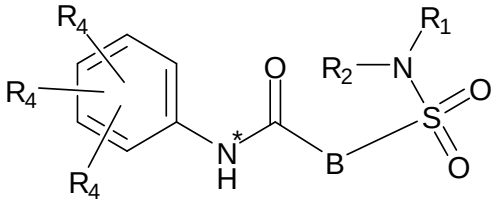
Each R_4 is independently selected from hydrogen, halogen, C_1-C_4alkyloxy, C_1-C_4alkyl, C_1-C_4alkenyl, OH, CN, CFH_2, CF_2H, CF_3 , HC≡C or a 3-5 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O and N, such C_1-C_4alkyl optionally substituted with OH;

R_5 represents C_1-C_6alkyl, CFH_2, CF_2H, CF_3, phenyl, pyridyl or a 3-7 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 3-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of hydrogen, halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

or a pharmaceutically acceptable salt or a solvate thereof.

According to one aspect, the disclosure relates to a compound of Formula (I)



(I)

or a stereoisomer or tautomeric form thereof, wherein:

B represents a monocyclic 5 to 6 membered aromatic ring, optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 5 to 6 membered aromatic ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_3alkyl, CN, CFH_2, CF_2H and CF_3;

R_1 represents hydrogen or C_1-C_3alkyl;

R_2 represents C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkyl-R_5, C(=O)-R_5, CFH_2, CF_2H, CF_3, a dihydro-indenyl or tetrahydronaphtalenyl moiety optionally substituted with OH, or a 3-7 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 3-7 membered saturated ring, C_1-C_6alkyl-R_5 or C_1-C_6alkyl optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

or R_1 and R_2 together with the Nitrogen to which they are attached form a 6-10 membered bicyclic or bridged ring or a 5-7 membered saturated ring, such bicyclic, bridged or saturated ring moiety optionally containing one or more additional heteroatoms each independently selected from the group consisting of O, S and N, such 5-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

Each R_4 is independently selected from hydrogen, halo, C_1-C_4alkyloxy, C_1-C_4alkyl, C_1-C_4alkenyl, OH, CN, CFH_2, CF_2H, CF_3 , HC≡C or a 3-5 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O and N, such C_1-C_4alkyl optionally substituted with OH, wherein one R_4 represents fluoro, and one other R_4 is selected from the group consisting of C_1-C_3alkyl, C_1-C_3alkenyl, CHF_2 or cyclopropyl;;

R_5 represents C_1-C_6alkyl, CFH_2, CF_2H, CF_3, phenyl, pyridyl or a 3-7 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 3-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

or a pharmaceutically acceptable salt or a solvate thereof,
wherein the compound is not a compound selected from the group consisting of N-(4-fluoro-3-methylphenyl)-3-(piperidin-1-ylsulfonyl)benzamide, N-(3-fluoro-4-methylphenyl)-3-(piperidin-1-ylsulfonyl)benzamide, N-(4-fluoro-3-methylphenyl)-6-fluoro-3-(piperidin-1-ylsulfonyl)benzamide, and N-(3-fluoro-4-methylphenyl)-6-fluoro-3-(piperidin-1-ylsulfonyl)benzamide.

According to another aspect, the disclosure further relates to a pharmaceutical composition comprising a compound of Formula (I), and a pharmaceutically acceptable carrier.

The disclosure also relates to the compounds of Formula (I) for use as a medicament preferably for use in the prevention or treatment of an HBV infection in a

mammal.

The disclosure relates to a combination of a compound of Formula (I), and another HBV inhibitor.

Definitions

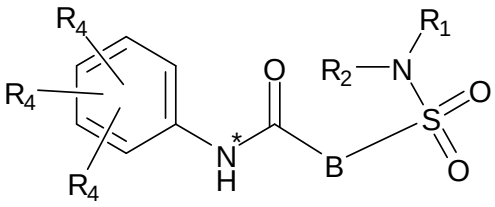
The term "C_{1-3}alkyl" as a group or part of a group refers to a hydrocarbyl radical of Formula C_nH_{2n+1} wherein n is a number ranging from 1 to 3. In case C_{1-3}alkyl is coupled to a further radical, it refers to a Formula $C_nH_{2n.}$. C_{1-3}alkyl groups comprise from 1 to 3 carbon atoms, more preferably 1 to 2 carbon atoms. C_{1-3}alkyl includes all linear, or branched alkyl groups with between 1 and 3 carbon atoms, and thus includes such as for example methyl, ethyl, *n*-propyl, and *i*-propyl.

C_{1-4}alkyl as a group or part of a group defines straight or branched chain saturated hydrocarbon radicals having from 1 to 4 carbon atoms such as the group defined for C_{1-3}alkyl and butyl and the like.

C_{1-6}alkyl as a group or part of a group defines straight or branched chain saturated hydrocarbon radicals having from 1 to 6 carbon atoms such as the groups defined for C_{1-4}alkyl and pentyl, hexyl, 2-methylbutyl and the like.

Claims

1. A compound of Formula (I)



(I)

or a stereoisomer or tautomeric form thereof, wherein:

B represents a monocyclic 5 to 6 membered aromatic ring, optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 5 to 6 membered aromatic ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_3alkyl, CN, CFH_2, CF_2H and CF_3;

R_1 represents hydrogen or C_1-C_3alkyl;

R_2 represents C_1-C_6alkyl, C_1-C_6alkenyl, C_1-C_6alkyl-R_5, C(=O)-R_5, CFH_2, CF_2H, CF_3, a dihydro-indenyl or tetrahydronaphtalenyl moiety optionally substituted with OH, or a 3-7 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 3-7 membered saturated ring, C_1-C_6alkyl-R_5 or C_1-C_6alkyl optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

or R_1 and R_2 together with the Nitrogen to which they are attached form a 6-10 membered bicyclic or bridged ring or a 5-7 membered saturated ring, such bicyclic, bridged or saturated ring moiety optionally containing one or more additional heteroatoms each independently selected from the group consisting of O, S and N, such 5-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

Each R_4 is independently selected from hydrogen, halo, C_1-C_4alkyloxy, C_1-C_4alkyl, C_1-C_4alkenyl, OH, CN, CFH_2, CF_2H, CF_3 , HC≡C or a 3-5 membered saturated ring

optionally containing one or more heteroatoms each independently selected from the group consisting of O and N, such C_1-C_4alkyl optionally substituted with OH, wherein one R_4 represents fluoro, and one other R_4 is selected from the group consisting of C_1-C_3alkyl, C_1-C_3alkenyl, CHF_2 or cyclopropyl;

R_5 represents C_1-C_6alkyl, CFH_2, CF_2H, CF_3, phenyl, pyridyl or a 3-7 membered saturated ring optionally containing one or more heteroatoms each independently selected from the group consisting of O, S and N, such 3-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, oxo, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3;

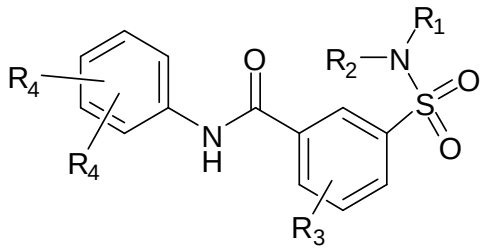
or a pharmaceutically acceptable salt or a solvate thereof,
wherein the compound is not a compound selected from the group consisting of N-(4-fluoro-3-methylphenyl)-3-(piperidin-1-ylsulfonyl)benzamide, N-(3-fluoro-4-methylphenyl)-3-(piperidin-1-ylsulfonyl)benzamide, N-(4-fluoro-3-methylphenyl)-6-fluoro-3-(piperidin-1-ylsulfonyl)benzamide, and N-(3-fluoro-4-methylphenyl)-6-fluoro-3-(piperidin-1-ylsulfonyl)benzamide.

2. A compound according to claim 1 wherein one R_4 represents fluoro and one other R_4 is selected from the group consisting of methyl or CHF_2 and wherein the location of said fluoro is on the *para* position and the location of said methyl or CHF_2 is on the *meta* position related to the Nitrogen(*).

3. The compound according to claims 1 or 2, wherein R_2 represents a 4-7 membered saturated ring containing carbon and one or more oxygen atoms, such 4-7 membered saturated ring optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_4alkyloxy, C_1-C_4alkyloxycarbonyl, C(=O)-C_1-C_3alkyl, C_1-C_4alkyl, OH, CN, CFH_2, CF_2H and CF_3.

4. The compound according to any one of the preceding claims, wherein B represents phenyl or thiophene, optionally being substituted with one or more substituents each independently selected from the group consisting of halogen, C_1-C_3alkyl, CN, CFH_2, CF_2H and CF_3.

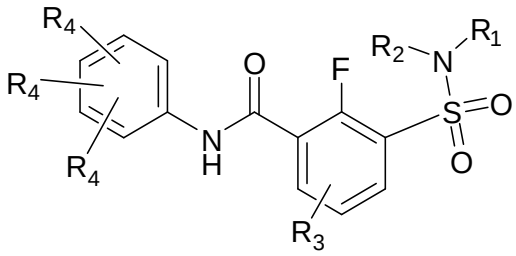
5. A compound according to any one of the preceding claims, which is of Formula (Ib)



(Ib)

wherein R_1, R_2, R_4 are defined as in any one of the previous claims and R_3 is selected from the group comprising hydrogen, halogen, C_1-C_3alkyl, CN, CFH_2, CF_2H, CF_3.

6. A compound according to any one of the preceding claims 1 to 4, which is of Formula (Id)

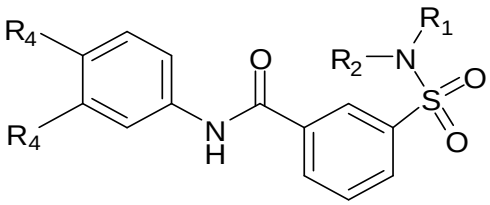


(Id)

wherein R_1, R_2, R_4 are defined as in any one of the previous claims 1 to 4 and R_3 is selected from the group comprising hydrogen, halogen, C_1-C_3alkyl, CN, CFH_2, CF_2H, CF_3.

7. A compound according to claim 5 or 6, wherein R_3 represents hydrogen.

8. A compound according to any one of the preceding claims 1 to 4, which is of Formula (Ic)



(Ic)

wherein R_1, R_2, R_4 are defined as in any one of the previous claims 1 to 4.

9. A pharmaceutical composition comprising a compound according to any one of claims 1 to 8, and a pharmaceutically acceptable carrier.