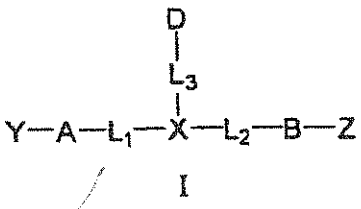
Claims

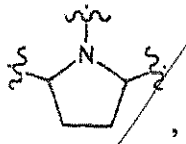
1. A compound of Formula I, or a pharmaceutically acceptable salt thereof,



I

wherein:

X is

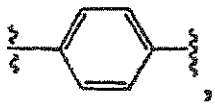


,

wherein the nitrogen ring atom is directly linked to -L_3-D, and wherein X is optionally substituted with one or more R_A;

L_1, L_2 and L_3 are bond;

A and B are each independently



,

and are each independently optionally substituted with one or more R_A;

D is C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, and is optionally substituted with one or more R_A;

Y is -G-$C(R_1R_2)N(R_5)$-T-R_D, -G-$C(R_3R_4)C(R_6R_7)$-T-R_D, $N(R_B)C(O)C(R_1R_2)N(R_5)$-T-$R_D$, or $N(R_B)C(O)C(R_3R_4)C(R_6R_7)$-T-$R_D$;

Z is -G-$C(R_8R_9)N(R_{12})$-T-R_D, -G-$C(R_{10}R_{11})C(R_{13}R_{14})$-T-$R_D$,-$N(R_B)C(O)C(R_8R_9)N(R_{12})$-T-$R_D$, or $N(R_B)C(O)C(R_{10}R_{11})C(R_{13}R_{14})$-T-$R_D$;

R_1 is R_C, and R_2 and R_5, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A;

R_3 and R_6 are each independently R_C, and R_4 and R_7, taken together with the atoms to which they are attached, form a 3- to 12-membered carbocycle or heterocycle which is optionally substituted with one or more R_A;

R_8 is R_C, and R_9 and R_{12}, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A;

R_{10} and R_{13} are each independently R_C, and R_{11} and R_{14}, taken together with the atoms to which they are attached, form a 3- to 12-membered carbocycle or heterocycle which is optionally substituted with one or more R_A;

G is each independently C_5-C_6carbocycle or 5- to 6-membered heterocycle, and is each independently optionally substituted with one or more R_A;

T is each independently selected at each occurrence from bond, -L_S-, -L_S-M-L_S'-, or -L_S-M-L_S'-M'-L_S"-, wherein M and M' are each independently selected at each occurrence from bond, -O-, -S-, -$N(R_B)$-, -C(O)-, -$S(O)_2$-, -S(O)-, -OS(O)-, -$OS(O)_2$-, -$S(O)_2O$-, -S(O)O-, -C(O)O-, -OC(O)-, -OC(O)O-, -C(O)$N(R_B)$-,-$N(R_B)$C(O)-, -$N(R_B)$C(O)O-, -OC(O)$N(R_B)$-, -$N(R_B)$S(O)-, -$N(R_B)S(O)_2$-, -S(O)$N(R_B)$-, -$S(O)_2N(R_B)$-, -C(O)$N(R_B)$C(O)-, -$N(R_B)$C(O)$N(R_B')$-, -$N(R_B)SO_2N(R_B')$-, -$N(R_B)$S(O)$N(R_B')$-, C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, and wherein said C_3-C_{12}carbocycle and 3- to 12-membered heterocycle are each independently optionally substituted at each occurrence with one or more R_A;

R_D is each independently selected at each occurrence from hydrogen or R_A;

R_A is independently selected at each occurrence from halogen, nitro, oxo, phosphonoxy, phosphono, thioxo, cyano, or -L_S-R_E;

R_B and R_B' are each independently selected at each occurrence from hydrogen; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-membered carbocycle or heterocycle in R_B or R_B' is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_C is independently selected at each occurrence from hydrogen, halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl or cyano; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino,

carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-membered carbocycle or heterocycle in R_C is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_E is independently selected at each occurrence from -O-R_S, -S-R_S, -C(O)R_S, - OC(O)R_S, - C(O)OR_S, -N($R_S$$R_S$'), -S(O)$R_S$, -$SO_2R_S$, -C(O)N($R_S$$R_S$'), - N($R_S$)C(O)$R_S$'. -N($R_S$)C(O)N($R_S$'$R_S$"), - N($R_S$)$SO_2R_S$', -$SO_2$N($R_S$RS'), - N($R_S$)$SO_2$N($R_S$'$R_S$"), -N($R_S$)S(O)N($R_S$'$R_S$"), -OS(O)-$R_S$, -$OS(O)_2$-$R_S$, - $S(O)_2OR_S$, -S(O)OR_S, -OC(O)OR_S, N(R_S)C(O)OR_S', -OC(O)N($R_S$$R_S$'), - N($R_S$)S(O)-$R_S$', - S(O)N($R_S$$R_S$') or -C(O)N($R_S$)C(O)-$R_S$'; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl or cyano; or C_3-C_6carbocycle or 3- to 6-membered heterocycle, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_L is independently selected at each occurrence from halogen, nitro, oxo, phosphonoxy, phosphono, thioxo, cyano, -O-R_S, -S-R_S, -C(O)R_S, -OC(O)R_S, - C(O)OR_S, -N($R_S$$R_S$'), -S(O)$R_S$, -$SO_2R_S$, -C(O)N($R_S$$R_S$') or -N($R_S$)C(O)$R_S$'; or C_3-C_6carbocycle or 3- to 6-membered heterocycle, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

Ls, Ls' and L_S" are each independently selected at each occurrence from bond; or C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene, each of which is independently optionally substituted at each occurrence with one or more R_L; and

R_S, R_S' and R_S" are each independently selected at each occurrence from hydrogen; C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-membered carbocycle or heterocycle in R_S, R_S' or R_S' is independently optionally substituted at

each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl,
wherein each said heterocycle is independently a saturated ring system, a partially unsaturated ring system, or a completely unsaturated ring system, wherein at least one ring atom in said ring system is a heteroatom.

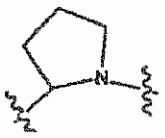
2. The compound or salt of claim 1, wherein:

T is independently selected at each occurrence from -C(O)-L_S'-M'-L_S"- or - N(R_B)C(O)-L_S'-M'-L_S"-; and
L_S' is each independently C_1-C_6alkylene, and is independently optionally substituted at each occurrence with one or more R_L.

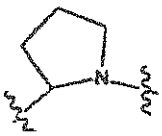
3. The compound or salt of claim 1, wherein:

Y is -N(R_B)C(O)C(R_1R_2)N(R_5)-T-R_D;
Z is -N(R_B)C(O)C(R_8R_9)N(R_{12})-T-R_D;
T is independently selected at each occurrence from -C(O)-L_S'-M'-L_S"-; and
D is C_5-C_6carbocycle, 5- to 6-membered heterocycle, or 6- to 10-membered bicycles, and is substituted with one or more R_A.

4. The compound or salt of claim 3, wherein T is independently selected at each occurrence from -C(O)-L_S'-N(R_B)C(O)-L_S"- or -C(O)-L_S'-N(R_B)C(O)O-L_S"-; and R_2 and R_S, taken together with the atoms to which they are attached, form



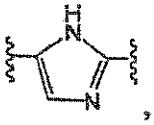
which is optionally substituted with one or more R_A; and R_9 and R_{12}, taken together with the atoms to which they are attached, form



which is optionally substituted with one or more R_A.

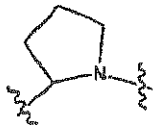
5. The compound or salt of claim 1, wherein:

Y is -G-$C(R_1R_2)N(R_5)$-T-R_D;
Z is -G-$C(R_8R_9)N(R_{12})$-T-R_D;
G is each independently

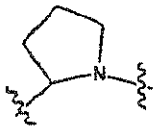


and is each independently optionally substituted with one or more R_A;
T is independently selected at each occurrence from -C(O)-L_S'-M'-L_S"-; and
D is C_5-C_6carbocycle, 5- to 6-membered heterocycle, or 6- to 10-membered bicycles, and is substituted with one or more R_A.

6. The compound or salt of claim 5, wherein T is independently selected at each occurrence from -C(O)-L_S'-$N(R_B)$C(O)-L_S"- or -C(O)L_S'-$N(R_B)$C(O)O-L_S" -; and R_2 and R_5, taken together with the atoms to which they are attached, form



which is optionally substituted with one or more R_A; and R_9 and R_{12}, taken together with the atoms to which they are attached, form



which is optionally substituted with one or more R_A.

7. A pharmaceutical composition comprising a compound or salt according to claim 1.

8. A pharmaceutical composition according to claim 7 further comprising another anti-HCV agent.

9. The compound or salt of claim 1, where said compound is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2S,5S)-1-(4-fluorophenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

10. The compound or salt of claim 1, where said compound is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2S,5S)-1-(4-*tert*-butylphenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

11. The compound or salt of claim 1, where said compound is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2R,5R)-1-(4-*tert*-butylphenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

12. The compound of claim 1 which is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2S,5S)-1-(4-fluorophenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

13. The compound of claim 1 which is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2S,5S)-1-(4-*tert*-butylphenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

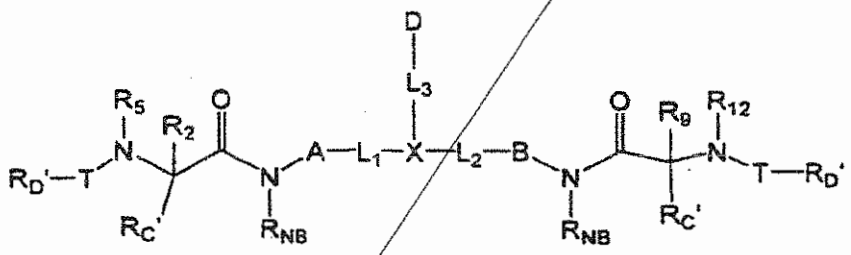
14. The compound of claim 1 which is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2R,5R)-1-(4-*tert*-butylphenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

15. A pharmaceutical composition comprising the compound of claim 12.

16. A pharmaceutical composition comprising the compound of claim 13.

17. A pharmaceutical composition comprising the compound of claim 14.

18. The compound or salt of claim 1, wherein said compound has Formula I_A,



I_A

wherein:

R_{NB} is each independently selected from R_B;

R_C' is each independently selected from R_C;

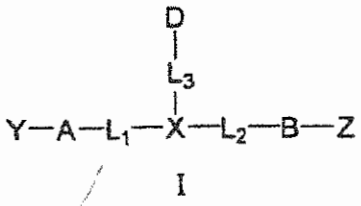
R_D' is each independently selected from R_D;

R_2 and R_5, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A; and

R_9 and R_{12}, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A.

19. A compound or composition of any one of claims 1-18 for use in the treatment of HCV infection.

20. A compound of Formula I, or a pharmaceutically acceptable salt thereof,



I

wherein:

X is 3- to 12-membered heterocycle, and is optionally substituted with one or more R_A;

L_1 and L_2 are each independently selected from bond; or C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene, each of which is independently optionally substituted at each occurrence with one or more R_L;

L_3 is bond or -L_S-K-L_S'-, wherein K is selected from bond, -O-, -S-, -N(R_B)-, - C(O)-, -S(O)$_2$-, -S(O)-, -OS(O)-, -OS(O)$_2$-, -S(O)$_2$O-, -S(O)O-, -C(O)O-, - OC(O)-, -OC(O)O-, -C(O)N(R_B)-, -N(R_B)C(O)-, -N(R_B)C(O)O-, - OC(O)N(R_B)-, -N(R_B)S(O)-, -N(R_B)S(O)$_2$-, -S(O)N(R_B)-, -S(O)$_2$N(R_B)-, -C(O)N(R_B)C(O)-, -N(R_B)C(O)N(R_B')-, -N(R_B)SO$_2$N(R_B')-, or -N(R_B)S(O)N(R_B')-;

A and B are each independently C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, and are each independently optionally substituted with one or more R_A;

D is C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, which is substituted with J and optionally substituted with one or more R_A, wherein J is C_3-C_{12}carbocycle or 3- to 12-membered heterocycle and is optionally substituted with one or more R_A, or J is-SF_5;

Y is selected from -T'-C(R_1R_2)N(R_5)-T-R_D, -T'-C(R_3R_4)C(R_6R_7)-T-R_D, -L_K-T-R_D, or-L_K-E;

R_1 and R_2 are each independently R_C, and R_S is R_B; or R_1 is R_C, and R_2 and R_5, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A;

R_3, R_4, R_6, and R_7 are each independently R_C; or R_3 and R_6 are each independently R_C, and R_4 and R_7, taken together with the atoms to which they are attached, form a 3- to 12-membered carbocycle or heterocycle which is optionally substituted with one or more R_A;

Z is selected from -T'-C(R_SR_9)N(R_{12})-T-R_D, -T'-C($R_{10}R_{11}$)C($R_{13}R_{14}$)-T-R_D, -L_K-T-R_D, or -L_K-E;

R_8 and R_9 are each independently R_C, and R_{12} is R_B; or R_8 is R_C, and R_9 and R_{12}, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A;

R_{10}, R_{11}, R_{13}, and R_{14} are each independently R_C; or R_{10} and R_{13} are each independently R_C, and

R_{11} and R_{14}, taken together with the atoms to which they are attached, form a 3- to 12-membered carbocycle or heterocycle which is optionally substituted with one or more R_A;

T and T' are each independently selected at each occurrence from bond, -L_S-, -L_S-M-L_S'-, or -L_S-M-L_S'-M'-L_S"-, wherein M and M' are each independently selected at each occurrence from bond, -O-, -S-, -N(R_B)-, -C(O)-, -S(O)$_2$-, -S(O)-, -OS(O)-, -OS(O)$_2$-, -S(O)$_2$O-, -S(O)O-, -C(O)O-, -OC(O)-, -OC(O)O-, -C(O)N(R_B)-, -N(R_B)C(O)-, -N(R_B)C(O)O-, -OC(O)N(R_B)-, -N(R_B)S(O)-, -N(R_B)S(O)$_2$-, -S(O)N(R_B)-, -S(O)$_2$N(R_B)-, -C(O)N(R_B)C(O)-, -N(R_B)C(O)N(R_B')-, -N(R_B)SO$_2$N(R_B')-, -N(R_B)S(O)N(R_B')-, C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, and wherein said C_3-C_{12}carbocycle and 3- to 12-membered heterocycle are each independently optionally substituted at each occurrence with one or more R_A;

L_K is independently selected at each occurrence from bond, -L_S-N(R_B)C(O)-L_S'- or -L_S-C(O)N(R_B)-L_S'-; or C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene, each of which is independently optionally substituted at each occurrence with one or more R_L; or C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, each of which is independently optionally substituted at each occurrence with one or more R_A;

E is independently selected at each occurrence from C_3-C_{12}carbocycle or 3- to 12-membered heterocycle, and is independently optionally substituted at each occurrence with one or more R_A;

R_D is each independently selected at each occurrence from hydrogen or R_A;

R_A is independently selected at each occurrence from halogen, nitro, oxo, phosphonoxy, phosphono, thioxo, cyano, or -L_S-R_E, wherein two adjacent R_A, taken together with the atoms to which they are attached and any atoms between the atoms to which they are attached, can optionally form carbocycle or heterocycle;

R_B and R_B' are each independently selected at each occurrence from hydrogen; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-membered carbocycle or heterocycle in R_B or R_B' is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_C is independently selected at each occurrence from hydrogen, halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl or cyano; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each

occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-membered carbocycle or heterocycle in R_C is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_E is independently selected at each occurrence from -O-R_S, -S-R_S, -C(O)R_S, - OC(O)R_S, -C(O)OR_S, -N($R_S$$R_S$'), -S(O)$R_S$, -$SO_2R_S$, -C(O)N($R_S$$R_S$'), - N($R_S$)C(O)$R_S$', -N($R_S$)C(O)N($R_S$'$R_S$"), -N($R_S$)$SO_2R_S$', -$SO_2$N($R_S$$R_S$'), - N($R_S$)$SO_2$N($R_S$'$R_S$"), -N($R_S$)S(O)N($R_S$'$R_S$"), -OS(O)-$R_S$, -OS(O)2-$R_S$, - $S(O)_2OR_S$, -S(O)OR_S, -OC(O)OR_S, -N(R_S)C(0)OR_S' -OC(O)N($R_S$$R_S$'), - N($R_S$)S(O)-$R_S$', -S(O)N($R_S$$R_S$') or -C(O)N($R_S$)C(O)-$R_S$'; or C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl or cyano; or C_3-C_6carbocycle or 3- to 6-membered heterocycle, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

R_L is independently selected at each occurrence from halogen, nitro, oxo, phosphonoxy, phosphono, thioxo, cyano, -O-R_S, -S-R_S, -C(O)R_S, -OC(O)R_S, - C(O)OR_S, -N($R_S$$R_S$'), -S(O)$R_S$, -$SO_2R_S$, -C(O)N($R_S$$R_S$') or -N($R_S$)C(O)$R_S$'; or C_3-C_6carbocycle 3- to 6-membered heterocycle, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl;

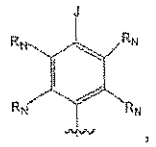
L_S, L_S' and L_S" are each independently selected at each occurrence from bond; or C_1-C_6alkylene, C_2-C_6alkenylene or C_2-C_6alkynylene, each of which is independently optionally substituted at each occurrence with one or more R_L; and

R_S, R_S' and R_S" are each independently selected at each occurrence from hydrogen; C_1-C_6alkyl, C_2-C_6alkenyl or C_2-C_6alkynyl, each of which is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano or 3- to 6-membered carbocycle or heterocycle; or 3- to 6-membered carbocycle or heterocycle; wherein each 3- to 6-

membered carbocycle or heterocycle in R_S , R_S' or R_S' is independently optionally substituted at each occurrence with one or more substituents selected from halogen, hydroxy, mercapto, amino, carboxy, nitro, oxo, phosphonoxy, phosphono, thioxo, formyl, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6haloalkyl, C_2-C_6haloalkenyl or C_2-C_6haloalkynyl.

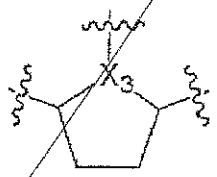
21. The compound or salt of claim 20, wherein D is C_5-C_6carbocycle or 5- to 6-membered heterocycle and is optionally substituted with one or more R_A, and J is C_3-C_6carbocycle or 3-to 6-membered heterocycle and is optionally substituted with one or more R_A.

22. The compound or salt of claim 20, wherein D is



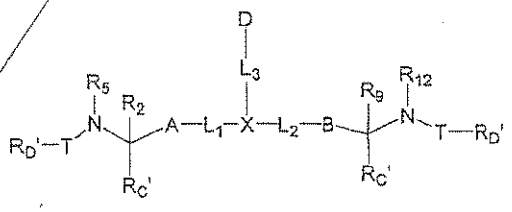
and each R_N is independently selected from R_D.

23. The compound or salt of claim 20, wherein X is



and is optionally substituted with one or more R_A, wherein X_3 is N and is directly linked to -L_3-D, and wherein L_1, L_2 and L_3 are bond.

24. The compound or salt of claim 20, wherein said compound has Formula I_B,



I_B

wherein:

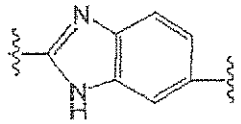
R_C' is each independently selected from R_C;

R_D' is each independently selected from R_D;

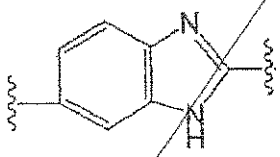
R_2 and R_5, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A; and

R_9 and R_{12}, taken together with the atoms to which they are attached, form a 3- to 12-membered heterocycle which is optionally substituted with one or more R_A.

25. The compound or salt of claim 24, wherein A is



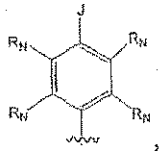
and is optionally substituted with one or more R_A; and B is



and is optionally substituted with one or more R_A.

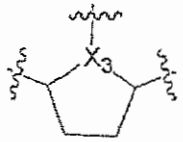
26. The compound or salt of claim 24, wherein D is C_5-C_6carbocycle or 5- to 6-membered heterocycle and is optionally substituted with one or more R_A, and J is C_3-C_6carbocycle or 3-to 6-membered heterocycle and is optionally substituted with one or more R_A.

27. The compound or salt of claim 24, wherein D is and each R_N is independently selected from R_D.



28. The compound or salt of claim 24, wherein -T-R_D' is each independently selected from -C(O)-L_Y'-R_D', -C(Ø)O-L_Y'-R_D', -C(O)-L_Y'-N(R_B)C(O)-L_S"-R_D', -C(O)-L_Y' - N(R_B)C(O)O-L_S"-R_D', -N(R_B)C(O)-L_Y'-N(R_B)C(O)-L_S"-R_D), -N(R_B)C(O)-L_Y'-N(R_B)C(O)O-L_S"-R_D', or -N(R_B)C(O)-L_Y'-N(R_B)-L_S"-R_D', and wherein L_Y' is each independently L_S'.

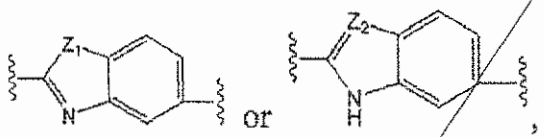
29. The compound or salt of claim 24, wherein X is



and is optionally substituted with one or more R_A, wherein X_3 is N and is directly linked to -L_3-D, and wherein L_1, L_2 and L_3 are bond.

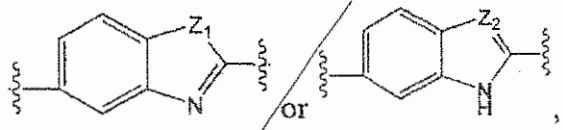
30. The compound or salt of claim 24, wherein:

A is



and is optionally substituted with one or more R_A;

B is



and is optionally substituted with one or more R_A;

D is C_5-C_6carbocycle or 5- to 6-membered heterocycle, and is optionally substituted with one or more R_A;

Z_1 is independently selected at each occurrence from O, S, NH or CH_2;

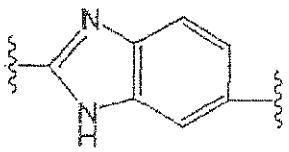
Z_2 is independently selected at each occurrence from N or CH;

L_1, L_2, and L_3 are bond;

-T-R_D' is independently selected at each occurrence from -C(O)-L_Y'-N(R_B)C(O)-L_S"-R_D' or -C(O)-L_Y'-N(R_B)C(O)O-L_S"-R_D', wherein L_Y' is C_1-C_6alkylene and optionally substituted with one or more substituents selected from R_L,

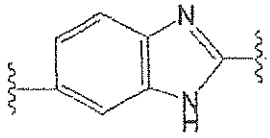
31. The compound or salt of claim 24, wherein:

A is



and is optionally substituted with one or more R_A;

B is

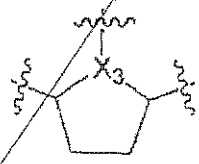


and is optionally substituted with one or more R_A.

D is C_5-C_6carbocycle or 5- to 6-membered heterocycle and is optionally substituted with one or more R_A;

J is C_3-C_6carbocycle or 3- to 6-membered heterocycle and is optionally substituted with one or more R_A.

X is

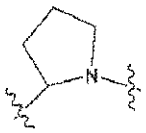


and is optionally substituted with one or more R_A, wherein X_3 is N and is directly linked to -L_3-D;

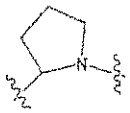
L_1, L_2 and L_3 are bond; and

-T-R_D' is each independently selected from -C(O)-L_Y'-R_D', -C(O)O-L_Y'-R_D', - C(O)-L_Y'-N(R_B)C(O)-L_S"-R_D', -C(O)-L_Y'-N(R_B)C(O)O-L_S"-R_D', N(R_B)C(O)-L_Y'-N(R_B)C(O)-L_S"-R_D', -N(R_B)C(O)-L_Y'-N(R_B)C(O)O-L_S'-R_D', or -N(R_B)C(O)-L_Y'-N(R_B)-L_S"-R_D', and wherein L_Y' is each independently L_S'.

32. The compound or salt of claim 31, wherein -T-R_D' is each independently selected from -C(O)L_Y'-N(R_B)C(O)-R_D' or -C(O)-L_Y'-N(R_B)C(O)O-R_D' and R_2 and R_5, taken together with the atoms to which they are attached, form

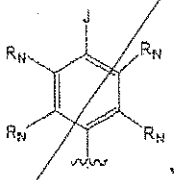


which is optionally substituted with one or more R_A; and R_9 and R_{12}, taken together with the atoms to which they are attached, form



which is optionally substituted with one or more R_A.

33. The compound or salt of claim 32, wherein D is



and each R_N is independently selected from R_D, and J is C_3-C_6carbocycle or 3- to 6-membered heterocycle and is optionally substituted with one or more R_A.

34. The compound or salt of claim 20, wherein said compound is methyl [(2S)-1-{(2S)-2-[4-(4-{5-(4-{2-[(2S)-1-{(2S)-2-[(methoxycarbonyl)amino]-3-methylbutanoyl}pyrrolidin-2-yl]-1H-imidazol-4-yl}phenyl)-1-[6-(piperidin-1-yl)pyridin-3-yl]-1H-pyrrol-2-yl}phenyl)-1H-imidazol-2-yl]pyrrolidin-1-yl}-3-methyl-1-oxobutan-2-yl]carbamate.

35. The compound or salt of claim 20, wherein said compound is methyl {(2S)-1-[(2S)-2-{5-[(2R,5R)-1-[3-fluoro-4-(piperidin-1-yl)phenyl]-5-{2-[(2S)-1-{(2S)-2-[(methoxycarbonyl)amino]-3-methylbutanoyl)pyrrolidin-2-yl]-1H-benzimidazol-5-yl}pyrrolidin-2-yl]-1H-benzimidazol-2-yl}pyrrolidin-1-yl]-3-methyl-1-oxobutan-2-yl}carbamate.

36. A pharmaceutical composition comprising the compound of claim 34.

37. A pharmaceutical composition comprising the compound of claim 35.

Claims

1. A compound, which is dimethyl (2S,2'S)-1,1'-((2S,2'S)-2,2'-(4,4'-((2S,5S)-1-(4-*tert*-butylphenyl)pyrrolidine-2,5-diyl)bis(4,1-phenylene))bis(azanediyl)bis(oxomethylene)bis(pyrrolidine-2,1-diyl))bis(3-methyl-1-oxobutane-2,1-diyl)dicarbamate.

2. A pharmaceutical composition comprising the compound of claim 1 or a pharmaceutically acceptable salt thereof.

3. Use of the compound of claim 1, or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating a patient infected with HCV.