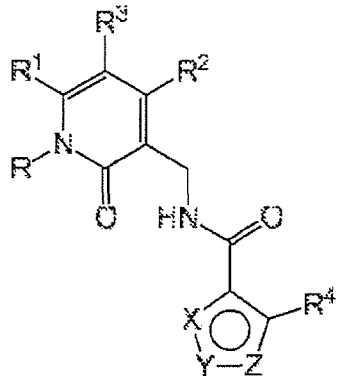
CLAIMS

1. A compound according to Formula (I):



(I)

wherein:

X is S and Y is CR^6; or

Y is S and X is CR^6;

Z is CR^5;

R is hydrogen or $(C_1\text{-}C_4)$alkyl;

R1, R2, and R3 are each independently selected from the group consisting of hydrogen, (C1-C4)alkoxy, (C1-C8)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, halo(C1-C4)alkyl, (C3-C8)cycloalkyl, hydroxy(C1-C4)alkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, RaO(O)CNH(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, halogen,

cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb,

nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -ORa, -OC(O)Ra, and -OC(O)NRaRb, wherein each (C3-C8)cycloalkyl, (C6-C10)bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by hydroxyl, halogen, nitro, (C1-C4)alkyl, cyano, (C1-C4)alkoxy, -NRaRb or -CO2Ra;

R4 is selected from the group consisting of hydrogen, (C1-C3)alkoxy, (C1-C3)alkyl, hydroxyl, halogen, cyano, (C3-C6)cycloalkyl, heterocycloalkyl, -NRaRb, halo(C1-C3)alkyl, and hydroxy(C1-C3)alkyl;

R5 is selected from the group consisting of (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, heteroaryl, and -NRaRb, wherein said (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by halogen, -ORa, -NRaRb, -NHCO2Ra, nitro, (C1-C3)alkyl, RaRbN(C1-C3)alkyl-, RaO(C1-C3)alkyl-, (C3-C8)cycloalkyl, cyano, -CO2Ra, -C(O)NRaRb, -SO2NRaRb, heterocycloalkyl, aryl, or heteroaryl, wherein said (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1 or 2 times, independently, by halogen, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-; or any 2 optional substituents on said (C2-C8)alkenyl taken together with the carbon atom(s) to which they are attached represent a 5-8 membered ring, optionally containing a heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1 or 2 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-;

R6 is selected from the group consisting of hydrogen, halogen, (C1-C8)alkyl, (C1-C4)alkoxy, -B(OH)2, (C3-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, RaRbN(C1-C4)alkyl-, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -ORa, -OC(O)Ra, and -OC(O)NRaRb, wherein each cycloalkyl, bicycloalkyl, heterocycloalkyl, aryl, or

heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by Rc-(C1-C6)alkyl-O-, Rc-(C1-C6)alkyl-S-, Rc-(C1-C6)alkyl-, (C1-C4)alkyl-heterocycloalkyl-, halogen, (C1-C6)alkyl, (C3-C8)cycloalkyl, halo(C1-C6)alkyl,

cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -ORa, -OC(O)Ra, -OC(O)NRaRb, heterocycloalkyl, aryl, heteroaryl, aryl(C1-C4)alkyl, or heteroaryl(C1-C4)alkyl;

R7 is selected from the group consisting of hydrogen, (C1-C8)alkyl, (C3-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SO2Ra, -SO2NRaRb, and RaRbN(C1-C4)alkyl-, wherein each cycloalkyl, bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by Rc-(C1-C6)alkyl-O-, Rc-(C1-C6)alkyl-S-, Rc-(C1-C6)alkyl-, (C1-C4)alkyl-heterocycloalkyl-, halogen, (C1-C6)alkyl, (C3-C8)cycloalkyl, halo(C1-C6)alkyl,

cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -ORa, -OC(O)Ra, -OC(O)NRaRb, heterocycloalkyl, aryl, heteroaryl, aryl(C1-C4)alkyl, or heteroaryl(C1-C4)alkyl;

each Rc is independently -S(O)Ra, -SO2Ra, -NRaRb, -NRaC(O)ORa, -NRaSO2Rb, or -CO2Ra; and

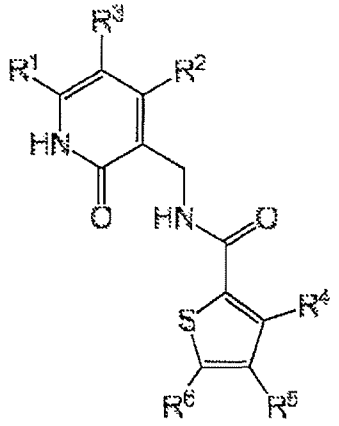
Ra and Rb are each independently hydrogen, (C1-C4)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, (C3-C10)cycloalkyl, heterocycloalkyl, aryl, aryl(C1-C4)alkyl-, heteroaryl(C1-C4)alkyl-, or heteroaryl, wherein any said cycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by halogen, hydroxyl, (C1-C4)alkoxy, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO2H, -CO2(C1-C4)alkyl, -CONH2, -CONH(C1-C4)alkyl, -CON((C1-C4)alkyl)2, -SO2(C1-C4)alkyl, -SO2NH2, -SO2NH(C1-C4)alkyl, or -SO2N((C1-C4)alkyl)2;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 5-8 membered saturated or unsaturated ring, optionally containing an additional heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1, 2, or 3 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-, wherein said ring is optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 6- to 10-membered bridged bicyclic ring system optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1 represented by Formula (II)(a):



(II)(a)

wherein:

R1, R2, and R^3 are each independently selected from the group consisting of hydrogen, (C1-C4)alkoxy, (C1-C8)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, halo(C1-C4)alkyl, (C3-C8)cycloalkyl, hydroxy(C1-C4)alkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, RaO(O)CNH(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, halogen,

cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2 NRaRb,

nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -OR a, -OC(O)Ra, and -OC(O)NRaRb, wherein each (C3-C8)cycloalkyl, (C6-C10)bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by hydroxyl, halogen, nitro, (C1-C4)alkyl, cyano, (C1-C4)alkoxy, -NRaRb or -CO2Ra;

R4 is selected from the group consisting of hydrogen, (C1-C3)alkoxy, (C1-C3)alkyl, hydroxyl, halogen, cyano, (C3-C6)cycloalkyl, heterocycloalkyl, -NRaRb, halo(C1-C3)alkyl, and hydroxy(C1-C3)alkyl;

R5 is selected from the group consisting of (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, heteroaryl, and -NRaRb, wherein said (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by halogen, -ORa, -NRaRb, -NHCO2Ra, nitro, (C1-C3)alkyl, RaRbN(C1-C3)alkyl-, RaO(C1-C3)alkyl-, (C3-C8)cycloalkyl, cyano, -CO2Ra, -C(O)NRaRb, -SO2NRaRb, heterocycloalkyl,aryl, or heteroaryl, wherein said (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1 or 2 times, independently, by halogen, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-; or any 2 optional substituents on said (C2-C8)alkenyl taken together with the carbon atom(s) to which they are attached represent a 5-8 membered ring, optionally containing a heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1 or 2 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-;

R6 is selected from the group consisting of hydrogen, halogen, (C1-C8)alkyl, (C1-C4)alkoxy, -B(OH)2, (C3-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl,

aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl,
cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, RaRbN(C1-C4)alkyl-, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -ORa, -OC(O)Ra, and -OC(O)NRaRb, wherein each cycloalkyl, bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by Rc-(C1-C6)alkyl-O-, Rc-(C1-C6)alkyl-S-, Rc-(C1-C6)alkyl-, (C1-C4)alkyl-heterocycloalkyl-, halogen, (C1-C6)alkyl, (C3-C8)cycloalkyl, halo(C1-C6)alkyl, cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -ORa, -OC(O)Ra, -OC(O)NRaRb, heterocycloalkyl, aryl, heteroaryl, aryl(C1-C4)alkyl, or heteroaryl(C1-C4)alkyl;

each Rc is independently -S(O)Ra, -SO2Ra, -NRaRb, -NRaC(O)ORa, -NRaSO2Rb, or -CO2Ra; and

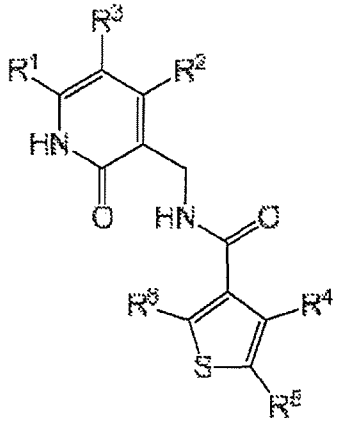
Ra and Rb are each independently hydrogen, (C1-C4)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, (C3-C10)cycloalkyl, heterocycloalkyl, aryl, aryl(C1-C4)alkyl-, heteroaryl(C1-C4)alkyl-, or heteroaryl, wherein any said cycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by halogen, hydroxyl, (C1-C4)alkoxy, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO2H, -CO2(C1-C4)alkyl, -CONH2, -CONH(C1-C4)alkyl, -CON((C1-C4)alkyl)2, -SO2(C1-C4)alkyl, -SO2NH2, -SO2NH(C1-C4)alkyl, or -SO2N((C1-C4)alkyl)2;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 5-8 membered saturated or unsaturated ring, optionally containing an additional heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1, 2, or 3 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-, wherein said ring is optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 6- to 10-membered bridged bicyclic ring system optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or a pharmaceutically acceptable salt thereof.

3. The compound according to claim 1 represented by Formula (III)(a):



(III)(a)

wherein:

R1, R2, and R3 are each independently selected from the group consisting of hydrogen, (C1-C4)alkoxy, (C1-C8)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, halo(C1-C4)alkyl, (C3-C8)cycloalkyl, hydroxy(C1-C4)alkyl, (C3-C8)cycloalkyl(C_1-C_4)alkyl-, RaO(O)CNH(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, halogen,
cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb,
nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -OR a, -OC(O)Ra, and -OC(O)NRaRb, wherein each (C3-C8)cycloalkyl, (C6-C10)bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by hydroxyl, halogen, nitro, (C1-C4)alkyl, cyano, (C1-C4)alkoxy, -NRaRb or -CO2Ra;

R4 is selected from the group consisting of hydrogen, (C1-C3)alkoxy,

(C1-C3)alkyl, hydroxyl, halogen, cyano, (C3-C6)cycloalkyl, heterocycloalkyl, -NRaRb, halo(C1-C3)alkyl, and hydroxy(C1-C3)alkyl;

R5 is selected from the group consisting of (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, heteroaryl, and -NRaRb, wherein said (C4-C8)alkyl, (C2-C8)alkenyl, (C3-C8)alkoxy, (C4-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C2)alkyl-, (C3-C8)cycloalkyloxy-, heterocycloalkyl, heterocycloalkyl(C1-C2)alkyl-, heterocycloalkyloxy-, or heteroaryl is optionally substituted 1, 2, or 3 times, independently, by halogen, -ORa, -NRaRb, -NHCO2Ra, nitro, (C1-C3)alkyl, RaRbN(C1-C3)alkyl-, RaO(C1-C3)alkyl-, (C3-C8)cycloalkyl, cyano, -CO2Ra, -C(O)NRaRb, -SO2NRaRb, heterocycloalkyl, aryl, or heteroaryl, wherein said (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted 1 or 2 times, independently, by halogen, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-; or any 2 optional substituents on said (C2-C8)alkenyl taken together with the carbon atom(s) to which they are attached represent a 5-8 membered ring, optionally containing a heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1 or 2 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, -CO(C1-C4)alkyl, -CO2(C1-C4)alkyl, -NRaRb, -NHCO2Ra, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-;

R6 is selected from the group consisting of hydrogen, halogen, (C1-C8)alkyl, (C1-C4)alkoxy, -B(OH)2, (C3-C8)cycloalkyl, (C3-C8)cycloalkyl(C1-C4)alkyl-, (C6-C10)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, aryl, aryl(C1-C4)alkyl, heteroaryl, heteroaryl(C1-C4)alkyl, cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -C(O)NRaNRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, RaRbN(C1-C4)alkyl-, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -NRaNRaRb, -NRaNRaC(O)Rb, -NRaNRaC(O)NRaRb, -NRaNRaC(O)ORa, -ORa, -OC(O)Ra, and -OC(O)NRaRb, wherein each cycloalkyl, bicycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by

Rc-(C1-C6)alkyl-O-, Rc-(C1-C6)alkyl-S-, Rc-(C1-C6)alkyl-, (C1-C4)alkyl-heterocycloalkyl-, halogen, (C1-C6)alkyl, (C3-C8)cycloalkyl, halo(C1-C6)alkyl, cyano, -C(O)Ra, -CO2Ra, -C(O)NRaRb, -SRa, -S(O)Ra, -SO2Ra, -SO2NRaRb, nitro, -NRaRb, -NRaC(O)Rb, -NRaC(O)NRaRb, -NRaC(O)ORa, -NRaSO2Rb, -NRaSO2NRaRb, -ORa, -OC(O)Ra, -OC(O)NRaRb, heterocycloalkyl, aryl, heteroaryl, aryl(C1-C4)alkyl, or heteroaryl(C1-C4)alkyl;

each Rc is independently -S(O)Ra, -SO2Ra, -NRaRb, -NRaC(O)ORa, -NRaSO2Rb, or -CO2Ra; and

Ra and Rb are each independently hydrogen, (C1-C4)alkyl, (C1-C4)alkoxy(C1-C4)alkyl-, (C3-C10)cycloalkyl, heterocycloalkyl, aryl, aryl(C1-C4)alkyl-, heteroaryl(C1-C4)alkyl-, or heteroaryl, wherein any said cycloalkyl, heterocycloalkyl, aryl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by halogen, hydroxyl, (C1-C4)alkoxy, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, (C1-C4)alkyl, halo(C1-C4)alkyl, -CO2H, -CO2(C1-C4)alkyl, -CONH2, -CONH(C1-C4)alkyl, -CON((C1-C4)alkyl)2, -SO2(C1-C4)alkyl, -SO2NH2, -SO2NH(C1-C4)alkyl, or -SO2N((C1-C4)alkyl)2;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 5-8 membered saturated or unsaturated ring, optionally containing an additional heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1, 2, or 3 times, independently, by (C1-C4)alkyl, halo(C1-C4)alkyl, amino, -NH(C1-C4)alkyl, -N((C1-C4)alkyl)2, hydroxyl, oxo, (C1-C4)alkoxy, or (C1-C4)alkoxy(C1-C4)alkyl-, wherein said ring is optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or Ra and Rb taken together with the nitrogen to which they are attached represent a 6- to 10-membered bridged bicyclic ring system optionally fused to a (C3-C8)cycloalkyl, heterocycloalkyl, aryl, or heteroaryl ring;

or a pharmaceutically acceptable salt thereof.

4. The compound according to any one of claims 1-3, wherein R^1, R^2, and R^3 are each independently selected from the group consisting of hydrogen, (C_1-C_4)alkoxy, (C_1-C_4)alkyl,

$(C_1\text{-}C_4)$alkoxy$(C_1\text{-}C_4)$alkyl-, halo$(C_1\text{-}C_4)$alkyl, and hydroxy$(C_1\text{-}C_4)$alkyl, or a pharmaceutically acceptable salt thereof.

5. The compound according to any one of claims 1-4, wherein R^1 and R^2 are each independently $(C_1\text{-}C_4)$alkyl, or a pharmaceutically acceptable salt thereof.

6. The compound according to claim 5, wherein R^1 and R^2 are each methyl, or a pharmaceutically acceptable salt thereof.

7. The compound according to any one of claims 1-6, wherein R^3 is hydrogen, or a pharmaceutically acceptable salt thereof.

8. The compound according to any one of claims 1-7, wherein R^4 is selected from the group consisting of hydrogen, $(C_1\text{-}C_3)$alkyl, hydroxyl, halogen, halo$(C_1\text{-}C_3)$alkyl, and hydroxy$(C_1\text{-}C_3)$alkyl, or a pharmaceutically acceptable salt thereof.

9. The compound according to claim 8, wherein R^4 is selected from the group consisting of $(C_1\text{-}C_3)$alkyl and halogen, or a pharmaceutically acceptable salt thereof.

10. The compound according to any one of claims 1-9, wherein R^5 is selected from the group consisting of $(C_3\text{-}C_6)$alkoxy, $(C_3\text{-}C_6)$cycloalkyloxy-, heterocycloalkyloxy-, heterocycloalkyl, -NH($(C_3\text{-}C_6)$cycloalkyl), -N($(C_1\text{-}C_3)$alkyl)($(C_3\text{-}C_6)$cycloalkyl), -NH(heterocycloalkyl), and -N($(C_1\text{-}C_3)$alkyl)(heterocycloalkyl), wherein any said $(C_3\text{-}C_6)$alkoxy, $(C_3\text{-}C_6)$cycloalkyloxy-, heterocycloalkyloxy-, heterocycloalkyl, or $(C_3\text{-}C_6)$cycloalkyl is optionally substituted 1 or 2 times, independently, by halogen, hydroxyl, $(C_1\text{-}C_3)$alkoxy, amino, -NH$(C_1\text{-}C_3)$alkyl, -N$((C_1\text{-}C_3)\text{alkyl})_2$, $(C_1\text{-}C_3)$alkyl, $(C_1\text{-}C_3)$alkoxy$(C_1\text{-}C_3)$alkyl-, amino$(C_1\text{-}C_3)$alkyl-, $((C_1\text{-}C_3)\text{alkyl})\text{NH}(C_1\text{-}C_3)$alkyl-, $((C_1\text{-}C_3)\text{alkyl})_2\text{N}(C_1\text{-}C_3)$alkyl-, $(C_3\text{-}C_8)$cycloalkyl, cyano, $-CO_2R^a$, $-C(O)NR^aR^b$, $-SO_2NR^aR^b$, phenyl, or heteroaryl, or a pharmaceutically acceptable salt thereof.

11. The compound according to any one of claims 1-9, wherein R^5 is $(C_3\text{-}C_8)$cycloalkyl$(C_1\text{-}C_2)$alkyl- or heterocycloalkyl$(C_1\text{-}C_2)$alkyl-, each of which is optionally

substituted 1 or 2 times, independently, by $-NR^aR^b$, $-NHCO_2R^a$, (C_1-C_3)alkyl, or $R^aR^bN(C_1-C_3)$alkyl- , or a pharmaceutically acceptable salt thereof.

12. The compound according to any one of claims 1-9, wherein R^5 is $-NR^aR^b$, or a pharmaceutically acceptable salt thereof.

13. The compound according to claim 12, wherein R^a is azetidinyl, oxetanyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, or tetrahydropyranyl, each of which is optionally substituted 1 or 2 times, independently, by (C_1-C_4)alkyl, and R^b is hydrogen or (C_1-C_4)alkyl, or a pharmaceutically acceptable salt thereof.

14. The compound according to claim 12, wherein R^a is cyclopentyl or cyclohexyl, each of which is optionally substituted by amino, $-NH(C_1-C_4)$alkyl, or $-N((C_1-C_4)alkyl)_2$, and R^b is hydrogen or (C_1-C_4)alkyl, or a pharmaceutically acceptable salt thereof.

15. The compound according to any one of claims 1-9, wherein R^6 is hydrogen, halogen, (C_1-C_4)alkyl, or (C_1-C_4)alkoxy, or a pharmaceutically acceptable salt thereof.

16. The compound according to claim 15, wherein R^6 is hydrogen, fluorine, chlorine, or bromine, or a pharmaceutically acceptable salt thereof.

17. The compound according to claim 1 which is:

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-isopropoxy-3-methylthiophene-2-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-3-methylthiophene-2-carboxamide;

5-chloro-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-3-methylthiophene-2-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-3-methylthiophene-2-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-(((cis)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-3-methylthiophene-2-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((cis)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methylthiophene-3-carboxamide;

tert-butyl 4-((4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)(ethyl)amino)piperidine-1-carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(piperidin-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-(4-(dimethylamino)piperidin-1-yl)ethyl)thiophene-3-carboxamide;

5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-N-((6-methyl-2-oxo-4-(trifluoromethyl)-1,2-dihydropyridin-3-yl)methyl)thiophene-3-carboxamide;

5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methyl-N-((6-methyl-2-oxo-4-propyl-1,2-dihydropyridin-3-yl)methyl)thiophene-3-carboxamide;

5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methyl-N-((4-methyl-2-oxo-6-(trifluoromethyl)-1,2-dihydropyridin-3-yl)methyl)thiophene-3-carboxamide;

5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-N-((4-methoxy-6-methyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

2-bromo-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophene-3-carboxamide;

tert-butyl 4-((4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)(hydroxy)methyl)piperidine-1-carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(hydroxy(piperidin-4-yl)methyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(tetrahydro-2H-pyran-4-yl)pyrrolidin-2-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(piperidin-4-yl)-1H-pyrazol-4-yl)thiophene-3-carboxamide;

tert-butyl 3-(4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)pyrrolidine-1-carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(2-methylpyrrolidin-1-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-morpholinoethyl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-(4-(dimethylamino)piperidin-1-yl)ethyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-(4-(dimethylamino)piperidin-1-yl)propyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-morpholinopropyl)thiophene-3-carboxamide;

5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-N-((1,4,6-trimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)thiophene-3-carboxamide;

5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methyl-N-((1,4,6-trimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)thiophene-3-carboxamide;

(E)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(piperidin-4-yl)prop-1-en-1-yl)thiophene-3-carboxamide;

tert-butyl ((trans)-4-((E)-1-(4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)prop-1-en-1-yl)cyclohexyl)carbamate ;

5-((E)-1-((trans)-4-aminocyclohexyl)prop-1-en-1-yl)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-((E)-1-((trans)-4-(dimethylamino)cyclohexyl)prop-1-en-1-yl)-4-methylthiophene-3-carboxamide ;

5-(((trans)-4-aminocyclohexyl)(hydroxy)methyl)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((trans)-4-(dimethylamino)cyclohexyl)(hydroxy)methyl)-4-methylthiophene-3-carboxamide;

tert-butyl 4-(1-(4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)propyl)piperidine-1-carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(piperidin-4-yl)propyl)thiophene-3-carboxamide;

(S)-(-)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-(4-(dimethylamino)piperidin-1-yl)propyl)-4-methylthiophene-3-carboxamide;

(R)-(+)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-(4-(dimethylamino)piperidin-1-yl)propyl)-4-methylthiophene-3-carboxamide;

5-(1-((trans)-4-aminocyclohexyl)propyl)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

(-)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-((trans)-4-(dimethylamino)cyclohexyl)propyl)-4-methylthiophene-3-carboxamide;

(+)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-((trans)-4-(dimethylamino)cyclohexyl)propyl)-4-methylthiophene-3-carboxamide;

(+)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-((cis)-4-(dimethylamino)cyclohexyl)propyl)-4-methylthiophene-3-carboxamide;

(-)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(1-((cis)-4-(dimethylamino)cyclohexyl)propyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(piperidin-4-ylidene)propyl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1-(piperidin-4-yl)vinyl)thiophene-3-carboxamide;

2-bromo-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methylthiophene-3-carboxamide;

2-cyano-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-4-methylthiophene-3-carboxamide;

2-bromo-5-(diethylamino)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

2-chloro-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-2,4-dimethylthiophene-3-carboxamide;

2-cyano-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(4-methylpiperazin-1-yl)thiophene-3-carboxamide;

tert-butyl 3-(3-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophen-2-yl)pyrrolidine-1-

carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(pyrrolidin-3-yl)thiophene-3-carboxamide;

tert-butyl 4-(3-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methylthiophen-2-yl)piperidine-1-carboxylate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(piperidin-4-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(1-(methylsulfonyl)pyrrolidin-3-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(1-(methylsulfonyl)piperidin-4-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl((trans)-4-(ethyl(methyl)amino)cyclohexyl)amino)-4-methylthiophene-3-carboxamide;

ethyl (4-(((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)carbamoyl)-3-methylthiophen-2-yl)(ethyl)carbamate;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(1-isopropylpiperidin-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(3-fluoropiperidin-4-yl)amino)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(2-(piperidin-4-yl)pyrrolidin-1-yl)thiophene-3-carboxamide;

5-([2,4'-bipiperidin]-1-yl)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(1,2,3,4-tetrahydroisoquinolin-5-yl)thiophene-3-carboxamide;

(Z)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(5-

morpholinopent-2-en-3-yl)thiophene-3-carboxamide;

(Z)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(6-(4-methylpiperazin-1-yl)hex-2-en-3-yl)thiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-4-methyl-5-(6-(4-methylpiperazin-1-yl)hexan-3-yl)thiophene-3-carboxamide;

(Z)-N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(6-(4-(dimethylamino)piperidin-1-yl)hex-2-en-3-yl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-2-(furan-3-yl)-4-methylthiophene-3-carboxamide;

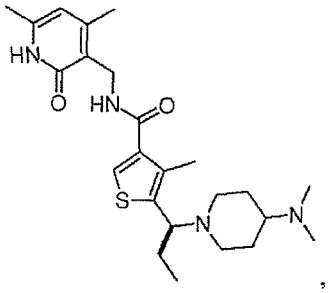
N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-2-(furan-2-yl)-4-methylthiophene-3-carboxamide;

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(((trans)-4-(dimethylamino)cyclohexyl)(ethyl)amino)-2-(furan-3-yl)-4-methylthiophene-3-carboxamide; or

N-((4,6-dimethyl-2-oxo-1,2-dihydropyridin-3-yl)methyl)-5-(ethyl(tetrahydro-2H-pyran-4-yl)amino)-4-methyl-2-(1-methyl-1H-pyrazol-4-yl)thiophene-3-carboxamide;

or a pharmaceutically acceptable salt thereof.

18. The compound according to claim 1 which is:



,

or a pharmaceutically acceptable salt thereof.

19. A pharmaceutical composition comprising the compound or pharmaceutically acceptable salt thereof according to any one of claims 1-18 and a pharmaceutically acceptable excipient.