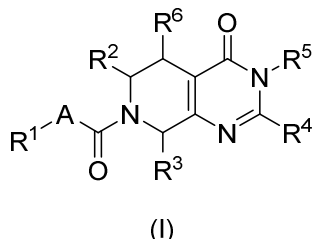


CLAIMS

1. A compound of Formula (I)



including any of its stereoisomers or tautomeric forms thereof, wherein:

- 5 A is a bond or NH;
R¹ is a 5- to 10-membered monocyclic or bicyclic ring system, more particularly a 5- to 9-membered monocyclic or bicyclic ring, wherein the 5- to 10-membered monocyclic or bicyclic ring system, more particularly the 5- to 9-membered monocyclic or bicyclic ring system, optionally contains 1 to 3 heteroatoms, the
10 heteroatoms each independently being selected from N, O and S;
wherein the 5- to 10-membered monocyclic or bicyclic ring, more particularly the 5- to 9-membered monocyclic or bicyclic ring is optionally substituted with one or more substituents each independently selected from the group consisting of halo, CN, CF₃, CF₂H, CFH₂, CF₂CH₃, C₁₋₆alkyl, OC₁₋₆alkyl, OCF₃,
15 OCF₂H, and C₃₋₄cycloalkyl;
or R¹ is selected from the group consisting of 1-methyl-2-oxo-1,3-dihydro-1H-benzo[d]imidazol-5-yl, 1-oxo-isindolin-5-yl, and 1,1-dioxo-benzo[b]thiophen-5-yl;
- 20 R² is selected from the group consisting of hydrogen, C₁₋₆alkyl, CF₃, CHF₂, CH₂F, phenyl and fluorophenyl;
- R³ is hydrogen;
- 25 R⁴ is X-R';
wherein X is NR'', S or O;
wherein R' is hydrogen, C₁₋₄alkyl, C₁₋₆alkyl substituted with OH, or C₂₋₃alkenyl, when X is NR'';
wherein R' is C₁₋₆alkyl, when X is S;
30 wherein R' is C₁₋₆alkyl, when X is O;

wherein R¹¹ is selected from the group consisting of hydrogen, Cycle1, Aryl1, C₂₋₄alkynyl, C₁₋₆alkyl and C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of

- fluoro,
- 5 OH,
- CO₂R¹⁶,
- OCONHR¹⁷,
- C₃₋₆cycloalkyl,
- C₃₋₆cycloalkyl substituted with one or more from among C₁₋₆alkyl,
- 10 N-acetyl piperidine,
- cubanyl,
- benzo[d][1,3]dioxole, and
- Aryl2;

wherein R¹⁶ is hydrogen or C₁₋₆alkyl;

- 15 wherein R¹⁷ is C₁₋₆alkyl;

wherein Cycle1 is selected from the group consisting of

- C₃₋₈cycloalkyl,
- C₃₋₈cycloalkyl containing a heteroatom, said heteroatom being an
- 20 oxygen atom,
- C₃₋₈cycloalkyl substituted with one or more substituents each independently selected from CH₃ and Aryl2,
- C₃₋₈cycloalkyl containing a heteroatom and being substituted with one or more substituents each independently selected from the group consisting of
- 25 CH₃, cyclopropyl, and Aryl2, said heteroatom being an oxygen atom,
- a 5- to 9- membered fused bicyclic unsaturated or saturated ring system, in particular a saturated heterocycle fused with an aromatic ring, which may be optionally substituted with OCH₃,
- a 5- to 9- membered bridged bicyclic unsaturated or saturated ring
- 30 system optionally substituted with 1, 2 or 3 CH₃ substituents,
- a C₅₋₁₂spirocycloalkyl, and
- cubanyl;

- wherein Aryl1 is selected from the group consisting of phenyl, monocyclic
- 35 heteroaryl, and bicyclic heteroaryl which is in particular an aromatic ring fused to a saturated ring or an aromatic ring fused to another aromatic ring, said Aryl1 being optionally substituted with CH₃;

wherein Aryl2 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl2 being optionally substituted with one or more substituents each independently selected from the group
5 consisting of halogens, CF₃, CF₂H, CH₂F, C₁₋₄alkyl, C₃₋₆cycloalkyl, CN, CONR¹⁸R¹⁹, OH, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, SO₂CH₃, imidazolyl optionally substituted with CH₃, phenyl optionally substituted with fluoro, and triazolyl;
wherein R¹⁸ and R¹⁹ are independently selected from the group consisting of
10 hydrogen, C₁₋₆alkyl and C₃₋₆cycloalkyl;

or wherein N, R' and R'' together form a cycle selected from the group consisting of
a C₃₋₈cycloalkyl ring,
15 a C₃₋₈cycloalkyl ring containing a heteroatom, said heteroatom being an oxygen atom, and optionally being substituted with CH₃,
a C₃₋₈cycloalkyl ring substituted with one or more substituents each independently selected from the group consisting of C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl,
20 a C₃₋₈cycloalkyl ring containing a heteroatom and being substituted with one or more substituents each independently selected from C₁₋₆alkyl, CN, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl, said heteroatom being an oxygen atom,
a C₅₋₁₂-spirocycloalkyl optionally substituted with CH₃, and
a C₅₋₆ bridged bicyclic saturated ring system;

25 R⁵ is selected from the group consisting of hydrogen, C₁₋₆alkyl, C₂₋₃alkenyl, Cycle2 and Aryl3;
wherein C₁₋₆alkyl is optionally substituted with one or more substituents each independently selected from the group consisting of phenyl, methoxyphenyl,
30 OC₁₋₆alkyl, NHSO₂CH₃, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

wherein Cycle2 is selected from the group consisting of
C₃₋₆cycloalkyl,
35 C₃₋₆cycloalkyl containing SO₂ or a heteroatom, the heteroatom being selected from the group consisting of oxygen and nitrogen,
C₃₋₆cycloalkyl substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl,

C₃₋₆cycloalkyl containing SO₂ or a heteroatom and being substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl, the heteroatom being selected from the group consisting of oxygen and nitrogen,

- 5 a 5-membered bridged bicyclic saturated ring substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
cubanyl optionally substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
isoindoline-1-one, and
indoline-2-one;

wherein R^{20a} is hydrogen or C₁₋₆alkyl;

- 10 wherein R^{20b} is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein Aryl3 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl3 being optionally substituted with one or more substituents each independently selected from the group

- 15 consisting of halogen, C₁₋₆alkyl, CF₃, CF₂H, CH₂F, CN, OC₁₋₆alkyl, OCF₃, OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², CO₂R²³, COR²⁴, CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle3 and Aryl4;

wherein R²¹ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein R²² is C₁₋₆alkyl or pyridine;

- 20 wherein R²³ is hydrogen or C₁₋₆alkyl;

wherein R²⁴ is selected from the group consisting of C₁₋₆alkyl, C₅₋₆heterocycle and C₅₋₆heterocycle substituted with CH₃;

wherein R²⁵ is hydrogen or CH₃;

wherein R²⁶ is selected from the group consisting of

- 25 hydrogen,

C₁₋₆alkyl,

C₁₋₆alkyl optionally substituted with one or more substituents each independently selected from the group consisting of OH, OCH₃, NH₂, CO₂H, C₃₋₆heterocycloalkyl and C₃₋₆heterocycloalkyl substituted with CH₃,

- 30 C₃₋₆cycloalkyl;

C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

C₃₋₆cycloalkyl substituted with CO₂H; and

- 35 C₃₋₆cycloalkyl containing a heteroatom and being substituted with CO₂H, said heteroatom being an oxygen atom;

wherein R²⁷ is selected from the group consisting of

C₁₋₆alkyl,

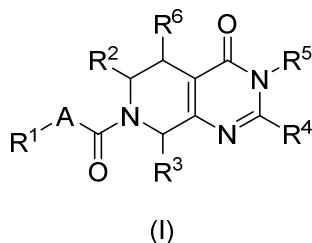
C₁₋₆alkyl substituted with C₃₋₆heterocycloalkyl, and
C₃₋₆heterocycloalkyl;
wherein R²⁸ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

- 5 wherein Cycle3 is selected from the group consisting of
C₃₋₆cycloalkyl,
C₃₋₆heterocycloalkyl,
C₃₋₆heterocycloalkyl substituted with one or more substituents each
independently selected from the group consisting of OH, CH₂OH, CO₂R²⁹,
10 NHCH₃ or NHCO₂*t*-Bu; and
imidazolidin-4-one substituted with CH₃;
wherein R²⁹ is hydrogen or C₁₋₆alkyl;

- wherein Aryl4 is selected from the group consisting of monocyclic heteroaryl
15 and bicyclic heteroaryl, said monocyclic or bicyclic heteroaryl being optionally
substituted with one or two substituents each independently selected from the
group consisting of halogens, CF₃, CH₂F, C₁₋₆alkyl, C₃₋₆cycloalkyl, OCF₃,
OCH₂F, OC₁₋₆alkyl, OC₃₋₆cycloalkyl, CO₂R³⁰, SO₂CH₃, and morpholine;
wherein R³⁰ is hydrogen or C₁₋₆alkyl;
20
wherein R', R'' and R⁵ are not all hydrogen; and

- wherein R⁶ is hydrogen, CH₃, CF₃ or CF₂H;
or a pharmaceutically acceptable salt thereof,
25 for use in the prevention or treatment of an HBV infection or of an HBV-induced
disease.

2. A compound of Formula (I)



- 30 including any of its stereoisomers or tautomeric forms thereof, wherein:
A is a bond or NH;

R¹ is a 5- to 10-membered monocyclic or bicyclic ring system, more particularly a 5- to 9-membered monocyclic or bicyclic ring system, wherein the 5- to 10-membered monocyclic or bicyclic ring system, more particularly the 5- to 9-membered monocyclic or bicyclic ring system, optionally contains 1 to 3 heteroatoms, the heteroatoms each independently being selected from N, O and S;

wherein the 5- to 10-membered monocyclic or bicyclic ring, more particularly the 5- to 9-membered monocyclic or bicyclic ring is optionally substituted with one or more substituents each independently selected from the group consisting of halo, CN, CF₃, CF₂H, CFH₂, CF₂CH₃, C₁₋₆alkyl, OC₁₋₆alkyl, OCF₃, OCF₂H, and C₃₋₄cycloalkyl;

or R¹ is selected from the group consisting of 1-methyl-2-oxo-1,3-dihydro-1H-benzo[d]imidazol-5-yl, 1-oxo-isoindolin-5-yl, and 1,1-dioxo-benzo[b]thiophen-5-yl;

R² is selected from the group consisting of hydrogen, C₁₋₆alkyl, CF₃, CHF₂, CH₂F, phenyl and fluorophenyl;

R³ is hydrogen;

R⁴ is X-R';

wherein X is NR'', S or O;

wherein R' is hydrogen, C₁₋₄alkyl, C₁₋₆alkyl substituted with OH, or C₂₋₃alkenyl, when X is NR'';

wherein R' is C₁₋₆alkyl, when X is S;

wherein R' is C₁₋₆alkyl, when X is O;

wherein R'' is selected from the group consisting of hydrogen, Cycle1, Aryl1, C₂₋₄alkynyl, C₁₋₆alkyl and C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of

fluoro,

OH,

CO₂R¹⁶,

CONHR¹⁷,

C₃₋₆cycloalkyl,

C₃₋₆cycloalkyl substituted with one or more from among C₁₋₆alkyl,

N-acetyl piperidine,

cubanyl,

benzo[d][1,3]dioxole, and

Aryl2;

wherein R¹⁶ is hydrogen or C₁₋₆alkyl;

wherein R¹⁷ is C₁₋₆alkyl;

5

wherein Cycle1 is selected from the group consisting of

C₃₋₈cycloalkyl,

C₃₋₈cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom,

10 C₃₋₈cycloalkyl substituted with one or more substituents each independently selected from CH₃ and Aryl2,

C₃₋₈cycloalkyl containing a heteroatom and being substituted with one or more substituents each independently selected from the group consisting of CH₃, cyclopropyl, and Aryl2, said heteroatom being an oxygen atom,

15 a 5- to 9-membered fused bicyclic unsaturated or saturated ring, in particular a saturated heterocycle fused with an aromatic ring which may be optionally substituted with OCH₃,

a 5- to 9-membered bridged bicyclic unsaturated or saturated ring optionally substituted with 1, 2 or 3 CH₃ substituents,

20 a C₅₋₁₂spirocycloalkyl, and cubanyl;

wherein Aryl1 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl which is in particular an aromatic ring fused to a saturated ring or an aromatic ring fused to another aromatic ring, said Aryl1 being optionally substituted with CH₃;

wherein Aryl2 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl2 being optionally substituted with one or more substituents each independently selected from the group consisting of halogens, CF₃, CF₂H, CH₂F, C₁₋₄alkyl, C₃₋₆cycloalkyl, CN, CONR¹⁸R¹⁹, OH, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, SO₂CH₃, imidazolyl optionally substituted with CH₃, phenyl optionally substituted with fluoro, and triazolyl;

35 wherein R¹⁸ and R¹⁹ are independently selected from the group consisting of hydrogen, C₁₋₆alkyl and C₃₋₆cycloalkyl;

or wherein R' and R'' together form a cycle or cycle system selected from the group consisting of

- a C₃₋₈cycloalkyl ring,
- a C₃₋₈cycloalkyl ring containing a heteroatom, said heteroatom being an oxygen atom, and optionally being substituted with CH₃,
- a C₃₋₈cycloalkyl ring substituted with one or more substituents each independently selected from the group consisting of C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl,
- a C₃₋₈cycloalkyl ring containing a heteroatom and being substituted with one or more substituents each independently selected from the group consisting of C₁₋₆alkyl, CN, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl, said heteroatom being an oxygen atom,
- a C₅₋₁₂-spirocycloalkyl optionally substituted with CH₃, and
- a C₅₋₆ bridged bicyclic saturated ring system;

15

R⁵ is selected from the group consisting of hydrogen, C₁₋₆alkyl, C₂₋₃alkenyl, Cycle2 and Aryl3;

- wherein C₁₋₆alkyl is optionally substituted with one or more substituents each independently selected from the group consisting of phenyl, methoxyphenyl, OC₁₋₆alkyl, NHSO₂CH₃, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

20

wherein Cycle2 is selected from the group consisting of

- C₃₋₆cycloalkyl,
- C₃₋₆cycloalkyl containing SO₂ or a heteroatom, the heteroatom being selected from the group consisting of oxygen and nitrogen,
- C₃₋₆cycloalkyl substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl,
- C₃₋₆cycloalkyl containing SO₂ or a heteroatom and being substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl, the heteroatom being selected from the group consisting of oxygen and nitrogen,
- a 5-membered bridged bicyclic saturated ring substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
- cubanyl optionally substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
- isoindoline-1-one, and
- indoline-2-one;

35

wherein R^{20a} is hydrogen or C₁₋₆alkyl;

wherein R^{20b} is C₁₋₆alkyl or C₃₋₆cycloalkyl;

- wherein Aryl3 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl3 being optionally substituted with one or more substituents each independently selected from the group
- 5 consisting of halo, C₁₋₆alkyl, CF₃, CF₂H, CH₂F, CN, OC₁₋₆alkyl, OCF₃, OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², CO₂R²³, COR²⁴, CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle3 and Aryl4;
- wherein R²¹ is C₁₋₆alkyl or C₃₋₆cycloalkyl;
- wherein R²² is C₁₋₆alkyl or pyridine;
- 10 wherein R²³ is hydrogen or C₁₋₆alkyl;
- wherein R²⁴ is selected from the group consisting of C₁₋₆alkyl, C₅₋₆heterocycle in particular C₅₋₆heterocycloalkyl and C₅₋₆heterocycle, in particular C₅₋₆heterocycloalkyl, substituted with CH₃;
- wherein R²⁵ is hydrogen or CH₃;
- 15 wherein R²⁶ is selected from the group consisting of
- hydrogen,
- C₁₋₆alkyl,
- C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of OH, OCH₃, NH₂, CO₂H, C₃₋
- 20 ₆heterocycloalkyl and C₃₋₆heterocycloalkyl substituted with CH₃,
- C₃₋₆cycloalkyl;
- C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;
- C₃₋₆cycloalkyl substituted with CO₂H; and
- 25 C₃₋₆cycloalkyl containing a heteroatom and being substituted with CO₂H, said heteroatom being an oxygen atom;
- wherein R²⁷ is selected from the group consisting of
- C₁₋₆alkyl,
- C₁₋₆alkyl substituted with C₃₋₆heterocycloalkyl, and
- 30 C₃₋₆heterocycloalkyl;
- wherein R²⁸ is C₁₋₆alkyl or C₃₋₆cycloalkyl;
- wherein Cycle3 is selected from the group consisting of
- C₃₋₆cycloalkyl,
- 35 C₃₋₆heterocycloalkyl,

C₃₋₆heterocycloalkyl substituted with one or more substituents each independently selected from the group consisting of OH, CH₂OH, CO₂R²⁹, NHCH₃ or NHCO₂*t*-Bu; and

imidazolidin-4-one substituted with CH₃;

5 wherein R²⁹ is hydrogen or C₁₋₆alkyl;

wherein Aryl₄ is selected from the group consisting of monocyclic heteroaryl and bicyclic heteroaryl, said monocyclic or bicyclic heteroaryl being optionally substituted with one or two substituents each independently selected from the
10 group consisting of halo, CF₃, CH₂F, C₁₋₆alkyl, C₃₋₆cycloalkyl, OCF₃, OCH₂F, OC₁₋₆alkyl, OC₃₋₆cycloalkyl, CO₂R³⁰, SO₂CH₃, and morpholine;
wherein R³⁰ is hydrogen or C₁₋₆alkyl;

wherein R', R'' and R⁵ are not all hydrogen; and R⁵ is not CH(Ph)₂ when R⁴ is
15 NH₂; and

wherein R⁶ is hydrogen, CH₃, CF₃ or CF₂H;

or a pharmaceutically acceptable salt thereof,

with the proviso that the compound is not

2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(2-methylimidazo[1,2-a]pyrimidin-3-yl)carbonyl]- Pyrido[3,4-d]pyrimidin-4(3H)-one,

7-[(2,3-dihydro-1,4-benzodioxin-6-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,

2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(4,5,6,7-tetrahydrobenzo[b]thien-3-yl)-carbonyl]- pyrido[3,4-d]pyrimidin-4(3H)-one,

5,6,7,8-tetrahydro-2-(1-piperidiny)-7-(4-thiazolylcarbonyl)- pyrido[3,4-d]-pyrimidin-4(3H)-one,

7-(2-fluorobenzoyl)-5,6,7,8-tetrahydro-2-(1-piperidiny)-pyrido[3,4-d]pyrimidin-4(3H)-one,

5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-7-(4-thiazolylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,

7-(3,4-dimethoxybenzoyl)-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-pyrido[3,4-d]pyrimidin-4(3H)-one,

5,6,7,8-tetrahydro-7-[(5-methyl-1-propyl-1H-pyrazol-4-yl)carbonyl]-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,

7-[(1-ethyl-3-methyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-pyrido[3,4-d]pyrimidin-4(3H)-one,

7-(2-furanylcarbonyl)-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
7-(3,4-dimethoxybenzoyl)-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(pyrazolo[1,5-a]pyrimidin-3-ylcarbonyl)-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-[(5-methyl-1-propyl-1H-pyrazol-4-yl)carbonyl]-2-(1-piperidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(3,4-dimethoxybenzoyl)-5,6,7,8-tetrahydro-2-(1-piperidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(2-pyridinylcarbonyl)-2-(1-pyrrolidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
2-(2,6-dimethyl-4-morpholinyl)-5,6,7,8-tetrahydro-7-(2-thienylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(cyclohexylcarbonyl)-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-7-[(5-methyl-1-propyl-1H-pyrazol-4-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2-furanylcarbonyl)-5,6,7,8-tetrahydro-2-(2-methyl-1-piperidinyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-piperidinyl)-7-(2-pyrazinylcarbonyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(2-methyl-1-piperidinyl)-7-(2-thienylcarbonyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
2-(2,6-dimethyl-4-morpholinyl)-7-(2-fluorobenzoyl)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-7-(5-quinoxaliny carbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1,2-dimethyl-1H-benzimidazol-5-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-morpholinyl)-7-[(4,5,6,7-tetrahydrobenzo[b]thien-3-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-7-[(3-methyl-1H-pyrazol-4-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2H-1-benzopyran-3-ylcarbonyl)-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,

5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-7-[(4,5,6,7-tetrahydro-1H-indazol-3-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(2,6-dimethyl-4-morpholinyl)-5,6,7,8-tetrahydro-7-(1H-pyrazol-3-ylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(1H-pyrazol-3-ylcarbonyl)-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2-furanylcarbonyl)-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1,3-dimethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1-ethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-methyl-1-piperidiny)-7-[(4-methyl-5-thiazolyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-[[5-(2-methylpropyl)-3-isoxazolyl]carbonyl]-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(3-pyridinylcarbonyl)-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2-fluorobenzoyl)-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(cyclohexylcarbonyl)-2-(2,6-dimethyl-4-morpholinyl)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-(5-quinoxaliny carbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(2-propyl-4-thiazolyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(3-chloro-2-thienyl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(1-ethyl-3-methyl-3-piperidiny)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(tetrahydro-2-furanyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-(4Hthieno[3,2-b]pyrrol-5-ylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(2,6-dimethoxy-3-pyridinyl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,

7-[(4-chloro-1H-pyrazol-3-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(1-ethyl-5-methyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-(2-hydroxybenzoyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(3-methylbenzo[b]thien-2-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(3-cyclohexyl-1H-pyrazol-4-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(7-methylpyrazolo[1,5-a]pyrimidin-6-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(6,7-dihydro-2-methoxy-5H-cyclopenta[b]pyridin-3-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(2-ethyl-4-methyl-5-oxazolyl)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2-chloro-3-methylbenzoyl)-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[2-(trifluoromethyl)benzoyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1,2-dihydro-1,4,6-trimethyl-2-oxo-3-pyridinyl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(6-methylimidazo[2,1-b]thiazol-5-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(1,4,5,6-tetrahydro-3-cyclopentapyrazolyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(2,3-dihydrothieno[3,4-b]-1,4-dioxin-5-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[[3-(2-methylpropyl)-5-isoxazolyl]carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-(4-propylbenzoyl)-pyrido[3,4-d]-pyrimidin-4(3H)-one,
7-[(6-chloroimidazo[1,2-a]pyridin-2-yl)carbonyl]-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[[1-ethyl-3-(1-methylethyl)-1H-pyrazol-5-yl]carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,

2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(1-methyl-1H-indol-2-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(2R)-2-pyrrolidinylcarbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(5,7-dimethyl-1,2,4-triazolo[4,3-a]pyrimidin-3-yl)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(7-methyl-2-benzofuranyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[[5-(1-methylethyl)-3-isoxazolyl]carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(5,7-dimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[[4-methyl-2-(1-methylethyl)-5-pyrimidinyl]carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(4,5,6,7-tetrahydro-5-methyl-2H-indazol-3-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(5-chloro-2-methoxybenzoyl)-2-(dimethylamino)-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(4,5,6,7-tetrahydro-5-methyl-1H-pyrazolo[4,3-c]pyridin-3-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-5,6,7,8-tetrahydro-7-[(1,2,3,4-tetrahydro-8-quinolinyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[[2-(ethylamino)-4-methyl-5-thiazolyl]carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
2-(dimethylamino)-7-[(2,7-dimethylpyrazolo[1,5-a]pyrimidin-5-yl)carbonyl]-5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-7-(1Hpyrazol-3-ylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[[3-(1,1-dimethylethyl)-1-methyl-1H-pyrazol-5-yl]carbonyl]-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(2-fluorobenzoyl)-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1-ethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(cyclohexylcarbonyl)-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,

7-[(1-ethyl-5-methyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1,5-dimethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-7-(2-pyrazinylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-piperidinyl)-7-[(1,4,5,6-tetrahydro-3-cyclopentapyrazolyl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1-ethyl-5-methyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-piperidinyl)-7-[(4,5,6,7-tetrahydro-1H-indazol-3-yl)carbonyl]-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(2,3-dihydro-1,4-benzodioxin-6-yl)carbonyl]-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-(3,5-difluorobenzoyl)-5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-pyrrolidinyl)-7-(2-thienylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(1-isoquinoliny carbonyl)-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-7-(1-isoquinoliny carbonyl)-2-(1-pyrrolidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1-ethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(1-piperidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-piperidinyl)-7-(2-thienylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
7-[(1,5-dimethyl-1H-pyrazol-4-yl)carbonyl]-5,6,7,8-tetrahydro-2-(4-methyl-1-piperidinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one,
5,6,7,8-tetrahydro-2-(1-piperidinyl)-7-(1H-pyrazol-3-ylcarbonyl)-pyrido[3,4-d]pyrimidin-4(3H)-one, or
7-[(2-cyclopropyl-4-quinolinyl)carbonyl]-5,6,7,8-tetrahydro-2-(4-morpholinyl)-pyrido[3,4-d]pyrimidin-4(3H)-one.

3. The compound according to claim 2, wherein

R¹ is selected from the group consisting of

phenyl optionally substituted with one or more substituents, in particular 1, 2 or

5 3 substituents, each independently selected from the group consisting of halo,

CN, CF₃, CF₂H, CH₂F, CF₂CH₃, C₁₋₆alkyl, OC₁₋₆alkyl, OCF₃, OCF₂H, and C₃₋₄cycloalkyl;

- 5 a 5- to 6-membered heteroaryl group selected from pyridyl, thienyl, pyrrolyl and pyrazolyl, each of which is optionally substituted with one or more substituents, in particular 1 to 2 substituents, each independently selected from the group consisting of halo, CN, CF₃, C₁₋₆alkyl, OC₁₋₆alkyl, and C₃₋₄cycloalkyl, more in particular selected from the group consisting of halo, CN, CF₃, and C₁₋₆alkyl;
- 10 a 8- to 10-membered bicyclic heteroaromatic ring system selected from the group consisting of
1H-indolyl, 2,3-dihydro-1H-pyrrolo[3,2-b]pyridinyl, 1H-benzo[d]imidazolyl, benzo[b]thiophenyl, thieno[2,3-c]pyridinyl, imidazo[1,2-a]pyridinyl, imidazo[1,5-a]pyridinyl, pyrazolo[1,5-a]pyridinyl, 1H-indazolyl, 1H-benzo-
15 [d][1,2,3]triazolyl, 1,1-dioxo-benzo[b]thiophenyl, [1,2,4]triazolo[1,5-a]pyridinyl, benzofuranyl, benzo[d]oxazolyl, benzo[d]thiazolyl, 4H-thieno[3,2-b]pyrrolyl, isoquinolinyl,
each of which is optionally substituted with one or more substituents, in particular 1, 2 or 3 substituents, each independently selected from the group
20 consisting of halo, CN, CF₃, C₁₋₆alkyl, OC₁₋₆alkyl, and OCF₃;
- a 9- to 10-ring system selected from the group consisting of chromanyl, indoliny, 2,3-dihydrobenzofuranyl, each optionally substituted with one or more substituents, in particular 1 or 2 substituents, each independently selected from
25 the group consisting of halo, C₁₋₆alkyl, and OC₁₋₆alkyl;
- cubanyl optionally substituted with a halo substituent;
- or R¹ is selected from the group consisting of 1-methyl-2-oxo-1,3-dihydro-1H-benzo[d]imidazol-5-yl, 1-oxo-isoinдолin-5-yl, and 1,1-dioxo-benzo[b]thiophen-5-yl.
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4. The compound according to claim 2 or 3, wherein
R⁴ is selected from the group consisting of -OC₁₋₆alkyl, -SC₁₋₆alkyl and NR'R",
35 wherein
R' is hydrogen, C₁₋₄alkyl, C₁₋₆alkyl substituted with OH, or C₂₋₃alkenyl; and

R" is selected from the group consisting of hydrogen, Cycle1, Aryl1, C₂₋₄alkynyl, C₁₋₆alkyl and C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of

- fluoro,
- 5 OH,
- CO₂R¹⁶,
- OCONHR¹⁷,
- C₃₋₆cycloalkyl,
- C₃₋₆cycloalkyl substituted with one or more from among C₁₋₆alkyl,
- 10 N-acetyl piperidine,
- cubanyl,
- benzo[d][1,3]dioxole, and
- Aryl2;

wherein R¹⁶ is hydrogen or C₁₋₆alkyl;

- 15 wherein R¹⁷ is C₁₋₆alkyl;

wherein Cycle1 is selected from the group consisting of

- C₃₋₈cycloalkyl
- C₃₋₈cycloalkyl containing a heteroatom, said heteroatom being an
- 20 oxygen atom,
- C₃₋₈cycloalkyl substituted with one or more substituents each independently selected from CH₃ and Aryl2,
- C₃₋₈cycloalkyl containing a heteroatom and being substituted with one or more substituents each independently selected from the group consisting of
- 25 CH₃, cyclopropyl, and phenyl, said heteroatom being an oxygen atom,
- a 5- to 9-membered membered fused bicyclic unsaturated or saturated ring, in particular a saturated heterocycle fused with an aromatic ring which may be optionally substituted with OCH₃,
- a 5- to 9-membered membered bridged bicyclic unsaturated or saturated
- 30 ring, optionally substituted with 1, 2 or 3 CH₃ substituents,
- a C₇₋₉spirocycloalkyl, and
- cubanyl;

- wherein Aryl1 is selected from the group consisting of phenyl, monocyclic
- 35 heteroaryl, and bicyclic heteroaryl which is in particular an aromatic ring fused to a saturated ring or an aromatic ring fused to another aromatic ring, said Aryl1 being optionally substituted with CH₃;

wherein Aryl2 is selected from the group consisting of

phenyl optionally substituted with one or more substituents each

independently selected from the group consisting of halo, CF₃, CF₂H, CH₂F,

- 5 C₁₋₄alkyl, C₃₋₆cycloalkyl, CN, CONR¹⁸R¹⁹, OH, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, SO₂CH₃, imidazolyl optionally substituted with CH₃, and triazolyl;

wherein R¹⁸ and R¹⁹ are independently selected from the group consisting of hydrogen, C₁₋₆alkyl and C₃₋₆cycloalkyl;

- 10 monocyclic 5- to 6-membered heteroaryl containing 1, 2 or 3 heteroatoms each independently selected from N, O and S, and being optionally substituted with one or more substituents each independently selected from the group consisting of halo, CF₃, CF₂H, CH₂F, C₁₋₄alkyl, C₃₋₆cycloalkyl, OH, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, and phenyl
15 optionally substituted with fluoro;

9- to 10-membered bicyclic heteroaryl which is in particular an aromatic ring fused to a saturated ring or an aromatic ring fused to another aromatic ring, containing 1, 2 or 3 heteroatoms each independently selected from N, S, and O, and being optionally substituted with one or more substituents each
20 independently selected from the group consisting of halo, C₁₋₄alkyl, OC₁₋₄alkyl, and C₃₋₆cycloalkyl;

or wherein NR' and R'' together form a saturated cycle or cycle system selected from the group consisting of

- 25 a 4- to 7-membered heterocycloalkyl ring, optionally containing a further heteroatom, said heteroatom being an oxygen, and said ring being optionally substituted with CH₃,

a 4- to 7-membered heterocycloalkyl ring optionally substituted with one or more substituents each independently selected from the group consisting of

- 30 C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl,

a C₅₋₁₂-spirocycloalkyl, in particular a C₆₋₈spirocycloalkyl, optionally substituted with CH₃, and

a C₅₋₆ bridged bicyclic saturated ring system, in particular 2-azabicyclo-[2.1.1]hexyl.

- 35 5. The compound according to any one of claims 2 to 4, wherein R⁵ is selected from the group consisting of hydrogen, C₁₋₆alkyl, Cycle2 and Aryl3;

wherein C₁₋₆alkyl is optionally substituted with one or more substituents each independently selected from the group consisting of phenyl, methoxyphenyl, OC₁₋₆alkyl, NHSO₂CH₃, and C₃₋₆cycloalkyl;

wherein Cycle2 is selected from the group consisting of

5 C₃₋₆cycloalkyl,

C₃₋₆cycloalkyl containing SO₂ or a heteroatom, the heteroatom being selected from the group consisting of oxygen and nitrogen,

C₃₋₆cycloalkyl substituted with CONHR^{20b} or SO₂C₁₋₆alkyl,

10 C₃₋₆cycloalkyl containing SO₂ or a heteroatom and being substituted with CONHR^{20b} or SO₂C₁₋₆alkyl, the heteroatom being selected from the group consisting of oxygen and nitrogen,

a 5-membered bridged bicyclic saturated ring, in particular bicyclo[1.1.1]pentanyl or bicyclo[2.1.0]pentanyl, substituted with CONHR^{20b}, and

15 cubanyl optionally substituted with CONHR^{20b};

wherein R^{20b} is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein Aryl3 is selected from the group consisting of

phenyl optionally substituted with one or more substituents each independently selected from the group consisting of halo, C₁₋₆alkyl, CF₃, CF₂H, 20 CH₂F, CN, OC₁₋₆alkyl, OCF₃, OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², COR²⁴, CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle3 and Aryl4;

5- to 6-membered monocyclic heteroaryl selected from the group consisting of

25 pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, triazolyl, pyridyl, pyridazinyl, pyrimidinyl, and pyrazinyl, each of which may be optionally substituted with one or more substituents each independently selected from the group consisting of halo, C₁₋₆alkyl, OC₁₋₆alkyl, SO₂R²¹, CONR²⁵R²⁶, and NHR²⁷; and

bicyclic heteroaryl selected from the group consisting of 1H-indolyl, 1H-indazolyl, benzo[d]oxazolyl, and benzo[d]isoxazolyl, each of which may be 30 optionally substituted with one or more substituents each independently selected from the group consisting of C₁₋₆alkyl, CONR²⁵R²⁶, and NHR²⁷;

wherein R²¹ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein R²² is C₁₋₆alkyl or pyridine;

35 wherein R²⁴ is selected from the group consisting of C₁₋₆alkyl, and morpholinyl or piperazinyl each of which may be optionally substituted with CH₃;

wherein R²⁵ is hydrogen or CH₃;

wherein R²⁶ is selected from the group consisting of

hydrogen,

C₁₋₆alkyl,

C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of OH, OCH₃, NH₂, CO₂H, and morpholinyl or piperazinyl each of which may be optionally substituted with CH₃,

5

C₃₋₄cycloalkyl; and

C₃₋₄cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

wherein R²⁷ is C₁₋₆alkyl; and

10

wherein R²⁸ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein Cycle3 is selected from the group consisting of cyclopropyl,

C₃₋₆heterocycloalkyl, in particular pyrrolidinyl or morpholinyl, substituted with one or more substituents each independently selected from the group consisting of OH, CH₂OH, CO₂R²⁹, NHCH₃ or NHCO₂*t*-Bu; and

15

imidazolidin-4-one substituted with CH₃;

wherein R²⁹ is hydrogen or C₁₋₆alkyl; and

wherein Aryl4 is a monocyclic heteroaryl selected from the group consisting of furanyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl,

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triazolyl, tetrazolyl, oxadiazolyl, thiadiazolyl, pyridyl, pyridazinyl, pyrimidinyl, and pyrazinyl, each of which may be optionally substituted with one or two substituents each independently selected from the group consisting of halo, CF₃, CH₂F, C₁₋₆alkyl, C₃₋₆cycloalkyl, CO₂R³⁰, SO₂CH₃, and morpholine; wherein R³⁰ is hydrogen or C₁₋₆alkyl.

25

6. The compound according to claim 2 wherein

A is a bond or NH;

R¹ is a 5- to 10-membered monocyclic or bicyclic ring, more particularly a 5- to 9-membered monocyclic or bicyclic ring, wherein the 5- to 10-membered

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monocyclic or bicyclic ring, more particularly the 5- to 9-membered monocyclic or bicyclic ring, optionally contains 1 to 3 heteroatoms, the heteroatoms independently being selected from N, O and S;

wherein the 5- to 10-membered monocyclic or bicyclic ring, more particularly the 5- to 9-membered monocyclic or bicyclic ring is optionally substituted with

35

one or more substituents selected from halogens, CN, CF₃, CF₂H, CFH₂, CF₂CH₃, C₁₋₆alkyl, OC₁₋₆alkyl, OCF₃, OCF₂H and C₃₋₄cycloalkyl;

- R^2 is selected from the group consisting of hydrogen, C_{1-6} alkyl, CF_3 , CHF_2 , CH_2F , phenyl and fluorophenyl;
 R^3 is hydrogen;
 R^4 is $X-R'$;
- 5 wherein X is NR'' , S or O;
wherein R' is hydrogen, C_{1-4} alkyl, C_{1-6} alkyl substituted with OH, or C_{2-3} alkenyl, when X is NR'' ;
wherein R' is C_{1-6} alkyl, when X is S;
wherein R' is C_{1-6} alkyl, when X is O;
- 10 wherein R'' is selected from the group consisting of hydrogen, Cycle1, Aryl1, C_{2-4} alkynyl, C_{1-6} alkyl and C_{1-6} alkyl substituted with one or more substituents selected from the group consisting of
- fluoro,
OH,
15 CO_2R^{16} ,
 $OCONHR^{17}$,
 C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl substituted with one or more from among C_{1-6} alkyl,
N-acetyl piperidine,
20 benzo[d][1,3]dioxole and
Aryl2;
- wherein R^{16} is hydrogen or C_{1-6} alkyl;
wherein R^{17} is C_{1-6} alkyl;
wherein Cycle1 is selected from the group consisting of
- 25 C_{3-8} cycloalkyl
 C_{3-8} cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom,
 C_{3-8} cycloalkyl substituted with one or more substituents selected from CH_3 and Aryl2,
- 30 C_{3-8} cycloalkyl containing a heteroatom and being substituted with one or more substituents selected from CH_3 and Aryl2, said heteroatom being an oxygen atom,
- a 5-9 membered fused bicyclic unsaturated or saturated ring,
a 5-9 membered bridged bicyclic unsaturated or saturated ring, and
35 a C_{5-12} spirocycloalkyl;

wherein Aryl1 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl1 being optionally substituted with CH₃;

wherein Aryl2 is selected from the group consisting of phenyl, monocyclic
5 heteroaryl, and bicyclic heteroaryl, said Aryl2 being optionally substituted with one or more substituents selected from the group consisting of halogens, CF₃, CF₂H, CH₂F, C₁₋₄alkyl, C₃₋₆cycloalkyl, CN, CONR¹⁸R¹⁹, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, and SO₂CH₃;

wherein R¹⁸ and R¹⁹ are independently selected from the group consisting of
10 hydrogen, C₁₋₆alkyl and C₃₋₆cycloalkyl;
or wherein R' and R'' together form a cycle selected from the group consisting of

- a C₃₋₈cycloalkyl ring,
- a C₃₋₈cycloalkyl ring containing a heteroatom, said heteroatom being an
15 oxygen atom,
- a C₃₋₈cycloalkyl ring substituted with one or more substituents selected from C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl,
- a C₃₋₈cycloalkyl ring containing a heteroatom and being substituted with one or more substituents selected from C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and
20 C₃₋₆cycloalkyl, said heteroatom being an oxygen atom and
- a C₅₋₁₂-spirocycloalkyl;

R⁵ is selected from the group consisting of hydrogen, C₁₋₆alkyl, C₂₋₃alkenyl, Cycle2 and Aryl3;

wherein C₁₋₆alkyl is optionally substituted with one or more substituents
25 selected from the group consisting of phenyl, methoxyphenyl, OC₁₋₆alkyl, NHSO₂CH₃, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

wherein Cycle2 is selected from the group consisting of

- C₃₋₆cycloalkyl,
- 30 C₃₋₆cycloalkyl containing SO₂ or a heteroatom, the heteroatom being selected from the group consisting of oxygen and nitrogen,
- C₃₋₆cycloalkyl substituted with CO₂R^{20a}, CONHC₁₋₆alkyl or SO₂C₁₋₆alkyl,
- C₃₋₆cycloalkyl containing SO₂ or a heteroatom and being substituted with CO₂R^{20a}, CONHC₁₋₆alkyl or SO₂C₁₋₆alkyl, the heteroatom being selected from
35 the group consisting of oxygen and nitrogen,
- a 5-membered bridged bicyclic saturated ring substituted with CO₂C₁₋₆alkyl or CONHC₁₋₆Alkyl,

isoindoline-1-one, and

indoline-2-one;

wherein R^{20a} is hydrogen or C₁₋₆alkyl;

wherein Aryl3 is selected from the group consisting of phenyl, monocyclic

5 heteroaryl, and bicyclic heteroaryl, said Aryl3 being optionally substituted with one or more substituents selected from the group consisting of halogen, C₁₋₆alkyl, CF₃, CF₂H, CH₂F, CN, OC₁₋₆alkyl, OCF₃, OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², CO₂R²³, COR²⁴, CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle3 and Aryl4;

10 wherein R²¹ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein R²² is C₁₋₆alkyl or pyridine;

wherein R²³ is hydrogen or C₁₋₆alkyl;

wherein R²⁴ is selected from the group consisting of C₁₋₆alkyl, C₅₋₆heterocycle and C₅₋₆heterocycle substituted with CH₃;

15 wherein R²⁵ is hydrogen or CH₃;

wherein R²⁶ is selected from the group consisting of

hydrogen,

C₁₋₆alkyl,

C₁₋₆alkyl optionally substituted with one or more substituents selected

20 from the group consisting of OH, OCH₃, NH₂, CO₂H, C₃₋₆heterocycloalkyl and C₃₋₆heterocycloalkyl substituted with CH₃,

C₃₋₄cycloalkyl;

C₃₋₄cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom;

25 C₃₋₄cycloalkyl substituted with CO₂H; and

C₃₋₄cycloalkyl containing a heteroatom and being substituted with CO₂H, said heteroatom being an oxygen atom;

wherein R²⁷ is selected from the group consisting of

C₁₋₆alkyl,

30 C₁₋₆alkyl substituted with C₃₋₆heterocycloalkyl, and

C₃₋₆heterocycloalkyl;

wherein R²⁸ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein Cycle3 is selected from the group consisting of

C₃₋₆heterocycloalkyl,

35 C₃₋₆heterocycloalkyl substituted with one or more substituents selected from the group consisting of OH, CH₂OH, CO₂R²⁹, NHCH₃ or NHCO₂*t*-Bu; and imidazolidin-4-one substituted with CH₃;

wherein R²⁹ is hydrogen or C₁₋₆alkyl;

wherein Aryl₄ is selected from the group consisting of monocyclic heteroaryl and bicyclic heteroaryl, said monocyclic or bicyclic heteroaryl being optionally substituted with one or two substituents selected from the group consisting of
5 halogens, CF₃, CH₂F, C₁₋₆alkyl, C₃₋₆cycloalkyl, OCF₃, OCH₂F, OC₁₋₆alkyl, OC₃₋₆cycloalkyl, CO₂R³⁰, SO₂CH₃, and morpholine;

wherein R³⁰ is hydrogen or C₁₋₆alkyl;

wherein R⁶ is hydrogen, CH₃, CF₃ or CF₂H.

10 7. The compound according to any one of claims 2 to 6, wherein R⁵ is phenyl or phenyl substituted with one or more substituents selected from the group consisting of halogen, C₁₋₆alkyl, CF₃, CF₂H, CH₂F, CN, OC₁₋₆alkyl, OCF₃, OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², CO₂R²³, COR²⁴,
15 CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle₃ and Aryl₄.

8. The compound of any one of claims 2 to 7, wherein A is a bond.

9. The compound of any one of claims 2 to 8, wherein R³ and R⁶ are both hydrogen.
20

10. A pharmaceutical composition, which comprises the compound or pharmaceutically acceptable salt of any one of claims 2 to 9, and which further comprises at least one pharmaceutically acceptable carrier.

25 11. The compound as defined in any one of claims 2 to 9, or the pharmaceutical composition as defined in claim 10, for use as a medicament.

12. A process for the preparation of the pharmaceutical composition according to claim 10, characterized in that at least one pharmaceutically acceptable
30 carrier is intimately mixed with a therapeutically effective amount of a compound of Formula (I) as defined in any one of claims 2 to 9.

13. A product comprising a first compound and a second compound as a combined preparation for simultaneous, separate or sequential use in the
35 prevention or treatment of an HBV infection or of an HBV-induced disease in mammal in need thereof, wherein said first compound is different from said

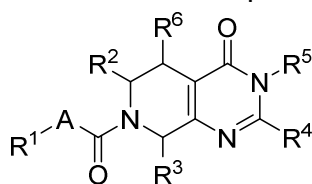
second compound, wherein said first compound is the compound or pharmaceutically acceptable salt of any one of claims 2 to 9 or the pharmaceutical composition of claim 10, and wherein said second compound is another HBV inhibitor which is selected from the group consisting of:

- 5 therapeutic agents selected from HBV combination drugs, HBV vaccines, HBV DNA polymerase inhibitors, immunomodulators, toll-like receptor (TLR) modulators, interferon alpha receptor ligands, hyaluronidase inhibitors, hepatitis b surface antigen (HBsAg) inhibitors, cytotoxic T-lymphocyte-associated protein 4 (ip4) inhibitors, cyclophilin inhibitors, HBV viral entry inhibitors, antisense
10 oligonucleotide targeting viral mRNA, short interfering RNAs (siRNA) and ddRNAi endonuclease modulators, ribonucleotide reductase inhibitors, HBV E antigen inhibitors, covalently closed circular DNA (cccDNA) inhibitors, farnesoid X receptor agonists, HBV antibodies, CCR2 chemokine antagonists, thymosin agonists, cytokines, nucleoprotein modulators, retinoic acid-inducible gene 1
15 simulators, NOD2 stimulators, phosphatidylinositol 3-kinase (PI3K) inhibitors, indoleamine-2, 3-dioxygenase (IDO) pathway inhibitors, PD-1 inhibitors, PD-L1 inhibitors, recombinant thymosin alpha-1, bruton's tyrosine kinase (BTK) inhibitors, KDM inhibitors, HBV replication inhibitors, arginase inhibitors, and other HBV drugs.

20

14. The product of claim 13, which is for simultaneous, separate or sequential use in the prevention or treatment of chronic Hepatitis B.

15. Use of a compound of Formula (I)



25

(I)

including any of its stereoisomers or tautomeric forms thereof, wherein:

A is a bond or NH;

- R¹ is a 5- to 10-membered monocyclic or bicyclic ring system, more particularly a 5- to 9-membered monocyclic or bicyclic ring, wherein the 5- to 10-membered
30 monocyclic or bicyclic ring system, more particularly the 5- to 9-membered monocyclic or bicyclic ring system, optionally contains 1 to 3 heteroatoms, the heteroatoms each independently being selected from N, O and S;

- wherein the 5- to 10-membered monocyclic or bicyclic ring, more particularly the 5- to 9-membered monocyclic or bicyclic ring is optionally substituted with one or more substituents each independently selected from the group consisting of halo, CN, CF₃, CF₂H, CFH₂, CF₂CH₃, C₁₋₆alkyl, OC₁₋₆alkyl, OCF₃, OCF₂H, and C₃₋₄cycloalkyl;
- 5 or R¹ is selected from the group consisting of 1-methyl-2-oxo-1,3-dihydro-1H-benzo[d]imidazol-5-yl, 1-oxo-isoindolin-5-yl, and 1,1-dioxo-benzo[b]thiophen-5-yl;
- 10 R² is selected from the group consisting of hydrogen, C₁₋₆alkyl, CF₃, CHF₂, CH₂F, phenyl and fluorophenyl;
- R³ is hydrogen;
- 15 R⁴ is X-R';
- wherein X is NR'', S or O;
- wherein R' is hydrogen, C₁₋₄alkyl, C₁₋₆alkyl substituted with OH, or C₂₋₃alkenyl, when X is NR'';
- wherein R' is C₁₋₆alkyl, when X is S;
- 20 wherein R' is C₁₋₆alkyl, when X is O;
- wherein R'' is selected from the group consisting of hydrogen, Cycle1, Aryl1, C₂₋₄alkynyl, C₁₋₆alkyl and C₁₋₆alkyl substituted with one or more substituents each independently selected from the group consisting of
- 25 fluoro,
OH,
CO₂R¹⁶,
OCONHR¹⁷,
C₃₋₆cycloalkyl,
C₃₋₆cycloalkyl substituted with one or more from among C₁₋₆alkyl,
30 N-acetyl piperidine,
cubanyl,
benzo[d][1,3]dioxole, and
Aryl2;
- wherein R¹⁶ is hydrogen or C₁₋₆alkyl;
- 35 wherein R¹⁷ is C₁₋₆alkyl;
- wherein Cycle1 is selected from the group consisting of

- C₃₋₈cycloalkyl,
C₃₋₈cycloalkyl containing a heteroatom, said heteroatom being an oxygen atom,
C₃₋₈cycloalkyl substituted with one or more substituents each
5 independently selected from CH₃ and Aryl²,
C₃₋₈cycloalkyl containing a heteroatom and being substituted with one or more substituents each independently selected from the group consisting of CH₃, cyclopropyl, and Aryl², said heteroatom being an oxygen atom,
10 a 5- to 9- membered fused bicyclic unsaturated or saturated ring system, in particular a saturated heterocycle fused with an aromatic ring, which may be optionally substituted with OCH₃,
a 5- to 9- membered bridged bicyclic unsaturated or saturated ring system optionally substituted with 1, 2 or 3 CH₃ substituents,
a C₅₋₁₂spirocycloalkyl, and
15 cubanyl;
- wherein Aryl¹ is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl which is in particular an aromatic ring fused to a saturated ring or an aromatic ring fused to another aromatic ring, said Aryl¹
20 being optionally substituted with CH₃;
- wherein Aryl² is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl² being optionally substituted with one or more substituents each independently selected from the group
25 consisting of halogens, CF₃, CF₂H, CH₂F, C₁₋₄alkyl, C₃₋₆cycloalkyl, CN, CONR¹⁸R¹⁹, OH, OCF₃, OCF₂H, OCH₂F, OC₁₋₄alkyl, OC₃₋₆cycloalkyl, SO₂CH₃, imidazolyl optionally substituted with CH₃, phenyl optionally substituted with fluoro, and triazolyl;
wherein R¹⁸ and R¹⁹ are independently selected from the group consisting of
30 hydrogen, C₁₋₆alkyl and C₃₋₆cycloalkyl;
- or wherein N, R' and R'' together form a cycle selected from the group consisting of
a C₃₋₈cycloalkyl ring,
35 a C₃₋₈cycloalkyl ring containing a heteroatom, said heteroatom being an oxygen atom, and optionally being substituted with CH₃,

a C₃₋₈cycloalkyl ring substituted with one or more substituents each independently selected from the group consisting of C₁₋₆alkyl, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl,

- 5 a C₃₋₈cycloalkyl ring containing a heteroatom and being substituted with one or more substituents each independently selected from C₁₋₆alkyl, CN, phenyl, C₂₋₆alkynyl and C₃₋₆cycloalkyl, said heteroatom being an oxygen atom, a C₅₋₁₂-spirocycloalkyl optionally substituted with CH₃, and a C₅₋₆ bridged bicyclic saturated ring system;

- 10 R⁵ is selected from the group consisting of hydrogen, C₁₋₆alkyl, C₂₋₃alkenyl, Cycle2 and Aryl3;
wherein C₁₋₆alkyl is optionally substituted with one or more substituents each independently selected from the group consisting of phenyl, methoxyphenyl, OC₁₋₆alkyl, NHSO₂CH₃, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl containing a
15 heteroatom, said heteroatom being an oxygen atom;

wherein Cycle2 is selected from the group consisting of

- C₃₋₆cycloalkyl,
C₃₋₆cycloalkyl containing SO₂ or a heteroatom, the heteroatom being
20 selected from the group consisting of oxygen and nitrogen,
C₃₋₆cycloalkyl substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl,
C₃₋₆cycloalkyl containing SO₂ or a heteroatom and being substituted with CO₂R^{20a}, CONHR^{20b} or SO₂C₁₋₆alkyl, the heteroatom being selected from the group consisting of oxygen and nitrogen,
25 a 5-membered bridged bicyclic saturated ring substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
cubanyl optionally substituted with CO₂C₁₋₆alkyl or CONHR^{20b},
isoindoline-1-one, and
indoline-2-one;
30 wherein R^{20a} is hydrogen or C₁₋₆alkyl;
wherein R^{20b} is C₁₋₆alkyl or C₃₋₆cycloalkyl;

- wherein Aryl3 is selected from the group consisting of phenyl, monocyclic heteroaryl, and bicyclic heteroaryl, said Aryl3 being optionally substituted with
35 one or more substituents each independently selected from the group consisting of halogen, C₁₋₆alkyl, CF₃, CF₂H, CH₂F, CN, OC₁₋₆alkyl, OCF₃,

OCF₂H, OCH₂F, OC₃₋₆cycloalkyl, SO₂R²¹, SO₂NHR²², CO₂R²³, COR²⁴,
CONR²⁵R²⁶, NHR²⁷, NHCOR²⁸, Cycle3 and Aryl4;

wherein R²¹ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein R²² is C₁₋₆alkyl or pyridine;

5 wherein R²³ is hydrogen or C₁₋₆alkyl;

wherein R²⁴ is selected from the group consisting of C₁₋₆alkyl, C₅₋₆heterocycle
and C₅₋₆heterocycle substituted with CH₃;

wherein R²⁵ is hydrogen or CH₃;

wherein R²⁶ is selected from the group consisting of

10 hydrogen,

C₁₋₆alkyl,

C₁₋₆alkyl optionally substituted with one or more substituents each
independently selected from the group consisting of OH, OCH₃, NH₂, CO₂H, C₃₋₆-
6heterocycloalkyl and C₃₋₆heterocycloalkyl substituted with CH₃,

15 C₃₋₆cycloalkyl;

C₃₋₆cycloalkyl containing a heteroatom, said heteroatom being an
oxygen atom;

C₃₋₆cycloalkyl substituted with CO₂H; and

C₃₋₆cycloalkyl containing a heteroatom and being substituted with CO₂H,

20 said heteroatom being an oxygen atom;

wherein R²⁷ is selected from the group consisting of

C₁₋₆alkyl,

C₁₋₆alkyl substituted with C₃₋₆heterocycloalkyl, and

C₃₋₆heterocycloalkyl;

25 wherein R²⁸ is C₁₋₆alkyl or C₃₋₆cycloalkyl;

wherein Cycle3 is selected from the group consisting of

C₃₋₆cycloalkyl,

C₃₋₆heterocycloalkyl,

30 C₃₋₆heterocycloalkyl substituted with one or more substituents each
independently selected from the group consisting of OH, CH₂OH, CO₂R²⁹,
NHCH₃ or NHCO₂*t*-Bu; and

imidazolidin-4-one substituted with CH₃;

wherein R²⁹ is hydrogen or C₁₋₆alkyl;

35

wherein Aryl4 is selected from the group consisting of monocyclic heteroaryl
and bicyclic heteroaryl, said monocyclic or bicyclic heteroaryl being optionally

substituted with one or two substituents each independently selected from the group consisting of halogens, CF₃, CH₂F, C₁₋₆alkyl, C₃₋₆cycloalkyl, OCF₃, OCH₂F, OC₁₋₆alkyl, OC₃₋₆cycloalkyl, CO₂R³⁰, SO₂CH₃, and morpholine; wherein R³⁰ is hydrogen or C₁₋₆alkyl;

5

wherein R', R'' and R⁵ are not all hydrogen; and

wherein R⁶ is hydrogen, CH₃, CF₃ or CF₂H;
or a pharmaceutically acceptable salt thereof,

10 in the manufacture of a medicament for the prevention or treatment of an HBV infection or of an HBV-induced disease.

16. Use of compound as defined in any one of claims 2 to 9, or the pharmaceutical composition as defined in claim 10, in the manufacture of a
15 medicament for the prevention or treatment of an HBV infection or of an HBV-induced disease.

17. Use of a product comprising a first compound and a second compound in the manufacture of a combined preparation for simultaneous, separate or
20 sequential use in the prevention or treatment of an HBV infection or of an HBV-induced disease in mammal in need thereof, wherein said first compound is different from said second compound, wherein said first compound is the compound or pharmaceutically acceptable salt of any one of claims 2 to 9 or the pharmaceutical composition of claim 10, and wherein said second
25 compound is another HBV inhibitor which is selected from the group consisting of: therapeutic agents selected from HBV combination drugs, HBV vaccines, HBV DNA polymerase inhibitors, immunomodulators, toll-like receptor (TLR) modulators, interferon alpha receptor ligands, hyaluronidase inhibitors, hepatitis b surface antigen (HBsAg) inhibitors, cytotoxic T-lymphocyte-associated protein
30 4 (ip4) inhibitors, cyclophilin inhibitors, HBV viral entry inhibitors, antisense oligonucleotide targeting viral mRNA, short interfering RNAs (siRNA) and ddRNAi endonuclease modulators, ribonucleotide reductase inhibitors, HBV E antigen inhibitors, covalently closed circular DNA (cccDNA) inhibitors, farnesyl transferase inhibitors, HBV X receptor agonists, HBV antibodies, CCR2 chemokine antagonists, thymosin
35 agonists, cytokines, nucleoprotein modulators, retinoic acid-inducible gene 1 simulators, NOD2 stimulators, phosphatidylinositol 3-kinase (PI3K) inhibitors, indoleamine-2, 3-dioxygenase (IDO) pathway inhibitors, PD-1 inhibitors, PD-L1

inhibitors, recombinant thymosin alpha-1, bruton's tyrosine kinase (BTK) inhibitors, KDM inhibitors, HBV replication inhibitors, arginase inhibitors, and other HBV drugs.

- 5 18. The use of the product of claim 17, which is for simultaneous, separate or sequential use in the prevention or treatment of chronic Hepatitis B.