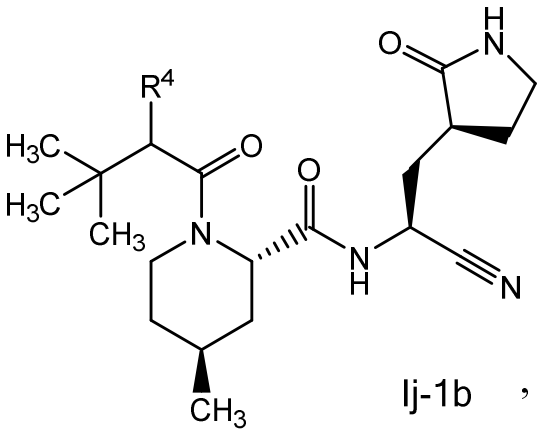
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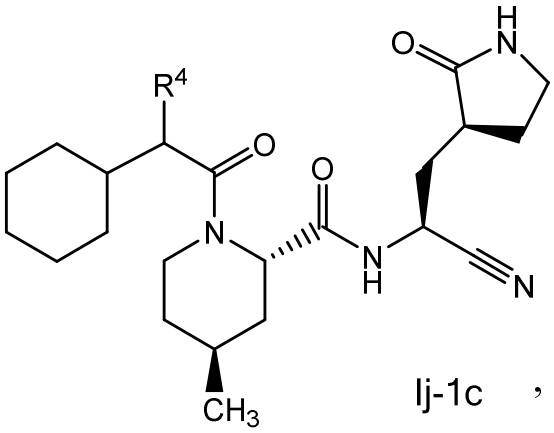
Ii-1c



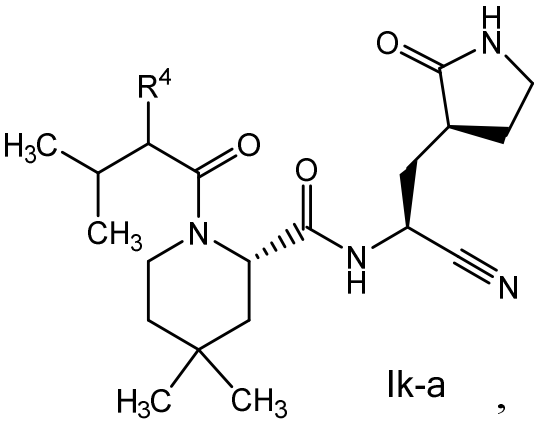
Ij-1a ,



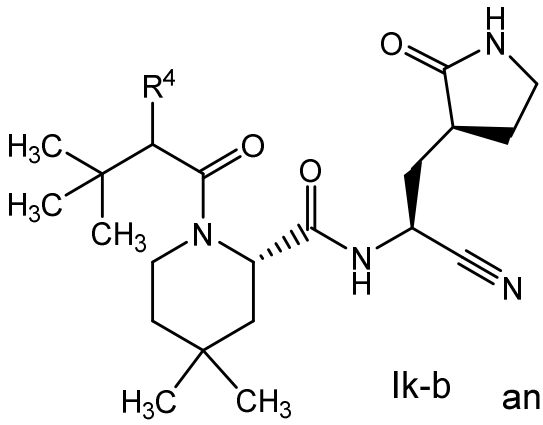
Ij-1b ,



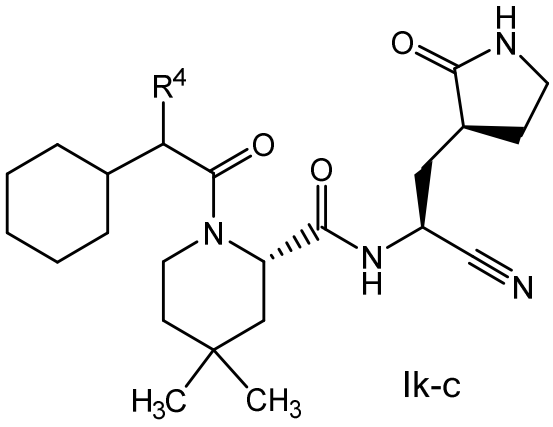
Ij-1c ,



Ik-a ,



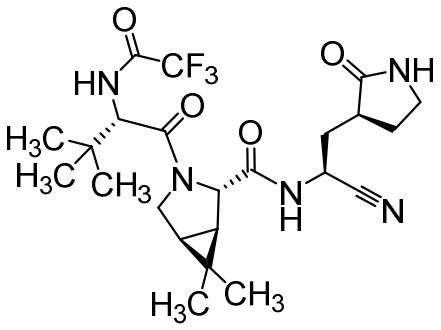
Ik-b and



Ik-c

wherein R^4 is selected from the group consisting of (C_1-C_6 alkyl)amino optionally substituted with one to five fluoro, C_1-C_6 alkyl-C(O)NH- optionally substituted with one to five fluoro, and C_1-C_6 alkyl-$S(O)_2$NH- optionally substituted with one to five fluoro;

or a solvate or hydrate thereof, or a pharmaceutically acceptable salt of said compound, solvate or hydrate excluding the compound (1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide having the structure

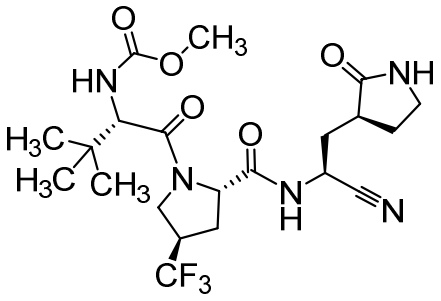

;

or a solvate or hydrate thereof or a pharmaceutically acceptable salt of said compound, solvate or hydrate.

2. The compound of claim 1 wherein R^4 is selected from the group consisting of $CF_3C(O)NH$-, $CF_3S(O)_2NH$-, $CH_3C(O)NH$-, $CH_3CH_2C(O)NH$- and CF_3CH_2NH-; or a solvate or hydrate thereof, or a pharmaceutically acceptable salt of said compound, solvate or hydrate.

3. The compound of claim 2 wherein R^4 is $CF_3C(O)NH$- or $CF_3S(O)_2NH$-; or a solvate or hydrate thereof.

4. The compound *N*-(Methoxycarbonyl)-3-methyl-L-valyl-(4*R*)-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-4-(trifluoromethyl)-L-prolinamide having the structure


;

or a solvate or hydrate thereof.

5. The compound of claim 4 which is *N*-(Methoxycarbonyl)-3-methyl-L-valyl-(4*R*)-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-4-(trifluoromethyl)-L-prolinamide.

6. A pharmaceutical composition comprising the compound of any one of claims 1 to 4 or a solvate or hydrate thereof or the compound of claim 5 together with a pharmaceutically acceptable carrier.

7. Use of 10 mg to 1500 mg of the compound according to any one of claims 1 to 4 or a solvate or hydrate thereof or the compound of claim 5, in the manufacture of a medicament for treating a coronavirus infection in a patient.

8. The use of claim 7 wherein the coronavirus infection is COVID-19.

9. The use of claim 7 wherein the medicament is an oral medicament.

10. The use of claim 7 wherein the amount of the compound according to any one of claims 1 to 4 or a solvate or hydrate thereof or the compound of claim 5 is 100 mg, 150 mg, 200 mg, 250 mg, 300 mg, 350 mg, 400 mg, 450 mg, 500 mg, 550 mg, 600 mg, 650 mg, 700 mg or 750 mg.

11. Use of the compound of any one of claims 1 to 4 or a solvate or hydrate thereof or the compound of claim 5 in the manufacture of a medicament for treating a coronavirus infection in a patient.

12. A compound selected from the group consisting of
(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;
(2*S*,4*R*)-4-*tert*-Butyl-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-1-{*N*-[(trifluoromethyl)sulfonyl]-L-valyl}piperidine-2-carboxamide;

(2*R*,4*S*)-4-*tert*-Butyl-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-1-{*N*-[(trifluoromethyl)sulfonyl]-L-valyl}piperidine-2-carboxamide;

3-Methyl-*N*-(trifluoroacetyl)-L-valyl-(4*R*)-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl] ethyl}-4-(trifluoromethyl)-L-prolinamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(methylcarbamoyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

Methyl {(2*S*)-1-[(1*R*,2*S*,5*S*)-2-({(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl} carbamoyl)-6,6-dimethyl-3-azabicyclo[3.1.0]hexan-3-yl]-3,3-dimethyl-1-oxobutan-2-yl}carbamate;

N-(Trifluoroacetyl)-L-valyl-(4*R*)-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-4-(trifluoromethyl)-L-prolinamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*R*)-5-hydroxy-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*,6*R*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6-(hydroxymethyl)-6-methyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*,6*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6-(hydroxymethyl)-6-methyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-[3-(hydroxymethyl)-*N*-(trifluoroacetyl)-L-valyl]-6,6-dimethyl-3-azabicyclo [3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*R*)-2,5-dioxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[5,5,5-trifluoro-2-(2,2,2-trifluoroacetamido)pentanoyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-[(2*S*)-2-cyclohexyl-2-{[(trifluoromethyl)sulfonyl]amino}acetyl]-6,6-dimethyl-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-[3-cyclobutyl-*N*-(trifluoroacetyl)-L-alanyl]-6,6-dimethyl-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-[3-cyclobutyl-*N*-(trifluoroacetyl)-D-alanyl]-6,6-dimethyl-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-(pyridin-2-yl)-*N*-(trifluoroacetyl)-L-alanyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-{*N*-[(4-fluorophenoxy) acetyl]-3-methyl-L-valyl}-6,6-dimethyl-3-azabicyclo[3.1.0]hexane-2-carboxamide;

3-Methyl-*N*-[(4-methylphenyl)acetyl]-L-valyl-(4*R*)-*N*-{(1*S*)-1-cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-4-(trifluoromethyl)-L-prolinamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-(1*H*-pyrazol-1-yl)-*N*-(trifluoroacetyl)-L-alanyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide;

(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-3-[(2*S*)-4,4-difluoro-2-(2,2,2-trifluoroacetamido)butanoyl]-6,6-dimethyl-3-azabicyclo[3.1.0] hexane-2-carbox-amide; and

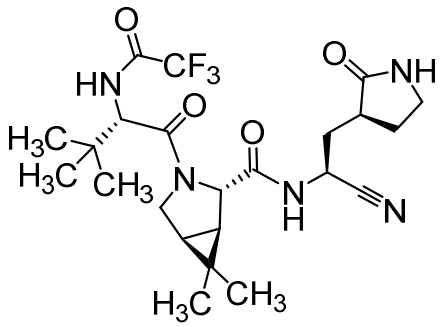
(1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[2-(2,2,2-trifluoroacetamido)-3-(trifluoromethyl)pentanoyl]-3-azabicyclo[3.1.0] hexane-2-carbox- amide;
or a solvate or hydrate thereof.

13. A pharmaceutical composition comprising a compound of claim 12 or a solvate or hydrate thereof and a pharmaceutically acceptable carrier.

14. Use of the compound of claim 12 or a solvate or hydrate thereof or the pharmaceutical composition of claim 13 in the manufacture of a medicament for treating a coronavirus infection in a patient.

15. The use of claim 14 wherein the coronavirus infection is COVID-19.

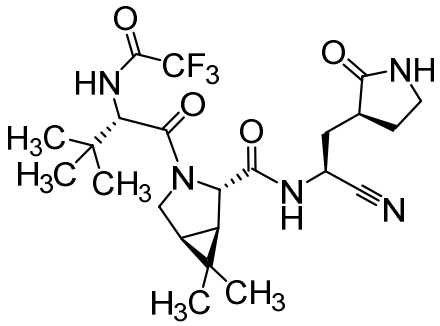
16. Use of a combination comprising (1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide having the structure



; and

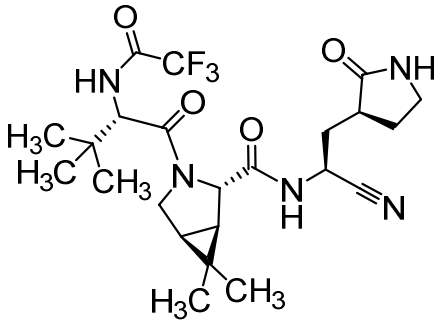
Ritonavir in the manufacture of a medicament for the treatment of a coronavirus infection.

17. Use of (1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide having the structure



in the manufacture of a medicament for the treatment of a coronavirus infection, wherein the medicament is to be used in combination with Ritonavir.

18. Use of Ritonavir in the manufacture of a medicament for the treatment of a coronavirus infection, wherein the medicament is to be used in combination with (1*R*,2*S*,5*S*)-*N*-{(1*S*)-1-Cyano-2-[(3*S*)-2-oxopyrrolidin-3-yl]ethyl}-6,6-dimethyl-3-[3-methyl-*N*-(trifluoroacetyl)-L-valyl]-3-azabicyclo[3.1.0]hexane-2-carboxamide having the structure



19. The use according to any one of claims 16 to 18, wherein the coronavirus infection is COVID-19.