

PHENYL [A]INDOLE[2,3-G]QUINOLIZINE COMPOUNDS,
PREPARATION METHOD THEREFOR, PHARMACEUTICAL
COMPOSITION, AND APPLICATIONS THEREOF

FIELD OF THE INVENTION

The invention relates to the field of medicinal chemistry and chemotherapy. Specifically, the present invention relates to a phenyl [a] indole [2,3-g] quinazoline compound of formula (I) and a derivative thereof, a preparation method thereof, a pharmaceutical composition and the application thereof in the prevention and treatment of hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, obesity and other metabolic diseases thereof.

BACKGROUND OF THE INVENTION

Hyperlipidemia is a major risk factor for cardiovascular disease. High blood lipid levels can directly cause diseases that seriously endanger human health, such as atherosclerosis, coronary heart disease and so on. The clinical manifestations of hyperlipidemia are mainly yellow tumors caused by the deposition of lipid in the dermis and the arteriosclerosis caused by deposition of lipids in the vascular endothelium. Although hyperlipidemia can cause yellow tumors, it is of low incidence; and the occurrence and development of atherosclerosis is a slow and gradual process. Therefore, under normal circumstances, most patients do not show obvious symptoms and abnormal signs. Many people were found to have elevated levels of plasma lipoproteins when they were tested for blood biochemistry for other reasons. Deaths from cardiovascular disease account for a quarter of all deaths, which is equivalent to one death from cardiovascular disease every three minutes.

At present, the main lipid-lowering drugs are statins. However, during clinical use, it was found that approximately 20% of patients were unable to tolerate side effects of statins, such as muscle soreness and forgetfulness.

In recent years, new lipid-lowering targets represented by PCSK9 have received more and more attention. Remarkable progresses in the research of PCSK9 inhibitors have also been achieved, and they are expected to become new revolutionary lipid-lowering drugs. PCSK9 is mainly regulated by the transcription factor, Sterol Response Element Binding Protein-2 (SREBP-2), and exists as a precursor of soluble zymogen in the endoplasmic reticulum of hepatocytes and the like, and form mature PCSK9 through self-catalyzation and hydrolyzation and secreted into plasma. Plasma LDL-c is uptaken by LDLR expressed on the surface of hepatocytes, endocytosed into cells, and degraded in lysosomes. PCSK9 can compete with LDL-c for binding to LDLR, thereby mediating the degradation of LDLR and causing elevated plasma LDL-c levels. Therefore, PCSK9 plays a key regulatory role in maintaining cholesterol homeostasis. Inhibition of PCSK9 can significantly reduce LDL-C levels *in vivo*. These findings have attracted interest in the development of PCSK9 inhibitors.

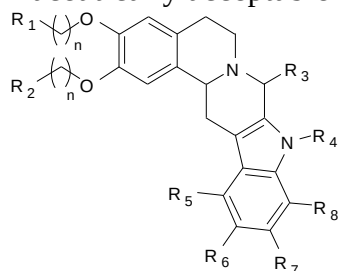
There are currently about 10 pharmaceutical companies producing or developing PCSK9 inhibitors, including Sanofi, Amgen, Novartis, Pfizer and Bristol-Myers Squibb. Among

them, about half of the PCSK9 inhibitors are monoclonal antibodies, and at the leading stage of drug clinical research. As a lipid-lowering drug, PCSK9 monoclonal antibody has many advantages, such as high specificity to target, longer half-life, and greatly reduced drug frequency. More importantly, PCSK9 monoclonal antibodies have shown promising results in previous clinical trials. According to the 2015 American Lipid Association (NLA) Clinical Lipid Annual Summary Report, 270 patients with hyperlipidemia and coronary heart disease were investigated in domestic hospitals. PCSK9 can rapidly and stably reduce the plasma LDL-C level, whenever used as an adjunct to statins or as a monotherapy, and none of the 270 cases showed significant adverse reactions, and there was no discomfort or ineffectiveness caused by statin tolerance. PCSK9 monoclonal antibodies can also improve other lipoprotein indicators that cause cardiovascular risk, such as non-HDL-C, apolipoprotein B, lipoprotein a, etc. Taking the possibility of gradually expanding the scope of treatment into consideration, such as treatment of early onset coronary heart disease and increased levels of lipoprotein B and lipoprotein a, even the patients can be extended to patients with diabetes and metabolic syndrome. In future, it is especially suitable for high-risk patients who do not achieve lipid-lowering goals by using statins or who cannot tolerate statins, as well as familial hypercholesterolemia patients. There are two problems for monoclonal antibody drugs: too expensive for patients, and it can not be taken orally (single dosage form), which lead to problems that whether many patients, especially asymptomatic hyperlipidemia, can accept long-term treatment with subcutaneous or intravenous every 2 or 4 weeks. However, the development of small molecule PCSK9 inhibitors is relatively rare, and the development of a novel structure of PCSK9 small molecule inhibitors is currently a research hotspot of lipid-lowering drugs.

SUMMARY OF THE INVENTION

The present invention relates to a novel phenyl [a]indole[2,3-g]quinolizine compound and a preparation method thereof, while some of the compounds show their use in the prevention and treatment of hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, obesity and other metabolic diseases thereof. The compounds disclosed herein also reduce total cholesterol, LDL-cholesterol and triglycerides, and increase hepatic LDL receptor expression, inhibit PCSK9 expression, and activate AMP-activated protein kinases.

In the first aspect of the present invention, a phenyl [a] indole [2,3-g] quinazine compound of formula (I), or a enantiomer, diastereomer, racemate, and mixture thereof, a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof is provided,



formula (I)

wherein R_1 and R_2 are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C1-C6 alkyl (5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, substituted or unsubstituted C2-C10 acyl, substituted or unsubstituted C2-C10 ester group, amino group, substituted or unsubstituted C1-C6 amide group, $-SO_2R_9$, $-OSO_2R_9$, $-OCOR_9$; and not both of R_1 and R_2 are hydrogen;

or the R_1 and R_2 and the adjacent $-(CH_2)_n-O$ and $C=C$ together form a substituted or unsubstituted 5-7 membered heterocyclic ring, wherein the heterocyclic ring is a fully saturated heterocyclic ring, partially unsaturated heterocyclic ring or aromatic heterocyclic ring;

R_3 , R_4 are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, amine, hydroxy, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C3-C12 cycloalkyl, substituted or unsubstituted C2-C10 acyl, substituted or unsubstituted C2-C10 ester group, amino, C1-C6 alkylamino, substituted or unsubstituted C1-C6 amide group, $-SO_2R_9$, $-OSO_2R_9$, $-OCOR_9$;

R_5 , R_6 , R_7 and R_8 are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, hydroxy, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C3-C12 cycloalkyl, cyano, nitro, carboxyl, sulfydryl, $-NR_9R_{10}$, $-NCOR_9R_{10}$, $-SO_2R_9$, $-SO_2NR_9R_{10}$, $-OSO_2R_9$ and $-OCOR_9$;

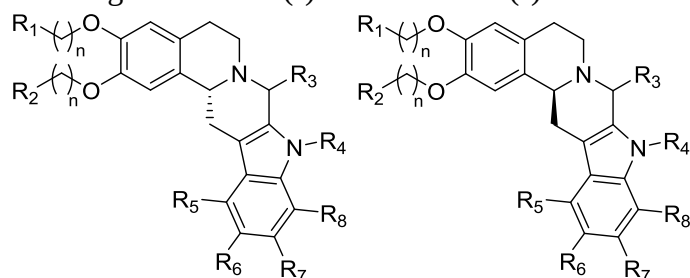
R_9 and R_{10} are independently hydrogen, deuterium, tritium, halogen, an unsubstituted or 1-3 halogen substituted C1-C6 alkyl, or C3-C6 cycloalkane unsubstituted or substituted by 1-3 halogens, C6-C10 aryl unsubstituted or substituted by 1 to 3 halogens, C1-C3 alkyl-(C6-C10 aryl) unsubstituted or substituted by 1-3 halogens, 5-7 membered heteroaryl unsubstituted or substituted by 1-3 halogens;

And when both of R_3 and R_4 are hydrogen, at least one of R_1 , R_2 , R_6 , R_7 is a group selected from the group consisting of a substituted C6-C10 aryl, substituted 5-7-membered heterocyclic ring, $-OSO_2R_9$;

wherein the "substituted" refers to one or more hydrogen atoms on the group are substituted with a substituent selected from the group consisting of halogen, a C1-C6 alkyl unsubstituted or substituted by halogen or C3-C6 (preferably C1-C4) cycloalkyl, C1-C4 alkoxy, C3-C6 cycloalkyl, C1-C4 linear or branched alkyl-substituted amine group, hydroxy, cyano, nitro, oxygen atom ($=O$), hydroxy-C1-C6 alkyl, carboxyl, sulfydryl, C6-C10 aryl unsubstituted or substituted by 1 to 3 halogens or hydroxy groups, unsubstituted or halogenated 5-7 membered heterocyclic ring, unsubstituted or halogenated C2-C6 acyl, C1-C6 hydroxyalkyl, $-NR_9R_{10}$, $-NCOR_9R_{10}$, $-SO_2R_9$, $-OSO_2R_9$, $-SO_2NR_9R_{10}$, $-COOR_9$ and $-OCOR_9$;

n is 0 or 1.

In another preferred embodiment, the phenyl[a]indolo[2,3-g]quinoline compound has the following formula R-(I) or formula S-(I):



Formula R-(I)

Formula S-(I)

In another preferred embodiment, the R₃ is hydrogen or a substituted or unsubstituted C1-C6 alkyl, and the R₄ is selected from the group consisting of a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted 5-7-membered heterocyclic ring, substituted or unsubstituted C3-C12 cycloalkyl, substituted or unsubstituted C2-C10 acyl, substituted or unsubstituted C2-C10 ester group, -OSO₂R₉.

In another preferred embodiment, the R₄ is a C1-C6 alkyl substituted with a group selected from the group consisting of hydroxyl, -OCOR₉, -OSO₂R₉; preferably, the R₉ is halogen (preferably F)-substituted phenyl.

In another preferred embodiment, the R₄ is hydrogen, and the R₃ is selected from the group consisting of a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C3-C12 cycloalkyl.

In another preferred embodiment, in the R₃, the aryl is phenyl group, and the heterocyclic ring is 5-membered heteroaryl ring.

In another preferred embodiment, the R₃ and R₄ are H, and at least one of R₁ and R₂ is a group selected from the group consisting of a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl group, substituted or unsubstituted C1-C6 alkyl-(5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, -SO₂R₉; or at least one of R₅, R₆, R₇ and R₈ is a group selected from the group consisting of a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C1-C6 alkyl-(5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, -OSO₂R₉.

In another preferred embodiment, R₁ and R₂ are independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C6-C10 aryl;

or the R₁ and R₂ together form a substituted or unsubstituted 5-7 membered heterocyclic ring, wherein the heterocyclic ring is fully saturated heterocyclic ring, partially unsaturated heterocyclic ring or aromatic heterocyclic ring;

R₃ is selected from the group consisting of hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring;

R₄ is hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted hydroxy-C1-C6 alkyl, substituted or unsubstituted C1-C6 alkylene-C2-C6 oxyacyl, substituted or unsubstituted C1-C6 alkylene-C2-C6 oxy (3-7 membered carbocyclic or heterocyclic sulfonyl);

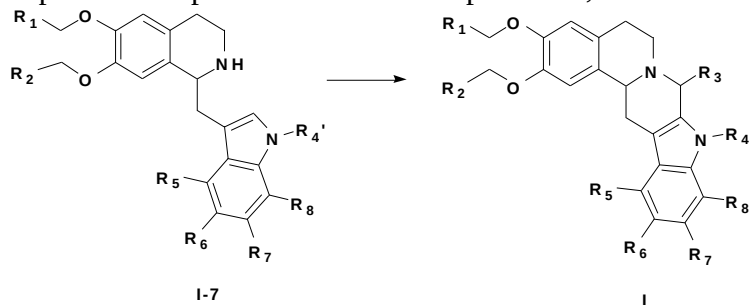
R₅, R₆, R₇ and R₈ are each independently hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C1-C12 alkyl, substituted or unsubstituted C1-C12 alkoxy, substituted or unsubstituted C3-C6 cycloalkyl, C1-C6 alkoxy-substituted C1-C6 alkyl, C3-C6 cycloalkyl-substituted C1-C6 alkyl, hydroxyl, cyano, nitro, C1-C6 straight or branched hydroxyalkyl, carboxyl, sulfydryl, -NR₉R₁₀, -NCOR₉R₁₀, -SO₂R₉, -SO₂NR₉R₁₀, or -OCOR₉.

In another preferred embodiment, the compound is a compound selected from the table 1.

In a second aspect of the invention, a PCSK9 inhibitor is provided, which comprises a compound according to the first aspect of the invention, or a enantiomer, diastereomer, racemate , or mixture thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof.

In another preferred embodiment, the inhibitor is *in vitro* or *in vivo* inhibitor.

In the third aspect of the present invention, a preparation method of compound (I) of the first aspect of the present invention is provided, which comprises the following steps:

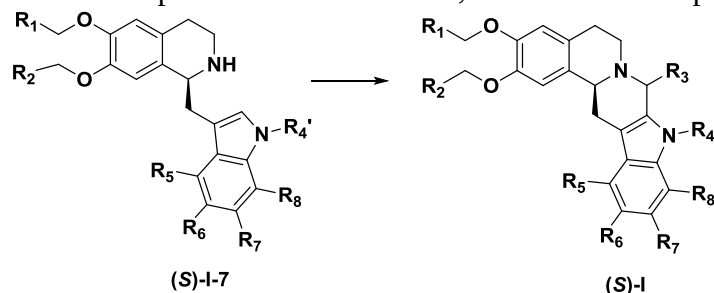


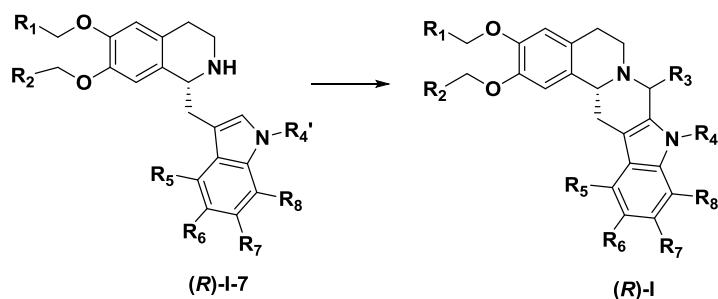
In an inert solvent, R₃-CHO reacts with a compound of formula I-7 to obtain a compound of formula I in the presence of formic acid;

Wherein R₄' is of the same definition of R₄, while they may be the same or different;

While the remaining groups are defined as in the first aspect of the present invention.

In another preferred embodiment, the method comprises the following steps:





In the fourth aspect of the invention, a pharmaceutical composition is provided, which comprises (A) therapeutically efficient amount of one or more of a compound according to the first aspect of the invention, a enantiomer, diastereomer, racemate, mixtures thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof; and (B) a pharmaceutically acceptable carrier.

In the fifth aspect of the invention, the use of a compound according to the first aspect of the invention, or a enantiomer, diastereomer, racemate, or mixture thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof is provided, for the preparation of:

(i) a medicament for treating a disease associated with a preprotein convertase subtilisin Kexin-9 (PCSK9), wherein the PCSK9-related diseases include prevention and treatment of metabolic diseases such as hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, and obesity;

(ii) a medicament that reduces total cholesterol, LDL-cholesterol, and/or triglycerides;

(iii) a medicament that increases liver LDL receptor expression, inhibits PCSK9 expression, and/or activates AMP-activated protein kinase.

It should be understood that, in the present invention, each of the technical features specifically described above and below (such as those in the Examples) can be combined with each other, thereby constituting new or preferred technical solutions which need not be specified again herein.

EMBODIMENTS FOR CARRYING OUT THE INVENTION

After long-term and intensive research, the present inventors have unexpectedly discovered that phenyl[a]indolo[2,3-g]quinolizine compounds can be used as highly effective PCSK9 inhibitors, and can also lower total cholesterol, LDL-cholesterol and triglycerides, increase hepatic LDL receptor expression and activate protein kinases that activated by AMP. Moreover, the inhibitory activity of this type of inhibitor on $\alpha 1A$ -AR is rather weak, so it can be used for prevention and treatment of metabolic diseases such as hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, and obesity. The present invention is completed based on the above findingd.

Terms

As used herein, unless otherwise specified, the term "substituted" means that one or more hydrogen atoms on the group are substituted with a substituent selected from the group

consisting of halogen, amino, hydroxy, nitro, cyano, trifluoromethyl, a C₁-C₁₂ alkyl or cycloalkyl, C₁-C₁₂ alkoxy, oxygen atom (i.e., =O), C₁-C₁₂ alkylamino unsubstituted or substituted by C₁-C₄ alkylamino, C₂-C₆ acyl, C₂-C₆ amide group, sulfo-C₁-C₁₂ alkyl, carboxyl, C₅-C₁₂ aryl or heteroaryl, C₅-C₁₂ heterocyclic group (containing 1-5, preferably 1-3 heteroatoms selected from N, O or S).

Term "C₁-C₁₂ alkyl" refers to a linear or branched alkyl with 1 to 12 carbon atoms, such as methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, or similar groups.

Term "C₁-C₁₂ cycloalkyl" refers to a cyclic alkyl with 1-12, preferably 3-12 carbon atoms (i.e., C₃₋₁₂) such as cyclopropyl, cyclobutyl, cyclopentyl, cycloheptyl, or the like.

The term "C₁-C₁₂ alkoxy" refers to a straight or branched chain alkyl having 1 to 12 carbon atoms, such as methoxy, ethoxy, propoxy, isopropoxy, butoxy, iso-butoxy, sec-butoxy, tert-butoxy, or the like.

The term "halogen" refers to F, Cl, Br or I.

The term "C₁-C₁₂ alkylamino" refers to a C₁-C₁₂ alkyl substituted by amino, for example, a group having structure of "C₁-C₁₂ alkyl-NH-" or "(alkyl)₂-N-(the total number of carbon atoms is 1-12)", "-C₁-C₁₂ alkylene-NH₂", "alkyl-N-alkylene-(total number of carbon atoms is 1-12)", or "(alkyl)₂-N-alkylene-(the total number of carbon atoms is 1-12)", such as CH₃NH-, C₂H₅NH-, C₃H₇NH-, (CH₃)₂N-, -CH₂NH₂, -C₂H₅NH₂, -C₃H₇NH₂, -C₂H₄N(CH₃)₂, or the like. Among them, the definition of the C₁-12 alkyl group is as described above.

The term "C₂-C₆ ester group" refers to a substituent in a form of "linear or branched alkyl/cycloalkyl/aryl/heteroaryl-carbonyl-oxy- with 1 to 5 carbon atoms", such as ethyl ester group, propyl ester group, butyl ester group, or the like.

As used herein, the term "C₁-C₆ acylamino" refers to a substituent in a form of "linear or branched alkyl/cycloalkyl/aryl/heteroaryl-carbonyl-amino- with 0-5 carbon atoms", such as acetamino group, propionamide group, butyramide group, or the like.

The term "C₆-C₁₀ aryl" refers to an aryl with 1-12 (preferably 6-10, i.e., C₆₋₁₀) carbon atoms, such as phenyl, naphthyl, or the like, the aryl can be substituted or unsubstituted.

The term "C₁-C₁₂ heteroaryl" refers to a heteroaryl having 1-12 carbon atoms and one or more (preferably 1-3) heteroatoms selected from O, S and/or N, preferably C₅-C₈ heteroaryl. The heteroaryl may be substituted or unsubstituted.

The term "5-7 membered heterocyclic ring" refers to a cyclic saturated, partially unsaturated or aromatic group having 5-7 members, wherein the heterocyclic ring has at least one ring atom selected from the group consisting of O, S and / or N.

The term "5-7 membered heteroaryl" refers to a cyclic aromatic group having 5-7 members, wherein the heterocyclic ring has at least one ring atom selected from the group consisting of O, S and/or N.

In particular, the expression "C₁-C_n" means that a group has 1-n carbon atoms, for example, the expression "C₁-C₁₂" means that a group has 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12 carbon atoms; "C₆-C₁₀" means that a group has 6, 7, 8, 9 or 10 carbon atoms.

The present invention, the term "pharmaceutically acceptable" component refers to substances which are suitable for applying to humans and / or animals without undue harmful side reactions (such as toxicity, stimulation or allergy), that is, substances of reasonable benefit / risk ratio.

In the present invention, the term "effective amount" refers to an amount in which the therapeutic agents can treat, relieve or prevent the target disease, or exhibit detectable therapeutic or preventive effects. The exact effective amount for a subject will depend on the size and health condition of the subject, the nature and extent of the disorder, and the the therapeutic agent and / or therapeutic agent combination selected for administration. Therefore, it is useless to specify an accurate effective amount in advance. However, for a given situation, the effective amount may be determined by routine experimentation, which can be determined by clinicians.

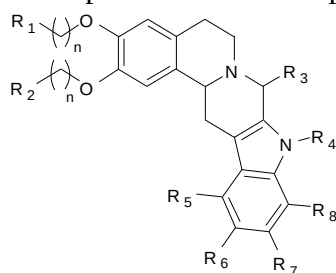
Unless otherwise indicated, all compounds in the invention are intended to include all possible optical isomers, such as single chiral compounds, or mixtures of various chiral compounds (i.e., racemates). In compounds of the present invention, each chiral carbon atom may optionally be in R configuration or S configuration, or the mixture of R configuration and S configuration.

As used herein, the term "compound of the invention" refers to formula I compound. The term also comprises the crystal forms, pharmaceutically acceptable salts, hydrates or solvates of compound of formula I.

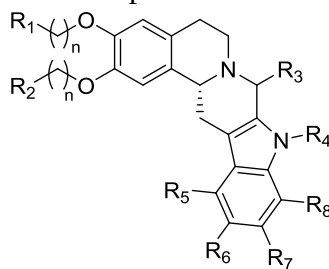
As used herein, the term "pharmaceutically acceptable salts" refers to salts suitable for use in pharmaceutical which is formed by compound of the present invention with an acid or base. The pharmaceutically acceptable salts include inorganic and organic salts. A preferred type of salts are salts formed by the compounds of the present invention and acid. Suitable salt-forming acids include, but are not limited to: inorganic acids such as hydrochloric acid, hydrobromic acid, hydrofluoric acid, sulfuric acid, nitric acid, phosphoric acid; organic acids such as formic acid, acetic acid, propionic acid, oxalic acid, malonic acid, succinic acid, fumaric acid, maleic acid, lactic acid, malic acid, tartaric acid, citric acid, picric acid, methanesulfonic acid, toluenesulfonic acid, benzenesulfonic acid and the like; and acidic amino acids such as aspartic acid, glutamic acid.

Compound of Formula (I)

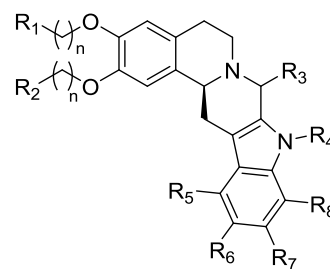
The present invention provides a compound of formula (I):



formula (I)



formula R-(I)



formula S-(I)

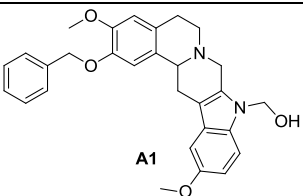
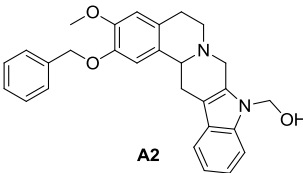
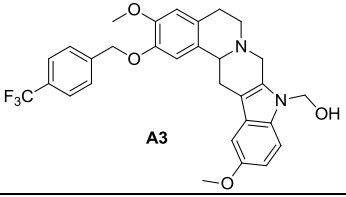
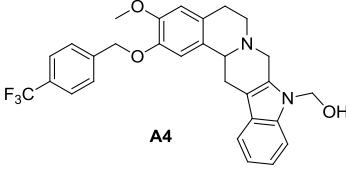
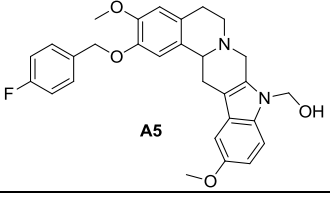
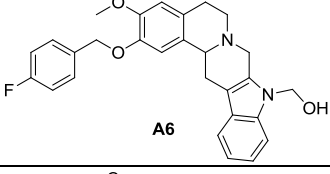
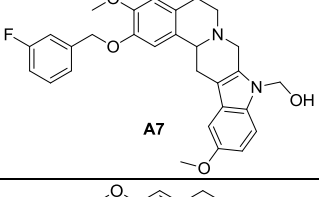
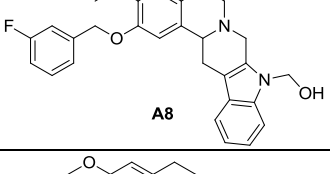
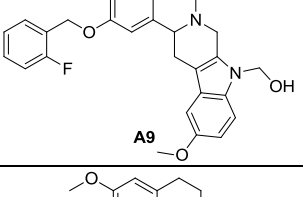
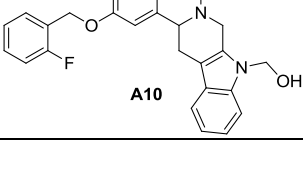
In another preferred embodiment, R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉ and R₁₀ and n are each independently the groups shown in the specific examples.

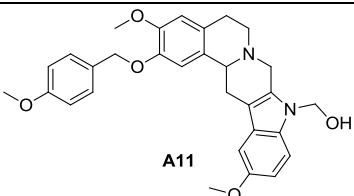
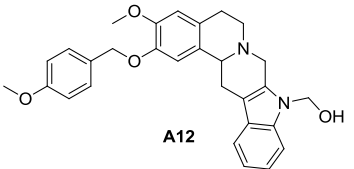
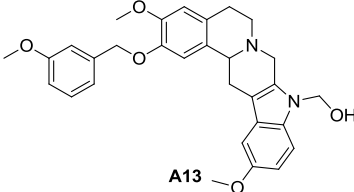
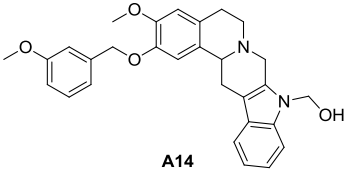
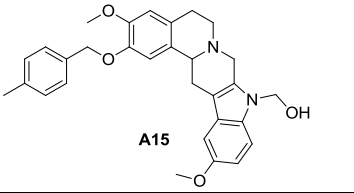
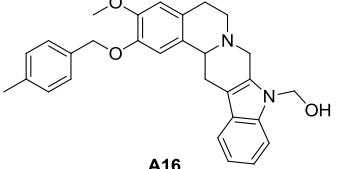
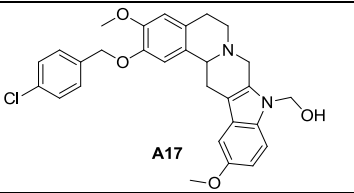
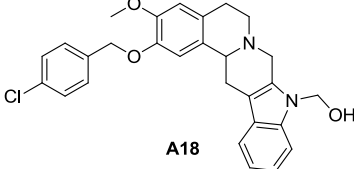
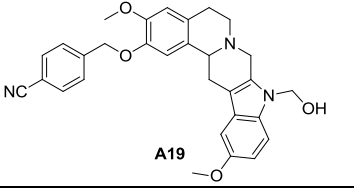
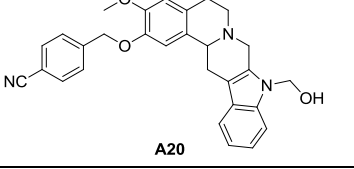
Meanwhile, the chiral carbon atom in the compound of formula (I) is R type and / or S type.

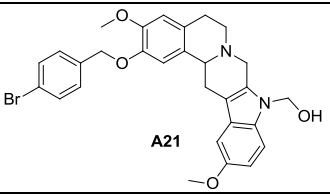
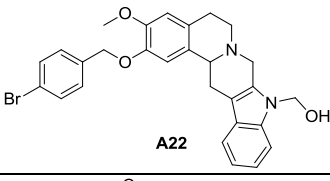
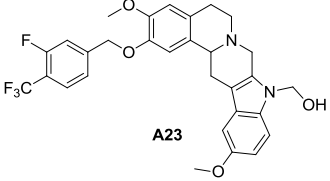
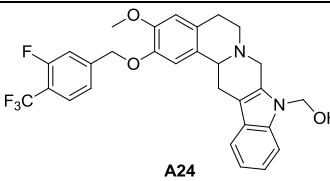
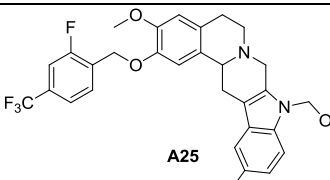
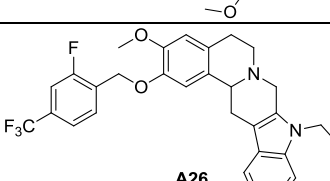
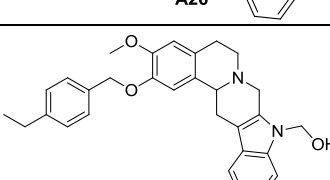
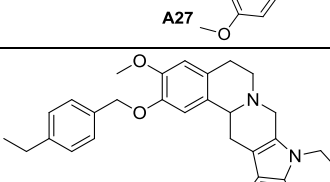
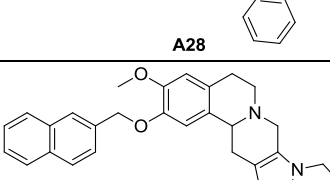
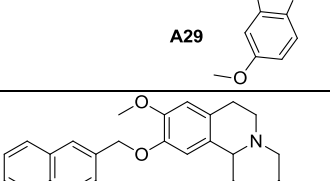
More preferably, the phenyl[a]indolo[2,3-g]quinolizine compound of the present invention is selected from the following compounds:

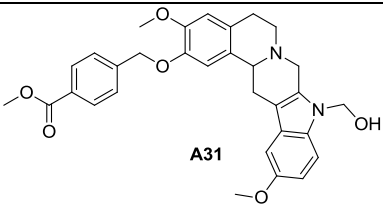
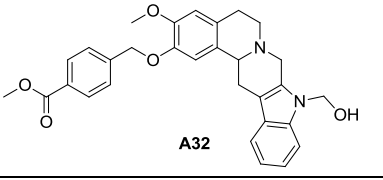
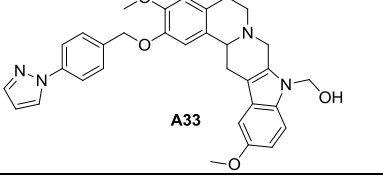
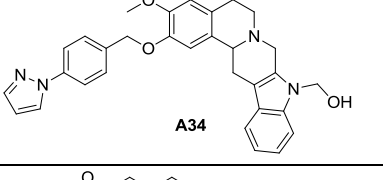
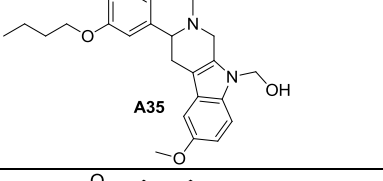
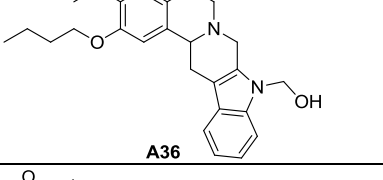
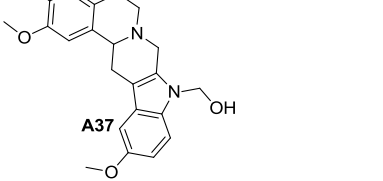
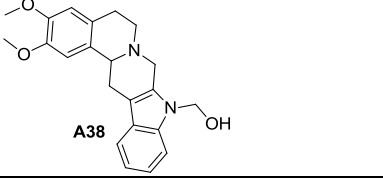
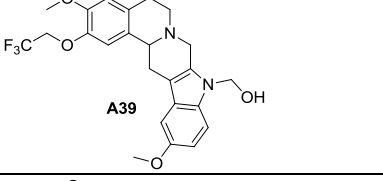
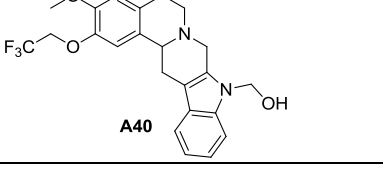
Table 1

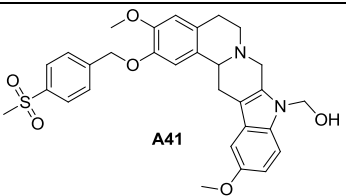
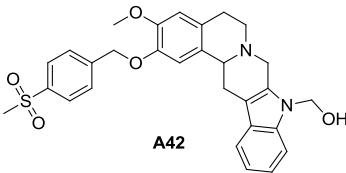
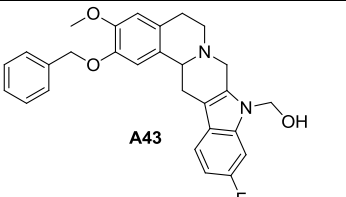
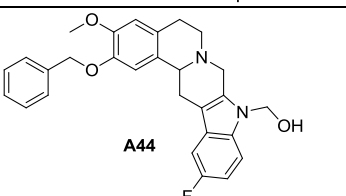
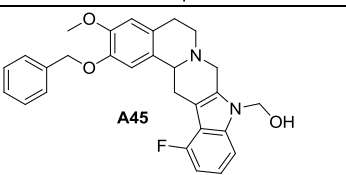
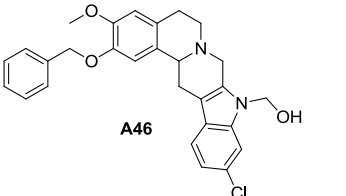
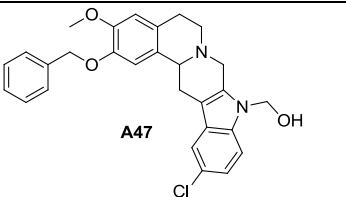
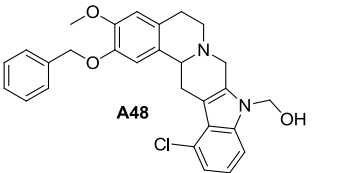
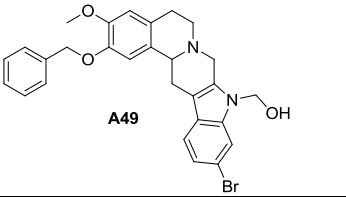
No.	Name	Structure
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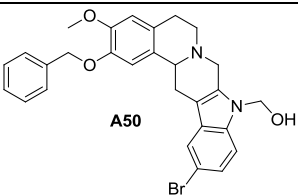
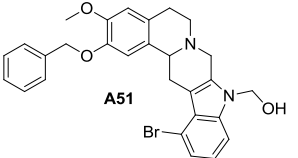
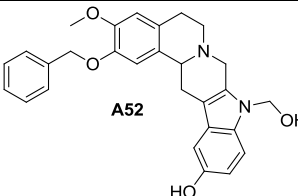
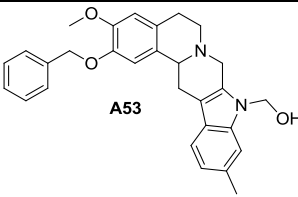
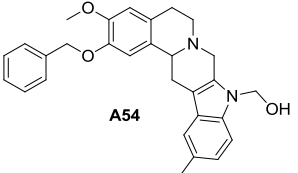
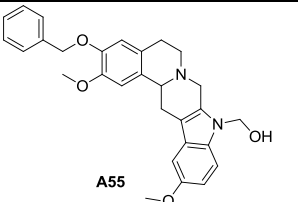
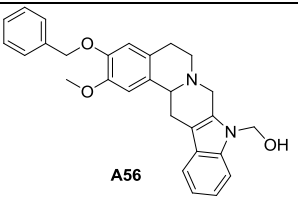
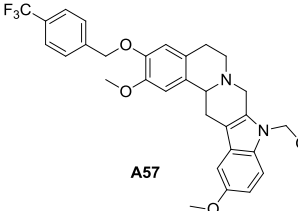
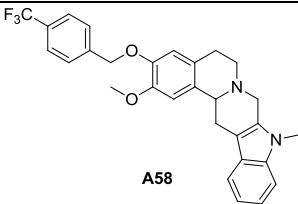
A1	(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A2	(2-(benzyloxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A3	(3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A4	(3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A5	(2-((4-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A6	(2-((4-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A7	(2-((3-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A8	(2-((3-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A9	(2-((2-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A10	(2-((2-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

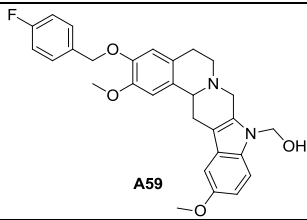
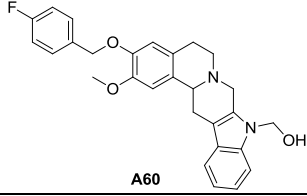
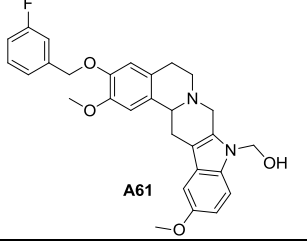
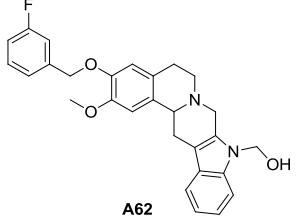
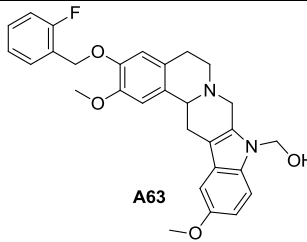
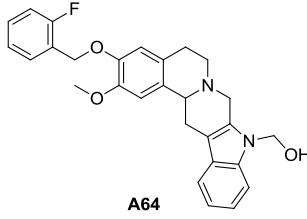
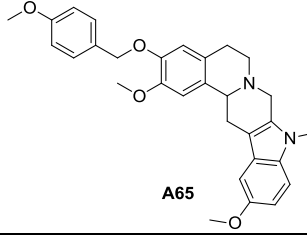
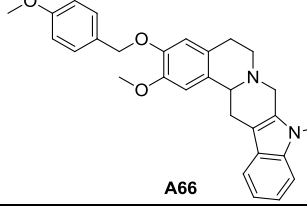
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A12	(3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A13	(3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A14	(3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A15	(3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A16	(3-methoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A17	(2-((4-chlorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A18	(2-((4-chlorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A19	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
A20	4-(((9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	

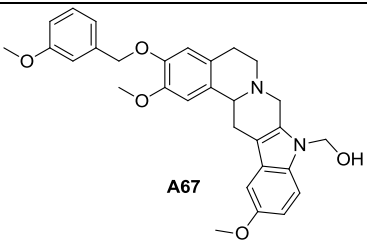
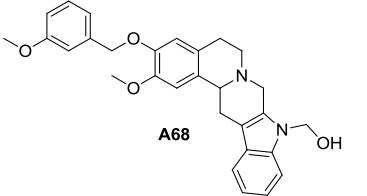
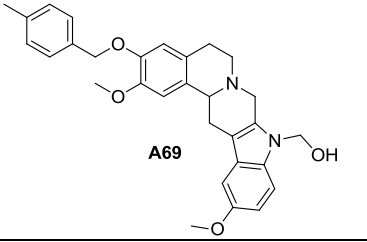
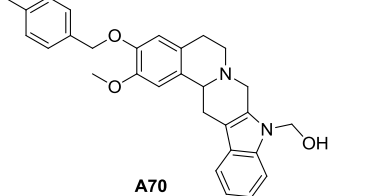
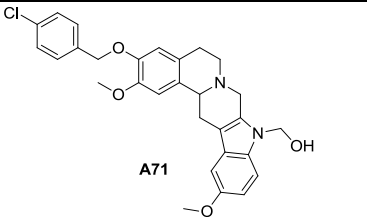
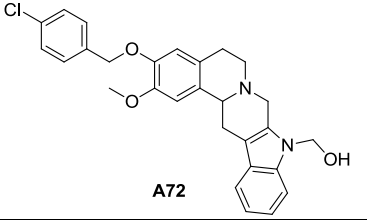
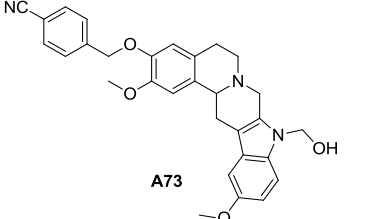
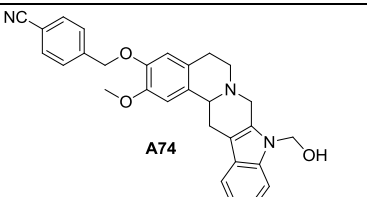
A21	(2-((4-bromobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A22	(2-((4-bromobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A23	(2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A24	(2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A25	(2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A26	(2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A27	(3,12-dimethoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A28	(3-methoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A29	(3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A30	(3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

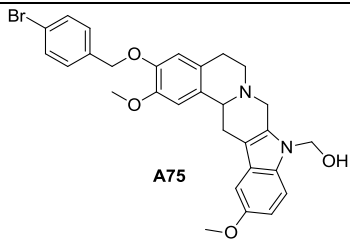
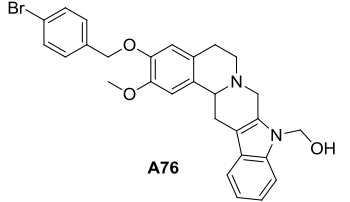
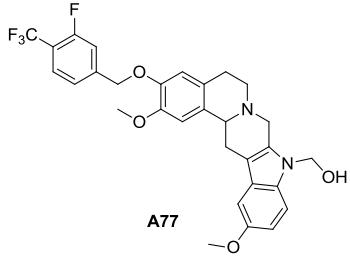
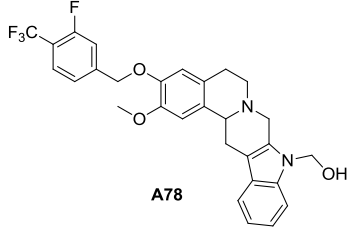
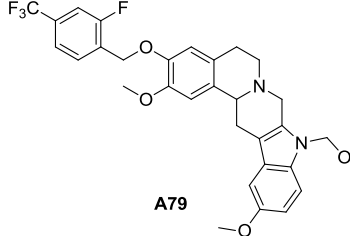
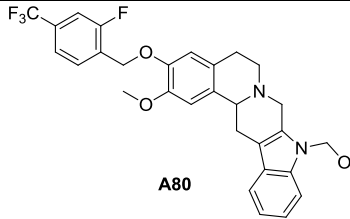
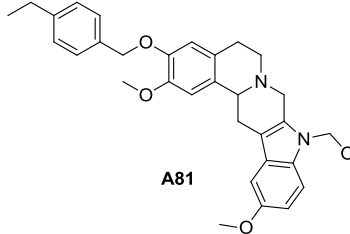
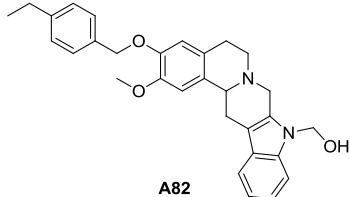
A31	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
A32	4-(((9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
A33	(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A34	(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A35	(2-butoxy-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A36	(2-butoxy-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A37	(2,3,12-trimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A38	(2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A39	(3,12-dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A40	(3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

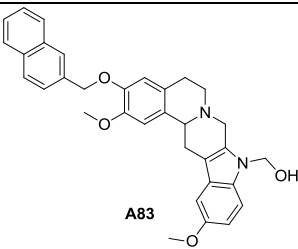
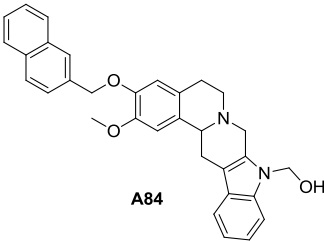
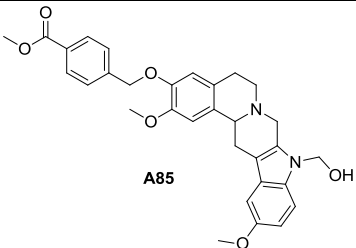
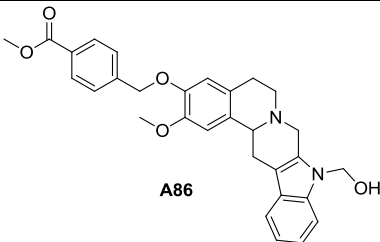
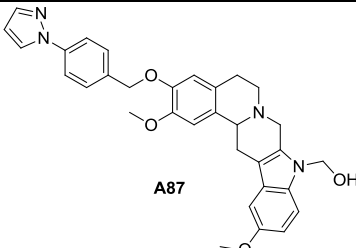
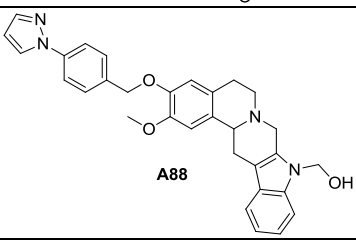
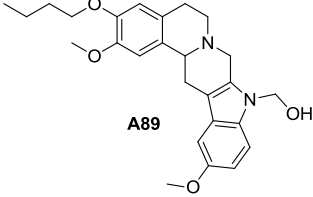
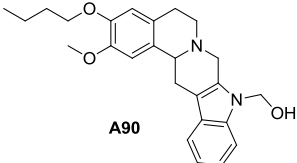
A41	(3,12-dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A42	(3-methoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A43	(2-(benzyloxy)-11-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A44	(2-(benzyloxy)-12-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A45	(2-(benzyloxy)-13-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A46	(2-(benzyloxy)-11-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A47	(2-(benzyloxy)-12-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A48	(2-(benzyloxy)-13-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A49	(2-(benzyloxy)-11-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

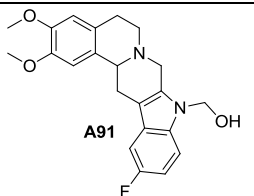
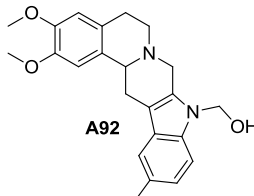
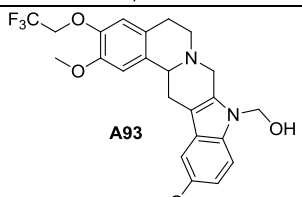
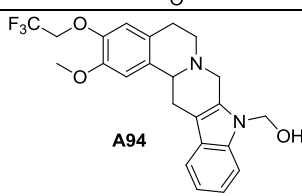
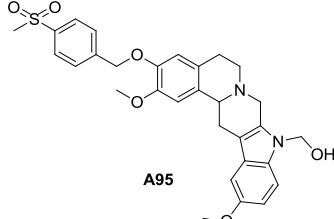
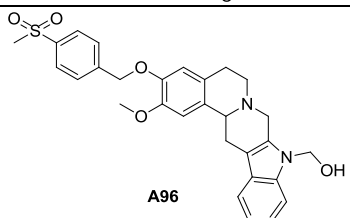
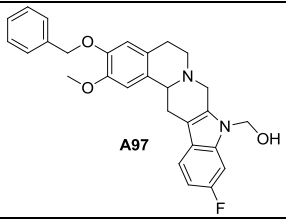
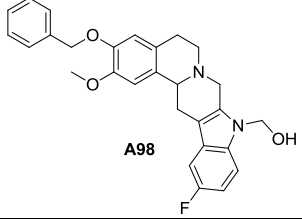
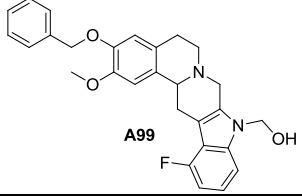
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A51	(2-(benzyloxy)-13-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A52	2-(benzyloxy)-9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
A53	(2-(benzyloxy)-3-methoxy-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A54	(2-(benzyloxy)-12-ethyl-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A55	(3-(benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A56	(3-(benzyloxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A57	(2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A58	(2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

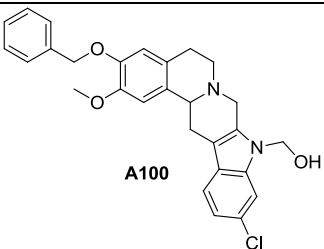
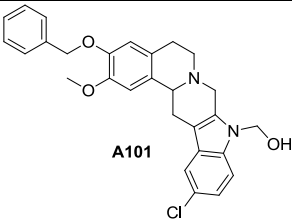
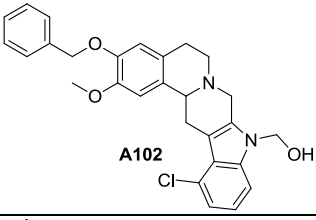
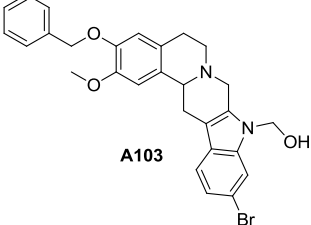
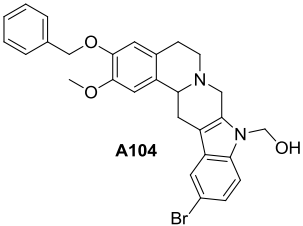
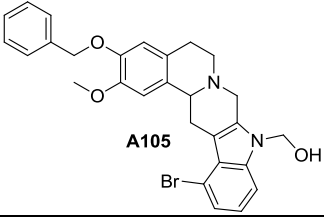
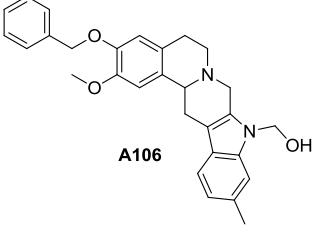
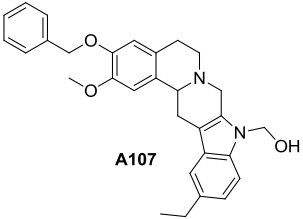
A59	(3-((4-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A60	(3-((4-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A61	(3-((3-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A62	(3-((3-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A63	(3-((2-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A64	(3-((2-fluorobenzyl)oxy)-2-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A65	(2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A66	(2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A67	(2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A68	(2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A69	(2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A70	(2-methoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A71	(3-((4-chlorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A72	(3-((4-chlorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A73	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
A74	4-(((9-(hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	

A75	(3-((4-bromobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A76	(3-((4-iodobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A77	(3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A78	(3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A79	(3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A80	(3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A81	(2,12-dimethoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A82	(2-methoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A83	(2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A84	(2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A85	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
A86	4-(((9-(hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
A87	(3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A88	(3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A89	(3-butoxy-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A90	(3-butoxy-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A91	(12-fluoro-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A92	(12-methyl-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A93	(2,12-dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A94	(2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A95	(2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A96	(2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A97	(3-(benzyloxy)-11-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A98	(3-(benzyloxy)-12-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A99	(3-(benzyloxy)-13-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

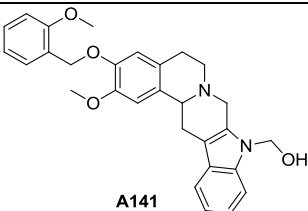
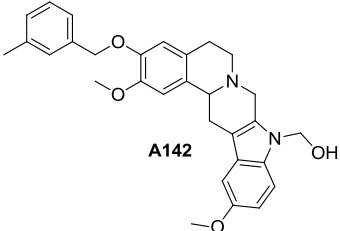
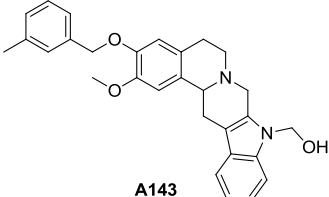
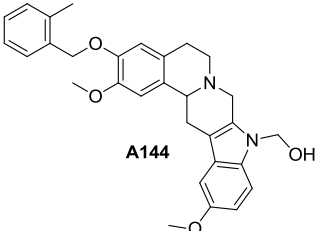
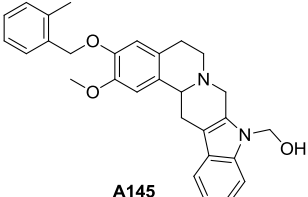
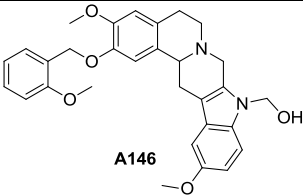
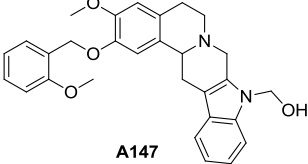
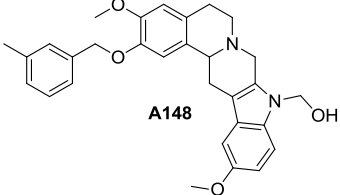
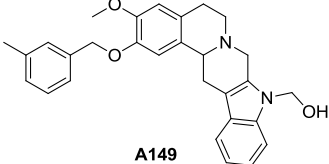
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A101	(3-(benzyloxy)-12-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A102	(3-(benzyloxy)-13-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A103	(3-(benzyloxy)-11-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A104	(3-(benzyloxy)-12-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A105	(3-(benzyloxy)-13-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A106	(3-(benzyloxy)-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A107	(3-(benzyloxy)-12-ethyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

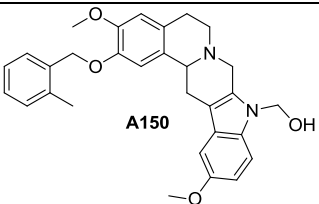
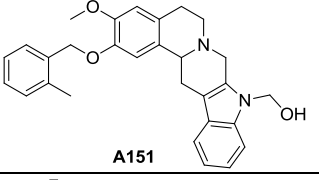
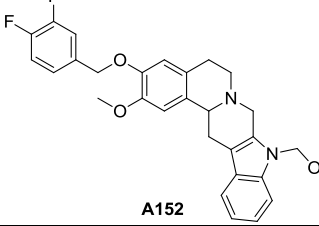
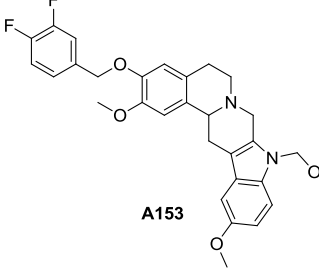
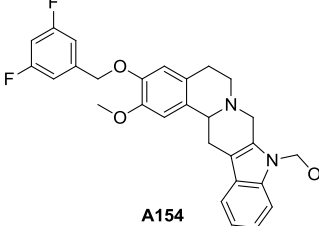
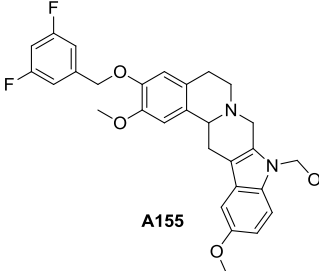
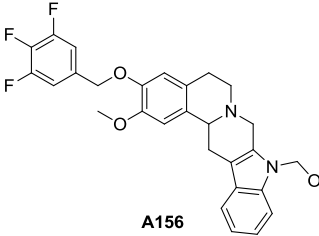
A108	(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A109	(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A110	(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A111	(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A112	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)acetate	
A113	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)cyclohexylsulfonate	
A114	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzenesulfonate	
A115	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzene sulfonate	
A116	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzene sulfonate	

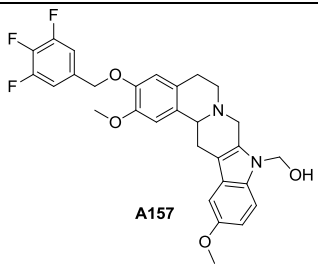
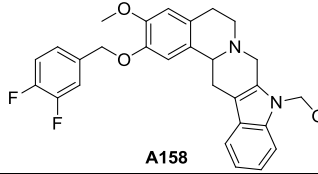
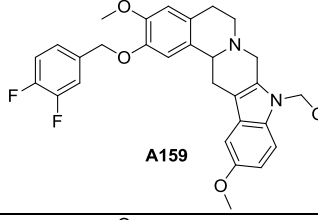
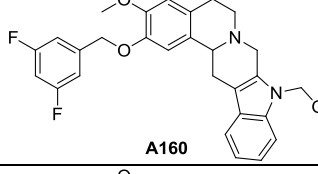
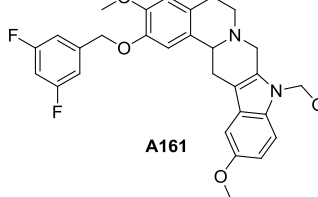
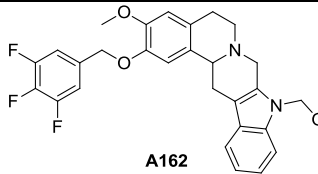
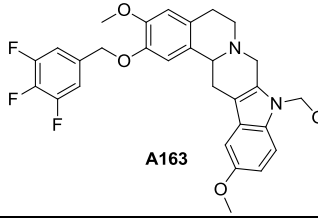
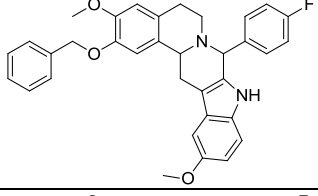
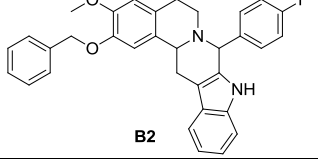
A117	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)2-fluorobenzene sulfonate	
A118	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzylbenzenesulfonate	
A119	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzoate	
A120	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)N,N-dimethylformate	
A121	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzoate	
A122	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzoate	
A123	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)2-fluorobenzoate	
A124	9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	

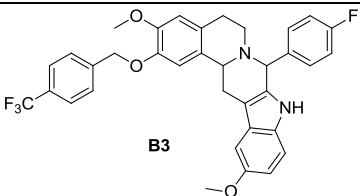
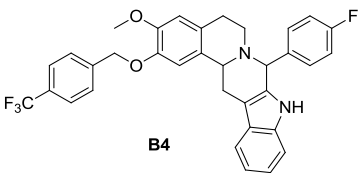
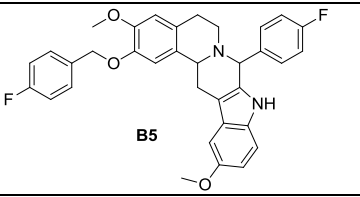
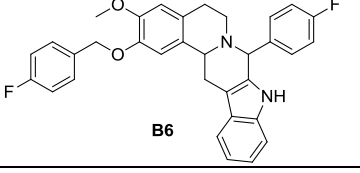
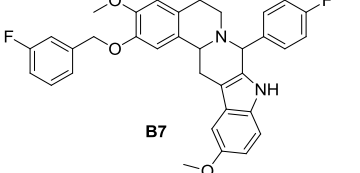
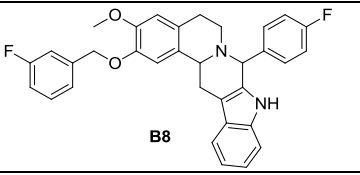
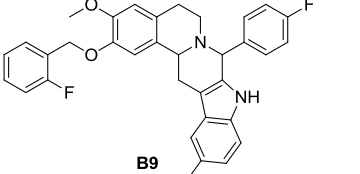
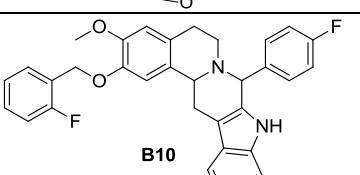
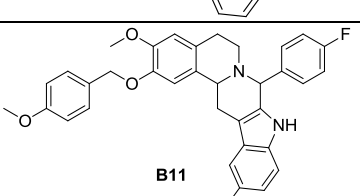
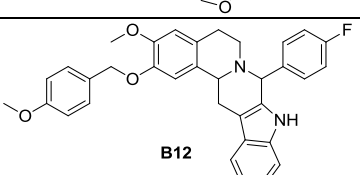
A125	9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	
A130	(3-(benzyloxy)-8-isopropyl-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A131	(2-(benzyloxy)-8-isopropyl-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A132	2-(benzyloxy)-3,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
A133	3-(benzyloxy)-2,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
A134	(2-((4-aminobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A135	(3-((4-aminobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A136	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)phenol	

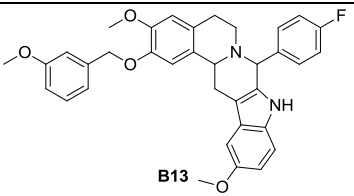
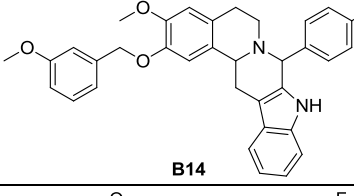
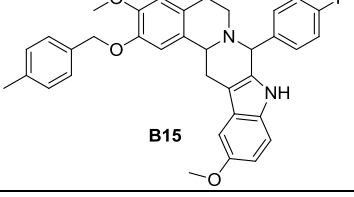
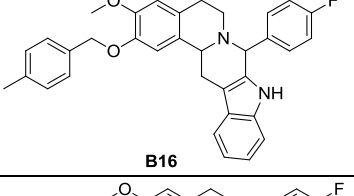
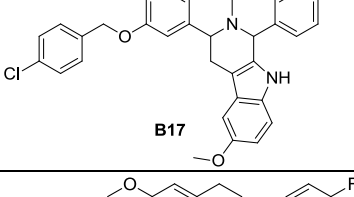
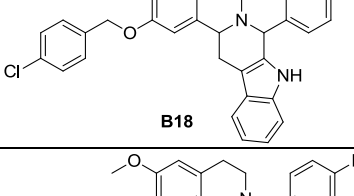
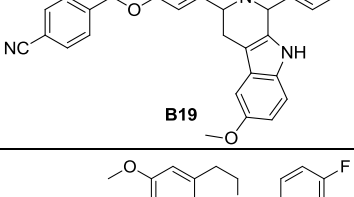
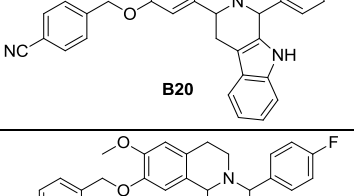
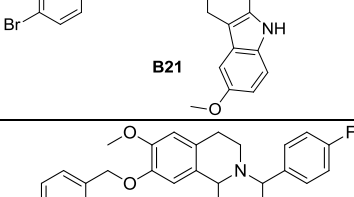
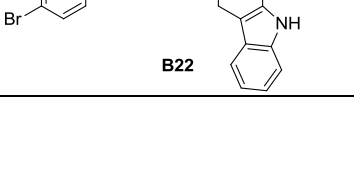
A137	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)phenol	
A138	4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoic acid	
A139	4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoic acid	
(S)-A55	S)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
(R)-A55	R)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
(S)-A1	S)-(2-(benzyloxy)-3,12-dimethoxy-5,8,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(6H)-yl)methanol	
(R)-A1	R)-(2-(benzyloxy)-3,12-dimethoxy-5,8,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(6H)-yl)methanol	
A140	(2,12-dimethoxy-3-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

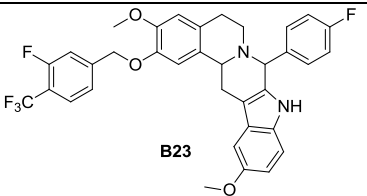
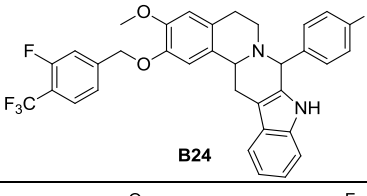
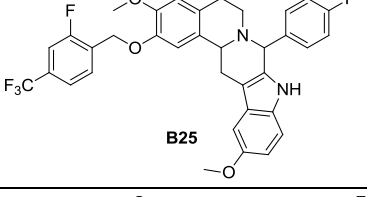
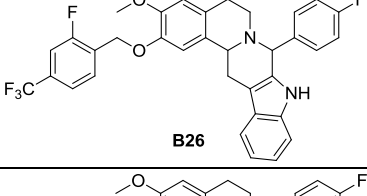
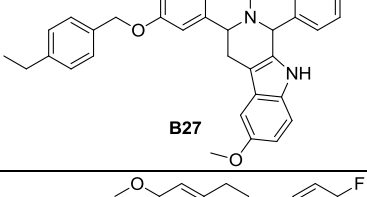
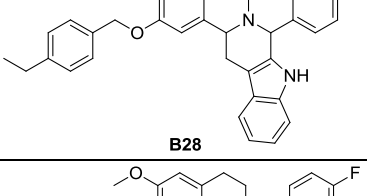
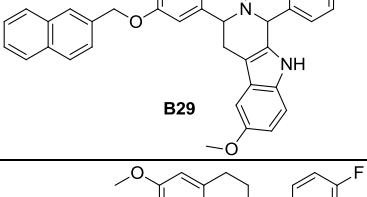
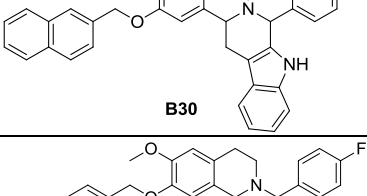
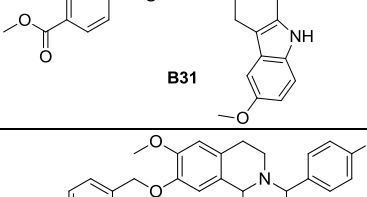
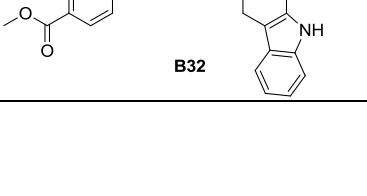
A141	(2-methoxy-3-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A142	(2,12-dimethoxy-3-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A143	(2-methoxy-3-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A144	(2,12-dimethoxy-3-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A145	(2-methoxy-3-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A146	(3,12-dimethoxy-2-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A147	(3-methoxy-2-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A148	(3,12-dimethoxy-2-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A149	(3-methoxy-2-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A150	(3,12-dimethoxy-2-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A151	(3-methoxy-2-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A152	(2-methoxy-3-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A153	(2,12-dimethoxy-3-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A154	(2-methoxy-3-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A155	(2,12-dimethoxy-3-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A156	(2-methoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

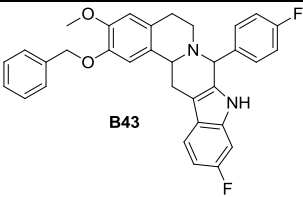
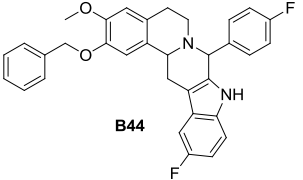
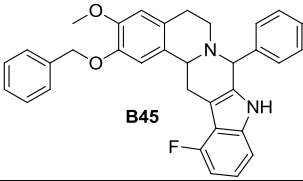
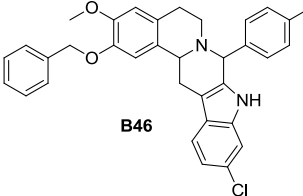
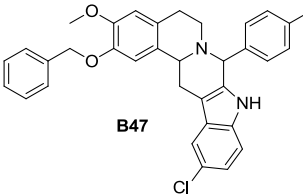
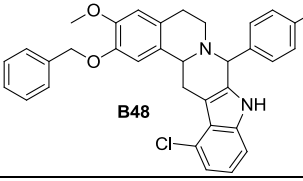
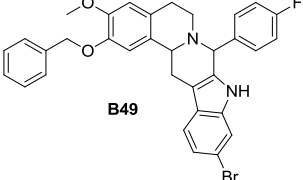
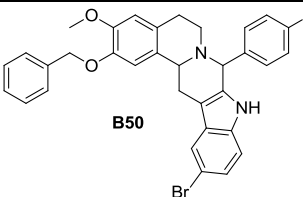
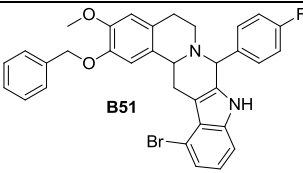
A157	(2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A158	(3-methoxy-2-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A159	(3,12-dimethoxy-2-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A160	(3-methoxy-2-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A161	(3,12-dimethoxy-2-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A162	(3-methoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A163	(3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
B1	2-(benzyloxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B2	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

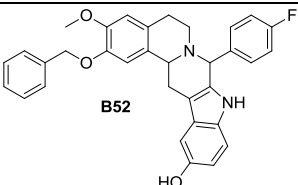
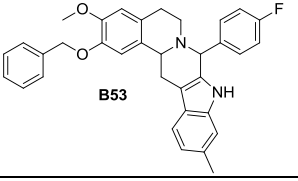
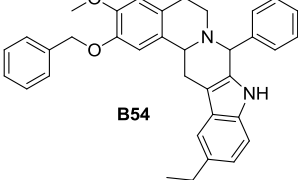
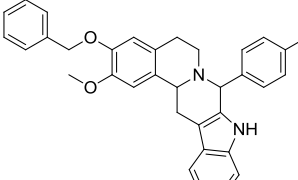
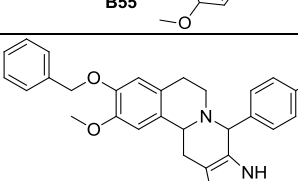
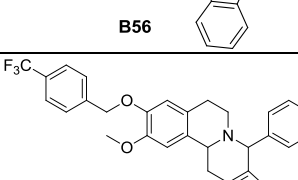
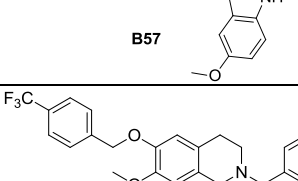
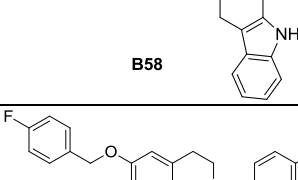
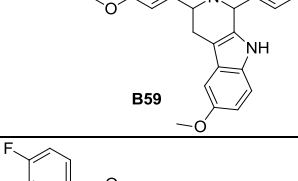
B3	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B4	8-(4-fluorophenyl)-3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B5	2-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B6	2-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B7	2-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B8	2-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B9	2-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B10	2-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B11	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B12	8-(4-fluorophenyl)-3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

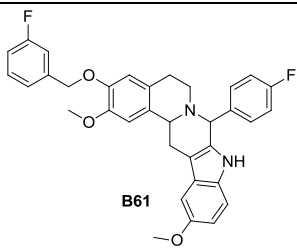
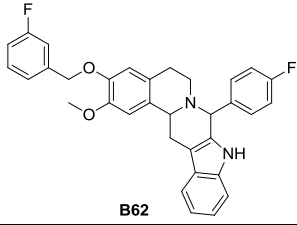
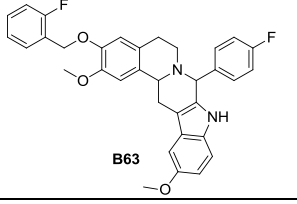
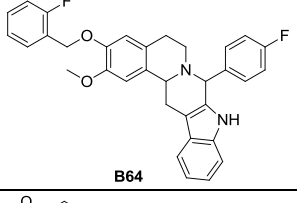
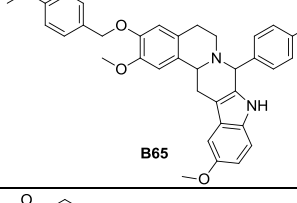
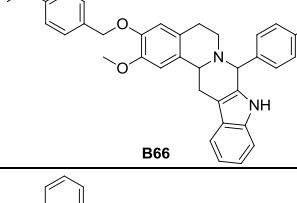
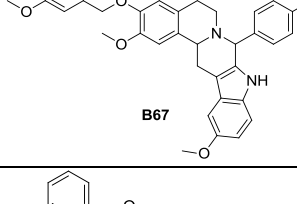
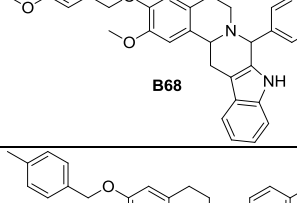
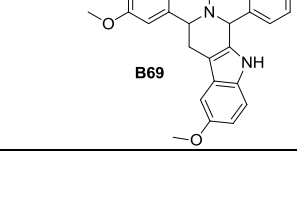
B13	8-(4-fluorophenyl)-3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B14	8-(4-fluorophenyl)-3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B15	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B16	8-(4-fluorophenyl)-3-methoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B17	2-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B18	2-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B19	4-(((8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
B20	4-(((8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
B21	2-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B22	2-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

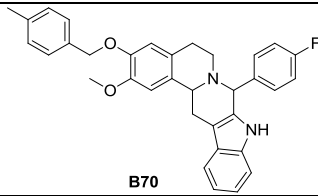
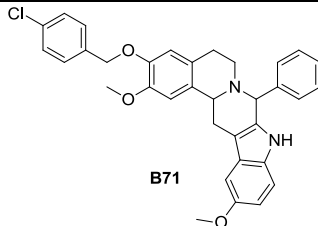
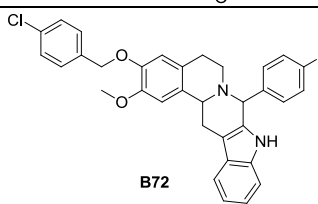
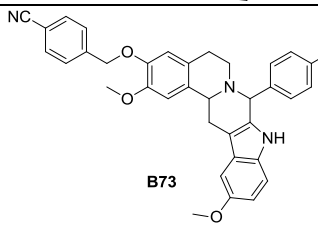
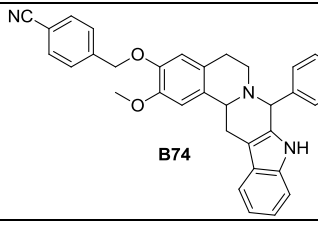
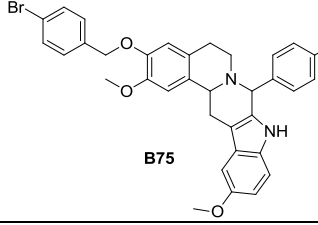
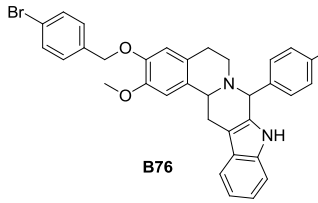
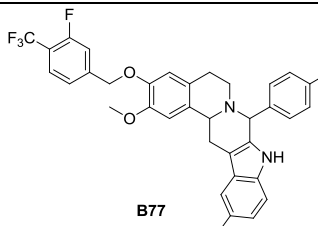
B23	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B24	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B25	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B26	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B27	2-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B28	2-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B29	8-(4-fluorophenyl)-3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B30	8-(4-fluorophenyl)-3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B31	4-(((8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
B32	4-(((8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	

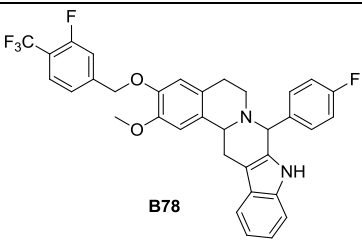
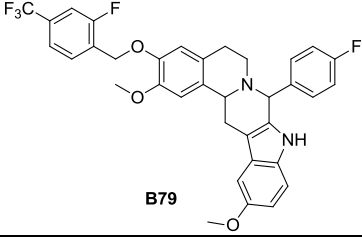
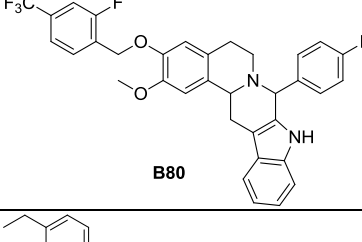
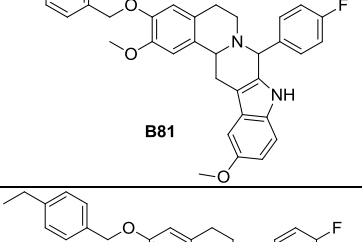
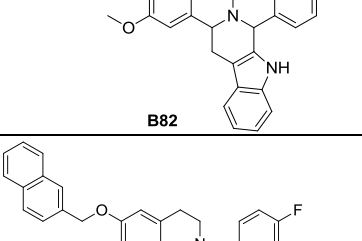
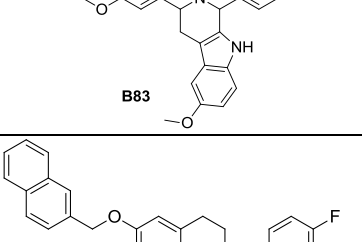
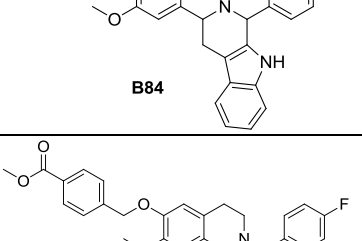
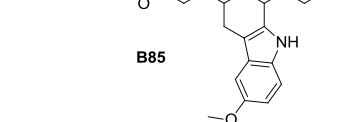
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B34	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B35	2-butoxy-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B36	2-butoxy-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B37	8-(4-fluorophenyl)-12-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline	
B38	8-(4-fluorophenyl)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline	
B39	8-(4-fluorophenyl)-3,12-dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B40	8-(4-fluorophenyl)-3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B41	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B42	8-(4-fluorophenyl)-3-methoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

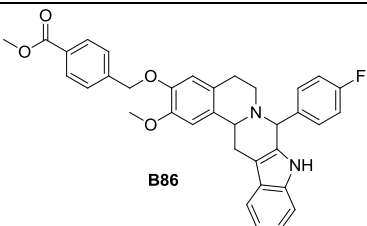
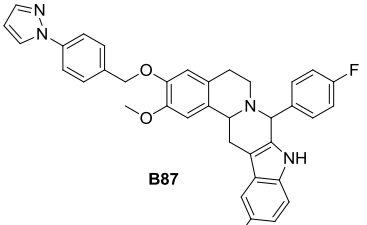
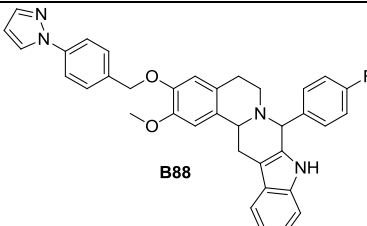
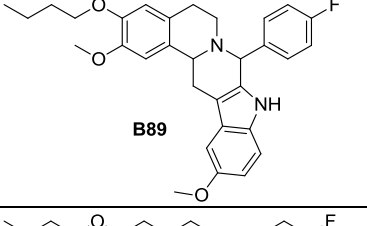
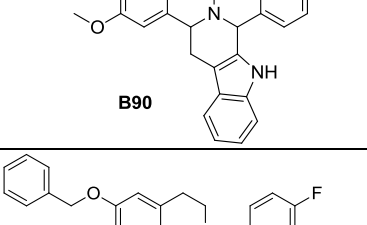
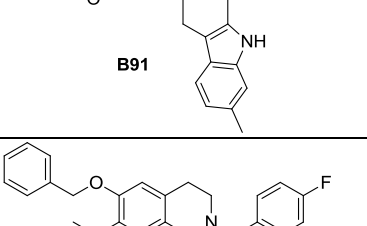
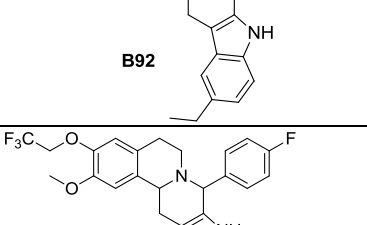
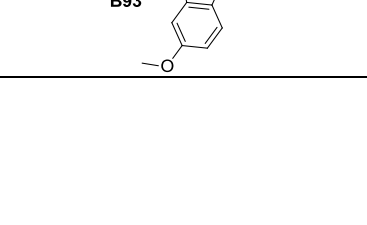
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B43	2-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B44	2-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B45	2-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B46	2-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B47	2-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B48	2-(benzyloxy)-13-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B49	2-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B50	2-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B51	2-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

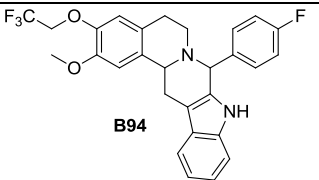
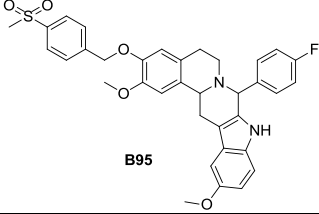
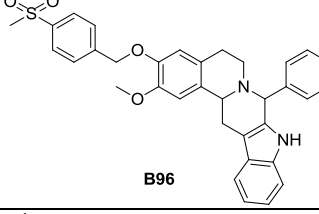
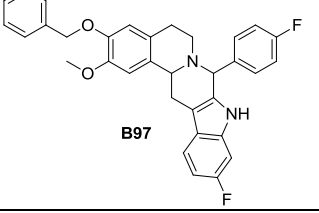
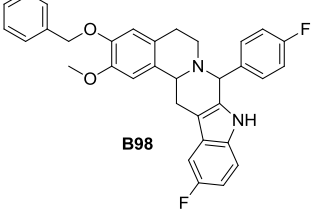
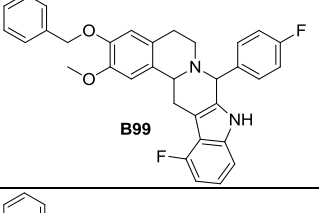
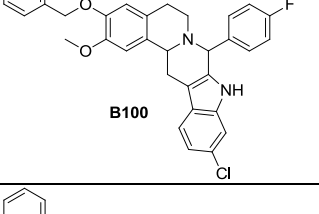
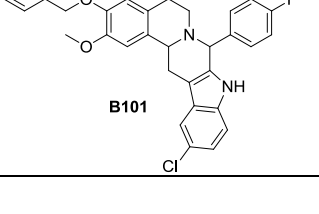
B52	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
B53	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B54	2-(benzyloxy)-12-ethyl-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B55	3-(benzyloxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B56	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B57	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B58	8-(4-fluorophenyl)-2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B59	3-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B60	3-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

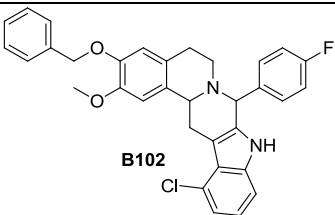
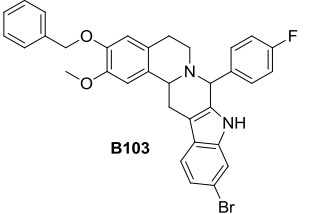
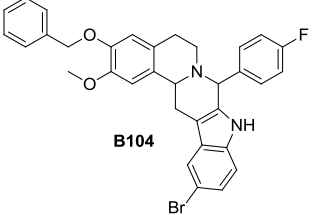
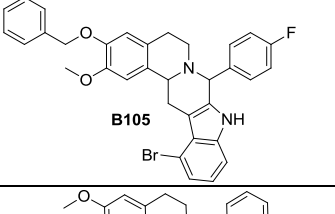
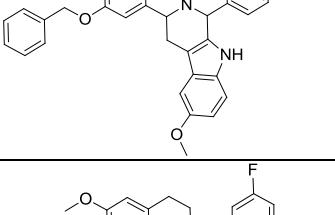
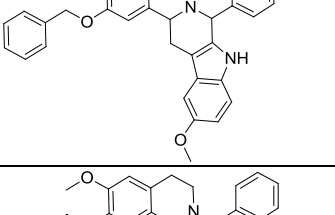
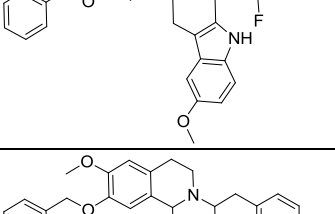
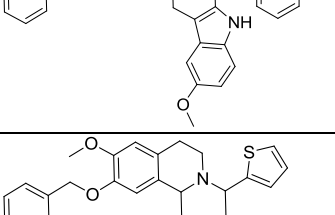
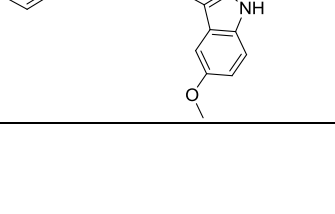
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B62	3-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B63	3-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B64	3-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B65	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B66	8-(4-fluorophenyl)-2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B67	8-(4-fluorophenyl)-2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B68	8-(4-fluorophenyl)-2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B69	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

B70	8-(4-fluorophenyl)-2-methoxy-3-((4-methyl benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B70
B71	3-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B71
B72	3-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B72
B73	4-(((8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	 B73
B74	4-(((8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	 B74
B75	3-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B75
B76	3-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B76
B77	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	 B77

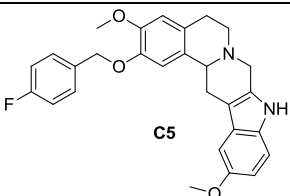
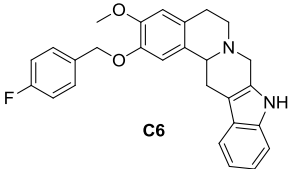
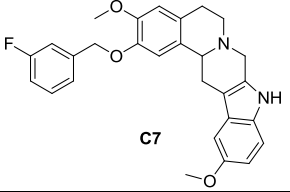
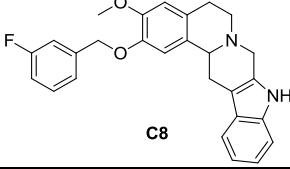
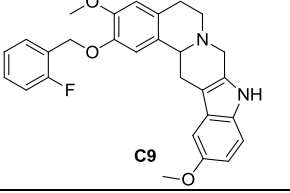
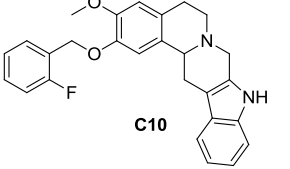
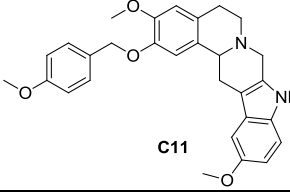
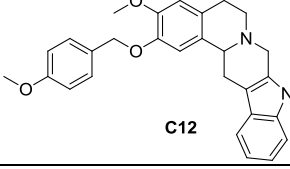
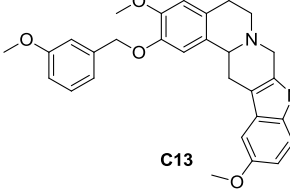
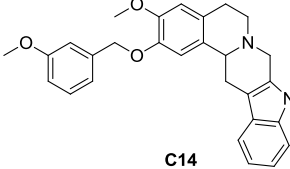
B78	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B79	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B80	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B81	3-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B82	3-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B83	8-(4-fluorophenyl)-2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B84	8-(4-fluorophenyl)-2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B85	4-(((8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	

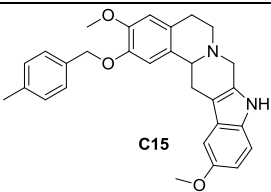
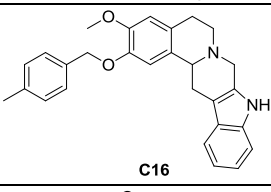
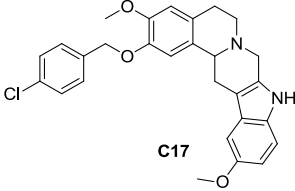
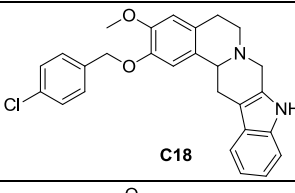
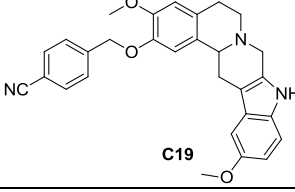
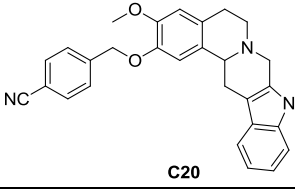
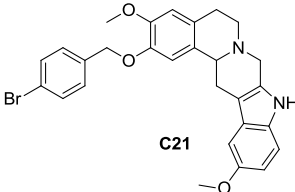
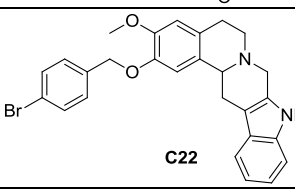
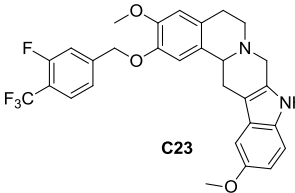
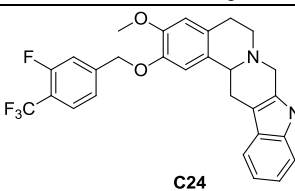
B86	4-(((8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
B87	3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B88	3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B89	3-butoxy-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B90	3-butoxy-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B91	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B92	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B93	8-(4-fluorophenyl)-2,12-dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

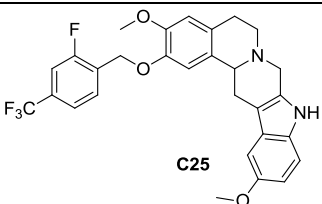
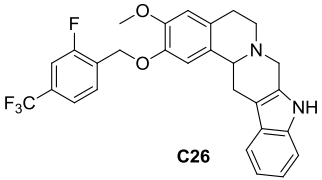
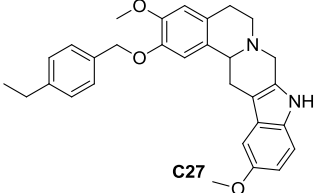
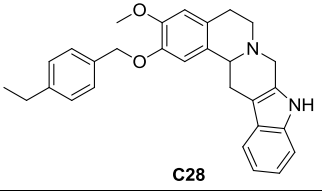
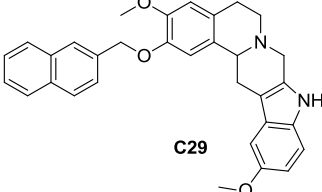
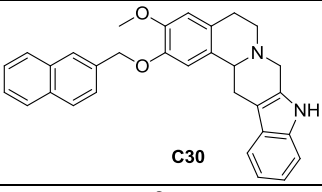
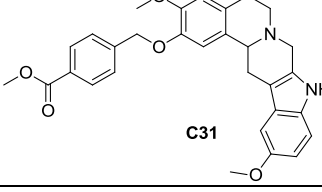
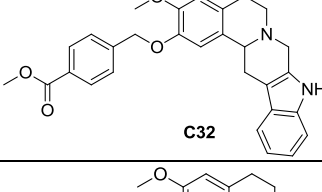
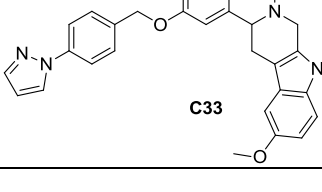
B94	8-(4-fluorophenyl)-2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B95	8-fluoro-2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B96	8-fluoro-2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B97	3-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B98	3-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B99	3-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B100	3-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B101	3-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

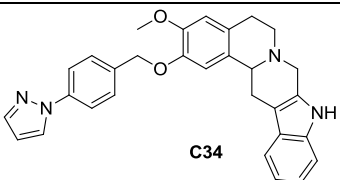
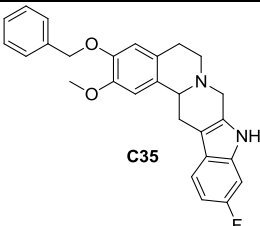
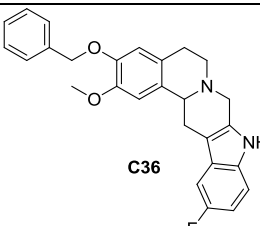
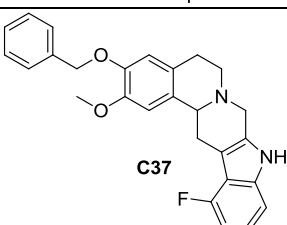
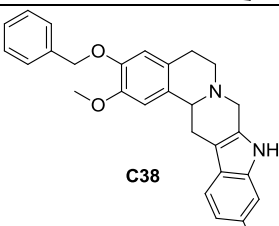
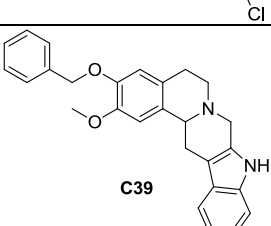
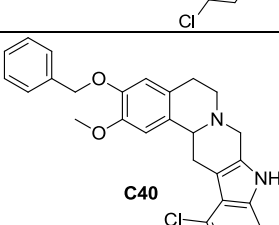
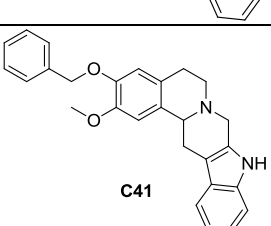
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B103	3-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B104	3-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B105	3-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B106	2-(benzyloxy)-8-phenyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B107	2-(benzyloxy)-8-(3-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B108	2-(benzyloxy)-8-(2-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B109	2-(benzyloxy)-8-benzyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B110	2-(benzyloxy)-8-thiophene-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

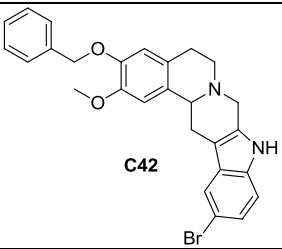
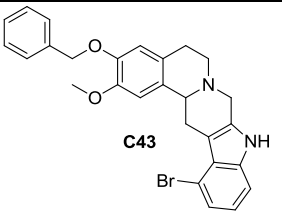
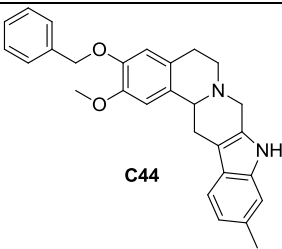
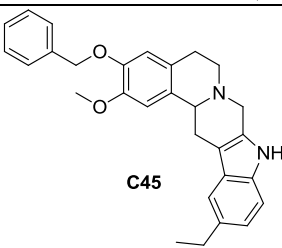
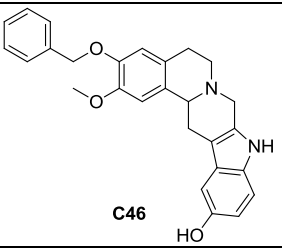
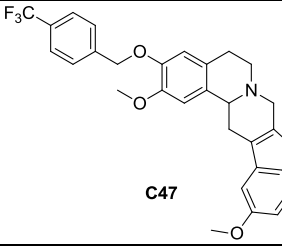
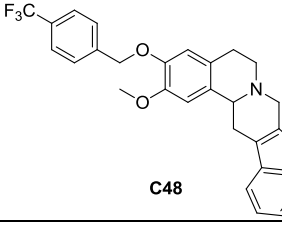
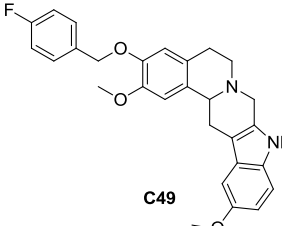
B111	2-(benzyloxy)-8-furan-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B112	2-(benzyloxy)-8-(3-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B113	2-(benzyloxy)-8-(5-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B114	2-(benzyloxy)-8-(5-cyanofuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B115	2-(benzyloxy)-8-pyrrole-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C1	2-((2,4-di(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C2	2-((2,4-di(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C3	3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C4	3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

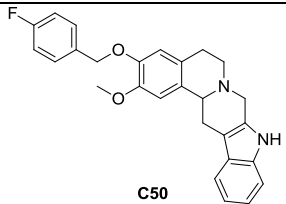
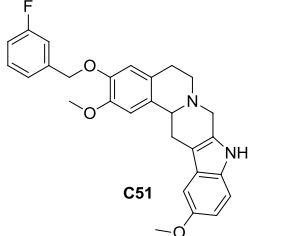
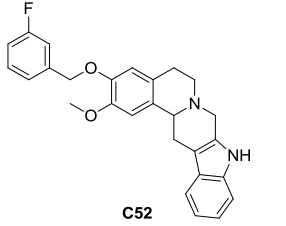
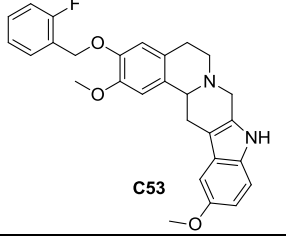
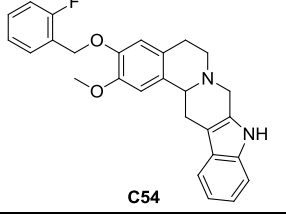
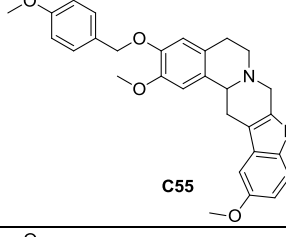
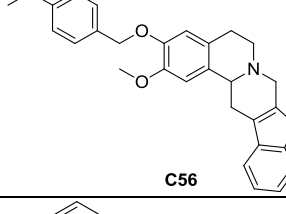
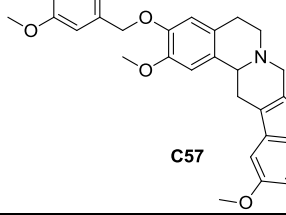
C5	2-((4-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C6	2-((4-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C7	2-((3-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C8	2-((3-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C9	2-((2-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C10	2-((2-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C11	3,12-dimethoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C12	3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C13	3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C14	3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

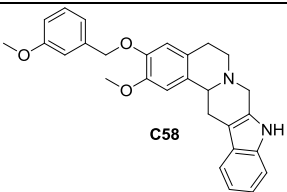
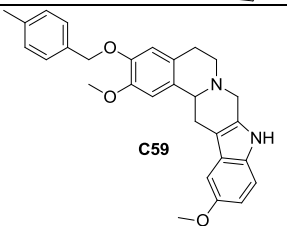
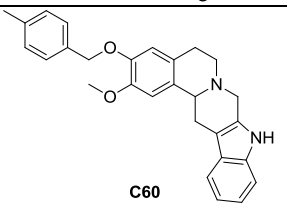
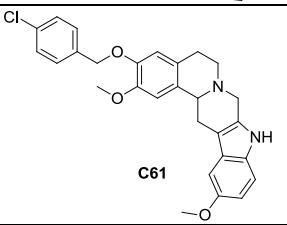
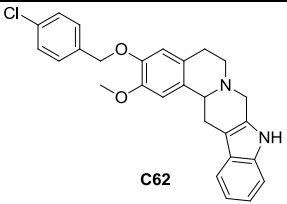
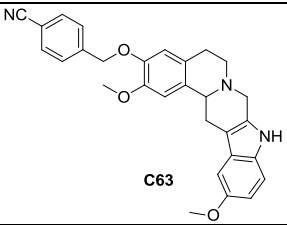
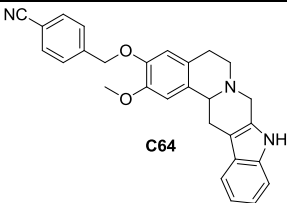
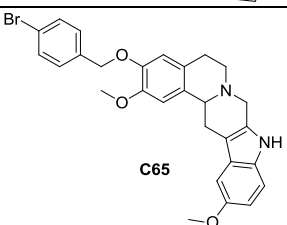
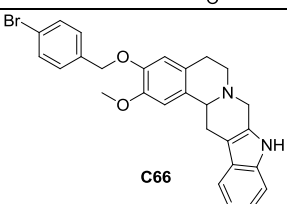
C15	3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C16	3-methoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C17	2-((4-chlorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C18	2-((4-chlorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C19	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
C20	4-(((3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
C21	2-((4-bromobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C22	2-((4-bromobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C23	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C24	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

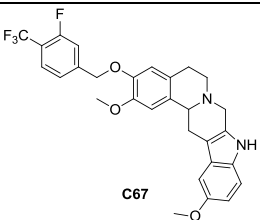
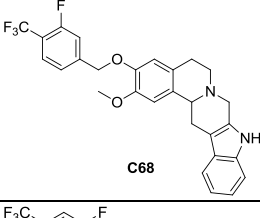
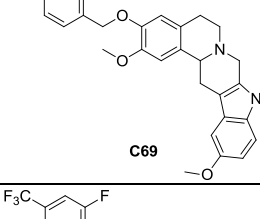
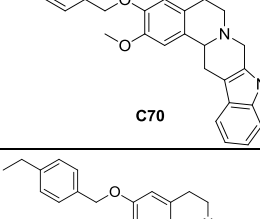
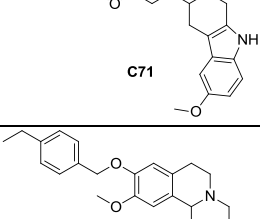
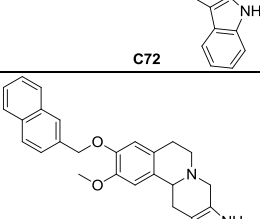
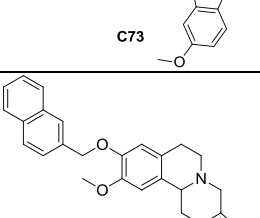
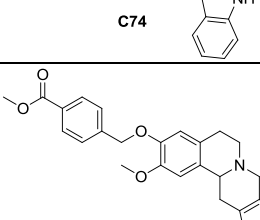
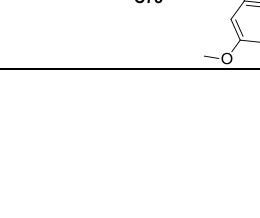
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C26	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C27	2-((4-ethylbenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C28	2-((4-ethylbenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C29	3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C30	3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C31	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
C32	4-(((3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
C33	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

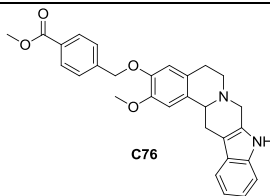
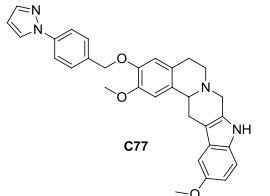
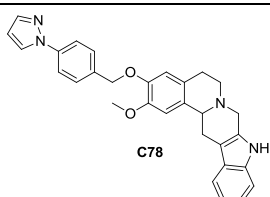
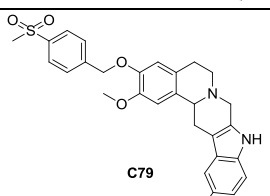
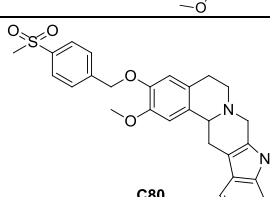
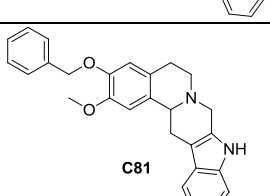
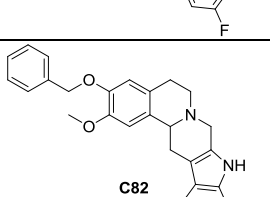
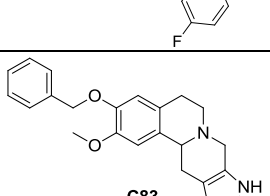
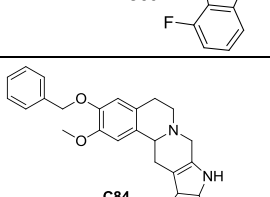
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C35	3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C36	3-(benzyloxy)-12-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C37	3-(benzyloxy)-13-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C38	3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C39	3-(benzyloxy)-12-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C40	3-(benzyloxy)-13-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
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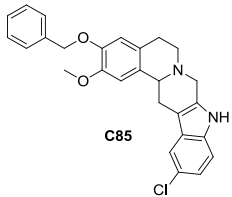
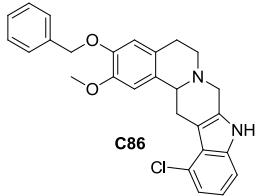
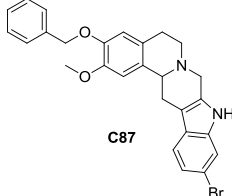
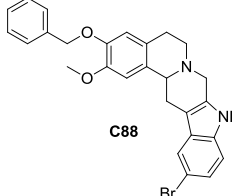
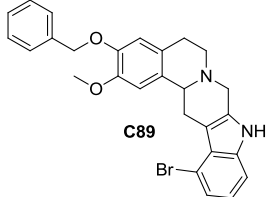
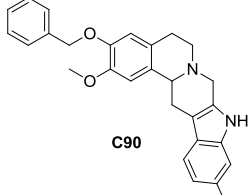
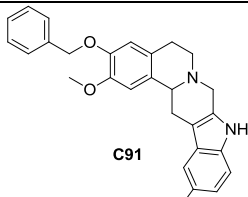
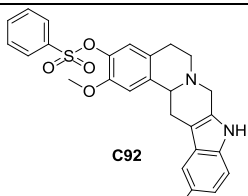
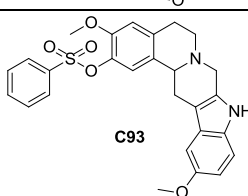
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C43	3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C44	3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C45	3-(benzyloxy)-12-ethyl-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C46	3-(benzyloxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
C47	2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C48	2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C49	3-((4-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

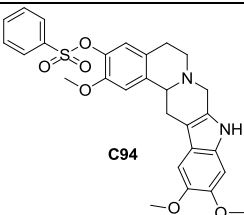
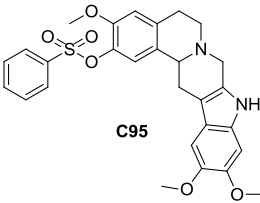
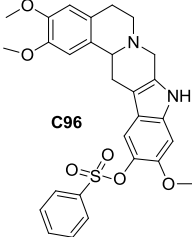
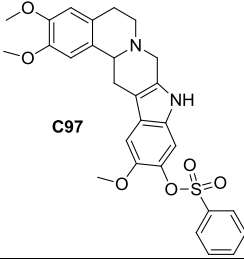
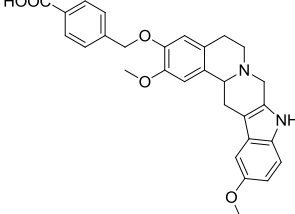
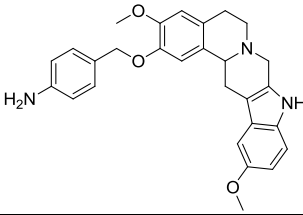
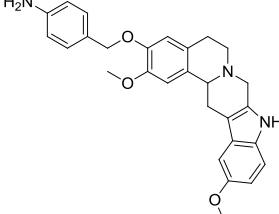
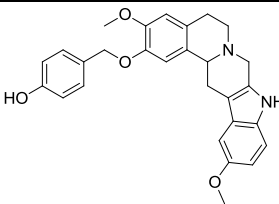
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C51	3-((3-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C52	3-((3-fluorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C53	3-((2-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C54	3-((2-fluorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C55	2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C56	2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C57	2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C58	2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C59	2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C60	2-methoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C61	3-((4-chlorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C62	3-((4-chlorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C63	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
C64	4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
C65	3-((4-bromobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C66	3-((4-bromobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

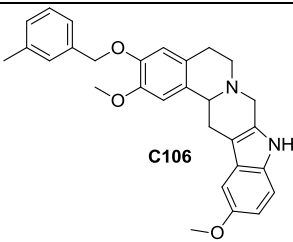
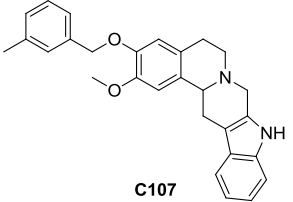
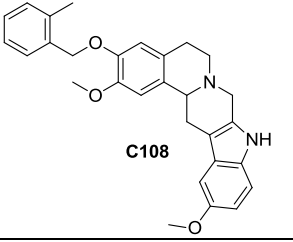
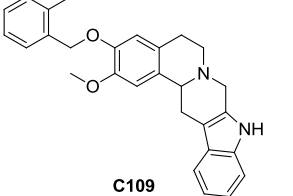
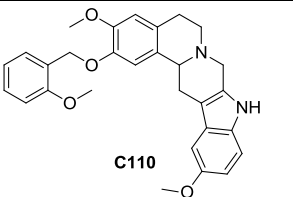
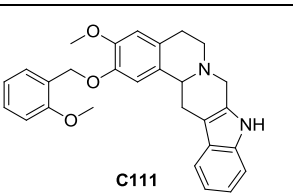
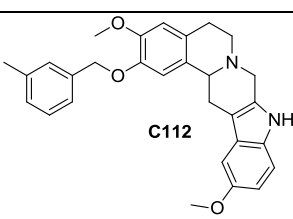
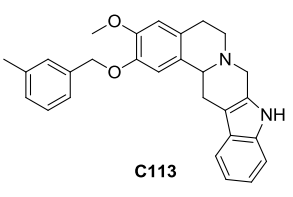
C67	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C68	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C69	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C70	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C71	3-((4-ethylbenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C72	3-((4-ethylbenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C73	2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C74	2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C75	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	

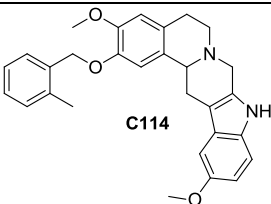
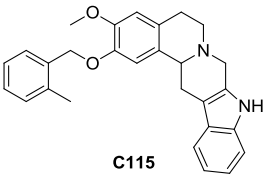
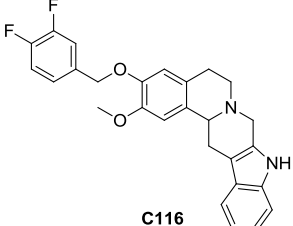
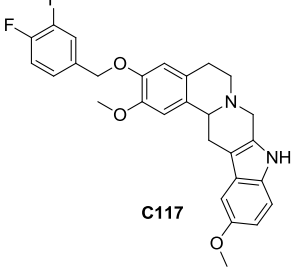
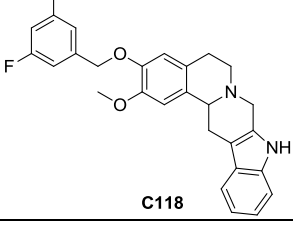
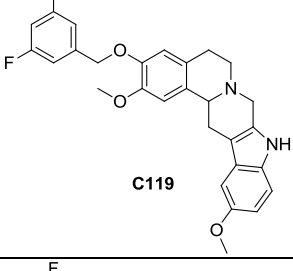
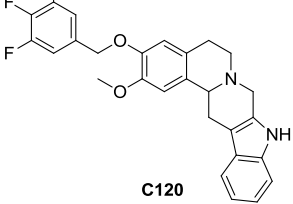
C76	4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
C77	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C78	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C79	2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C80	2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C81	3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C82	3-(benzyloxy)-12-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C83	3-(benzyloxy)-13-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C84	3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

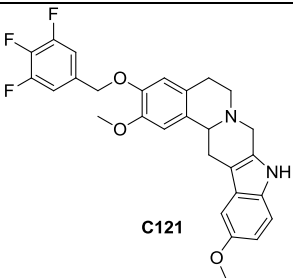
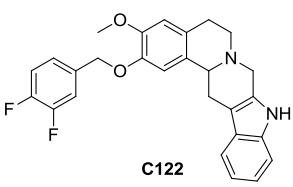
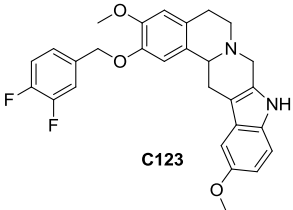
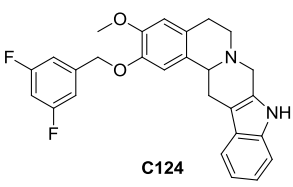
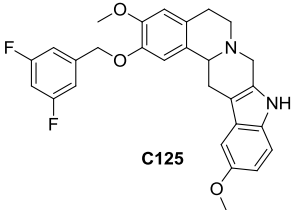
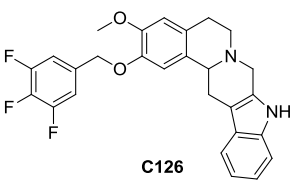
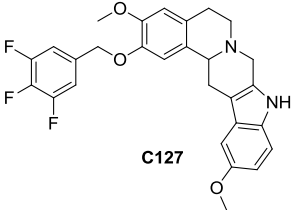
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C86	3-(benzyloxy)-13-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C87	3-(benzyloxy)-11-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C88	3-(benzyloxy)-12-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C89	3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C90	3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C91	3-(benzyloxy)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C92	2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	
C93	3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	

C94	2,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	
C95	3,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	
C96	2,3,11-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-ylbenzenesulfonate	
C97	2,3,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-11-ylbenzenesulfonate	
C98	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzoic acid	
C99	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)aniline	
C100	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)aniline	
C101	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)phenol	

C102	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)phenol	
C103	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzoic acid	
(S)-C3	S)-3,12-dimethoxy-2-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(R)-C3	R)-3,12-dimethoxy-2-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(S)-C47	S)-2,12-dimethoxy-3-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(R)-C47	R)-2,12-dimethoxy-3-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
C104	2,12-dimethoxy-3-(((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C105	2-methoxy-3-(((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C106	2,12-dimethoxy-3-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C107	2-methoxy-3-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C108	2,12-dimethoxy-3-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C109	2-methoxy-3-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C110	3,12-dimethoxy-2-((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C111	3-methoxy-2-((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C112	3,12-dimethoxy-2-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C113	3-methoxy-2-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

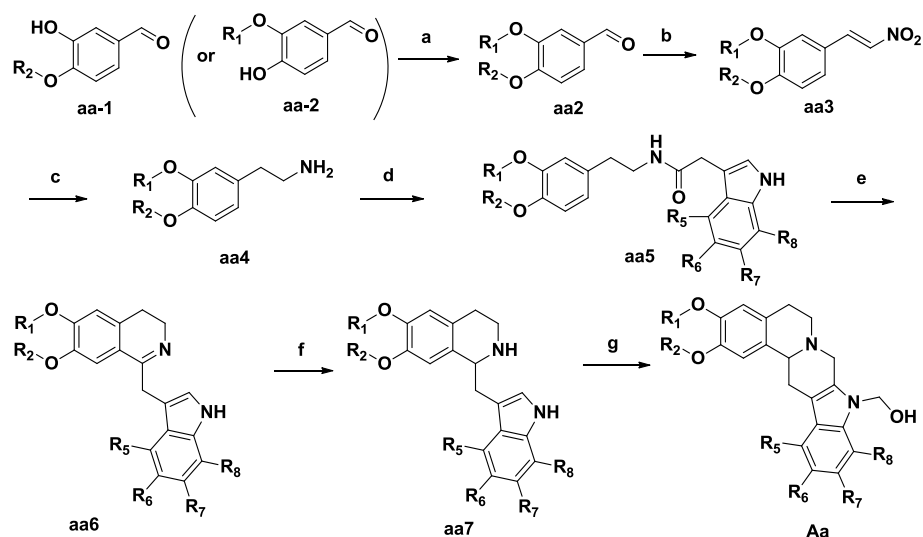
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C115	3-methoxy-2-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C116	2-methoxy-3-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C117	2,12-dimethoxy-3-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C118	2-methoxy-3-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C119	2,12-dimethoxy-3-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C120	2-methoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C121	2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C122	3-methoxy-2-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C123	3,12-dimethoxy-2-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C124	3-methoxy-2-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C125	3,12-dimethoxy-2-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C126	3-methoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C127	3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

The Preparation of Compound of Formula (I)

The present invention provides a process for the preparation of the following compounds of formula Aa, Bb and Cc, which are carried out according to the following schemes 1 and 2. The following materials and reagents are commercially available unless otherwise stated.

Scheme 1:



Scheme 1 Step 1-a: 3-methoxy-4-hydroxy-benzaldehyde **1** and R_1X (R_1 = benzyl, alkyl, etc.) are dissolved in acetone solution, potassium carbonate is added in two portions, and the mixture is stirred at 65 °C for 4-12 hours after the addition. After the reaction is completed (TLC monitoring, UV development), the reaction solution is subjected to suction filtration, and the filtrate is collected and concentrated by distillation under reduced pressure. The crude product is purified by silica gel column chromatography (petroleum ether/ethyl acetate) to give compound **aa2**. The yield is 70-90%.

Step 1-b: The compound **aa2** is dissolved in nitromethane, and ammonium acetate and acetic acid are added at room temperature. After the addition, the mixture is stirred at 80 °C for 2-4 hours. After the reaction is completed (TLC monitoring and UV development), the mixture is concentrated by distillation under reduced pressure, and the obtained concentrate is poured into a saturated NaHCO_3 solution with stirring to give a yellow solid suspension. The suspension is suction-filtrated with a Buchner funnel. The obtained cake is added into isopropanol, and suction-filtered with a Buchner funnel. This operation is repeated twice to obtain a purified product **aa3** in a yield of 80%-95%.

Step 1-c: LiAlH_4 is dissolved in anhydrous THF in an ice water bath, and then a solution of compound **aa3** in tetrahydrofuran is added dropwise. After the addition is completed, the mixture is reacted in an ice water bath for 1 hour, then transferred to a 65 °C oil bath and stirred for 4-8 hours. After the reaction is completed (TLC monitoring and UV development), the reaction is cooled to room temperature, then the mixture is moved to an ice water bath to quench the reaction, and the quenched mixture is poured into a Buchner funnel and suction-filtered under reduced pressure. The filtrate was collected, and the crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to afford pale yellow liquid **aa4**, yield 30-70%.

Step 1-d: 5-methoxy-3-indolacetic acid is dissolved in anhydrous dichloromethane, and HOBt, EDC hydrochloride and triethylamine are added in one portion at room temperature. After the addition, the mixture is stirred at room temperature for 30 minutes. The solution of the compound **aa4** in dichloromethane is slowly added and stirred for 10-20 hours. After the reaction is completed (TLC monitoring, UV development), an appropriate amount of water is added, and the mixture is extracted with dichloromethane, the organic layers are combined,

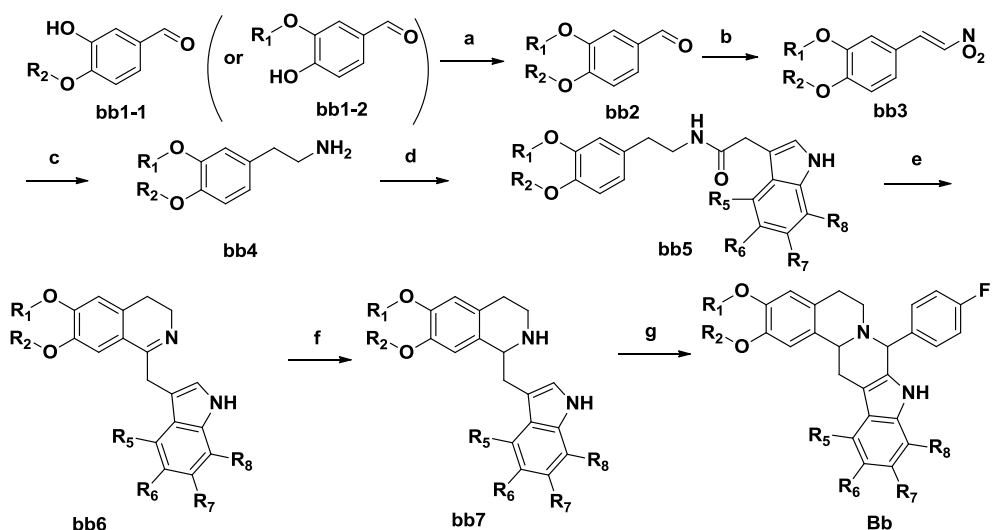
washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to provide compound **aa5** in a yield of 60-80%.

Step 1-e: The compound **aa5** was dissolved in anhydrous CH₃CN, and an appropriate amount of POCl₃ is added thereto at room temperature. After the addition, the mixture is reacted at 90 °C for 1-2 hours under argon. After the reaction is completed (TLC monitoring, UV development), the reaction solution is directly concentrated by distillation under reduced pressure, and the concentrate is quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **aa6**, which is directly used in the next step without purification.

Step 1-f: The concentrate **aa6** is dissolved in anhydrous methanol, and sodium borohydride is added portionwise in an ice water bath. After the addition, the mixture was stirred at room temperature for 4-8 hours. After the reaction is completed (TLC monitoring, UV development), the reaction solution is concentrated, and saturated NH₄Cl solution is added to the obtained concentrated liquid, and an appropriate amount of ethyl acetate is added to the mixed solution. The mixture is shaken until clear and transparent, and extracted with ethyl acetate. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated to give a spumous solid **aa7**, yield 20-30%.

Step 1-g: The compound **aa7** was dissolved in anhydrous acetonitrile, and a solution of formaldehyde and formic acid solution (or a solution of 4-fluorobenzaldehyde and formic acid solution) are added. After the addition, the mixture was stirred at 80 °C for 4-8 hours. After the reaction is completed (TLC monitoring, UV development), the reaction liquid is concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution is added to the concentrate, and the mixture is extracted with ethyl acetate. The combined organic layer is washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product is purified by silica gel column chromatography (dichloromethane/methanol) to give a powdered solid **Aa** (yield: 60-80%).

Scheme 2:



Scheme 2 Step 2-a: 3-methoxy-4-hydroxy-benzaldehyde **1** and R_1X (R_1 = benzyl, alkyl, etc.) are dissolved in acetone solution, and potassium carbonate is added in two portions, and the mixture is stirred at 65 °C for 4-12 hours after the addition. After the reaction is completed (TLC monitoring, UV development), the reaction solution is subjected to suction filtration, and the filtrate is collected and concentrated by distillation under reduced pressure. The crude product is purified by silica gel column chromatography (petroleum ether/ethyl acetate) to give compound **bb2**. The yield is 70-90%.

Step 2-b: The compound **bb2** was dissolved in nitromethane, and ammonium acetate and acetic acid are added at room temperature. After the addition, the mixture is stirred at 80 °C for 2-4 hours. After the reaction is completed (TLC monitoring and UV development), the mixture is concentrated by distillation under reduced pressure, and the obtained concentrate is poured into a saturated NaHCO_3 solution with stirring to give a yellow solid suspension. The suspension is suction-filtrated with a Buchner funnel. The obtained cake is added to isopropanol, and suction-filtered with a Buchner funnel. This operation is repeated twice to obtain a purified product **bb3** in a yield of 80%-95%.

Step 2-c: LiAlH_4 is dissolved in anhydrous THF in an ice water bath, and then a solution of compound **bb3** in tetrahydrofuran is added dropwise. After the addition is completed, the mixture is reacted in an ice water bath for 1 hour, then transferred to a 65 °C oil bath and stirred for 4-8 hours. After the reaction is completed (TLC monitoring and UV development), the reaction is cooled to room temperature, then the mixture is moved to an ice water bath to quench the reaction, and the quenched mixture is poured into a Buchner funnel and suction-filtered under reduced pressure. The filtrate was collected, and the crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to afford pale yellow liquid **bb4**, yield 30-70%.

Step 2-d: 5-methoxy-3-indolacetic acid is dissolved in anhydrous dichloromethane, and HOBt, EDC hydrochloride and triethylamine are added in one portion at room temperature. After the addition, the mixture is stirred at room temperature for 30 minutes. The solution of the compound **bb4** in dichloromethane is slowly added and stirred for 10-20 hours. After the reaction is completed (TLC monitoring, UV development), an appropriate amount of water is added, and the mixture is extracted with dichloromethane, the organic layers are combined,

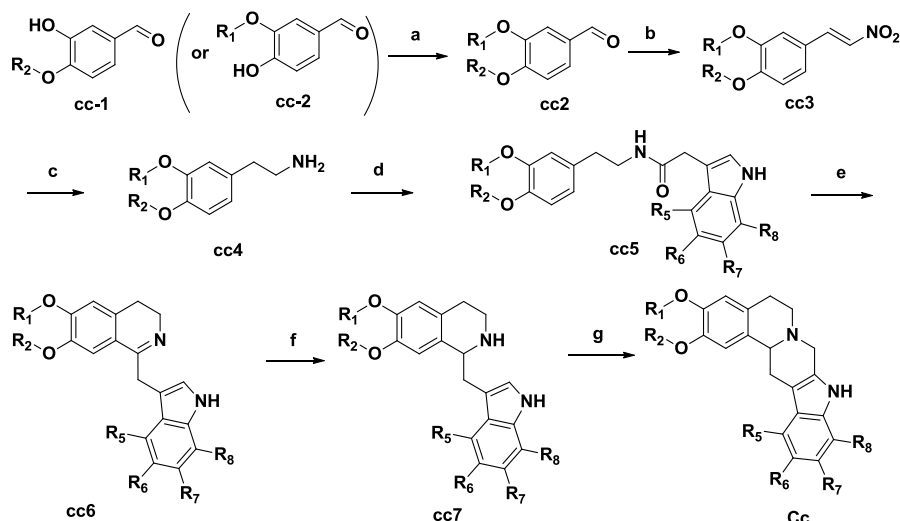
washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to provide compound **bb5** in a yield of 60-80%.

Step 2-e: The compound **bb5** is dissolved in anhydrous CH₃CN, and an appropriate amount of POCl₃ is added thereto at room temperature. After the addition, the mixture is reacted at 90 °C for 1-2 hours under argon. After the reaction is completed (TLC monitoring UV development), the reaction solution is directly concentrated by distillation under reduced pressure, and the concentrate is quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **bb6**, which is directly used in the next step without purification.

Step 2-f: The concentrate **bb6** is dissolved in anhydrous methanol, and sodium borohydride is added portionwise in an ice water bath. After the addition, the mixture was stirred at room temperature for 4-8 hours. After the reaction is completed (TLC monitoring, UV development), the reaction solution is concentrated, and saturated NH₄Cl solution is added to the obtained concentrated liquid, and an appropriate amount of ethyl acetate is added to the mixed solution. The mixture is shaken until clear and transparent, and extracted with ethyl acetate. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated to give a spumous solid **bb7**, yield 20-30%.

Step 2-g: The compound **bb7** is dissolved in anhydrous acetonitrile, and a solution of 4-fluorobenzaldehyde and formic acid solution are added. After the addition, the mixture was stirred at 80 °C for 4-8 hours. After the reaction is completed (TLC monitoring, UV development), the reaction liquid is concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution is added to the concentrate, and the mixture is extracted with ethyl acetate. The combined organic layer is washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product is purified by silica gel column chromatography (dichloromethane/methanol) to give a powdered solid **Bb** (yield: 60-80%).

Scheme 3:



Scheme 3 Step 3-a: 3-methoxy-4-hydroxy-benzaldehyde **1** and R_1X (R_1 = benzyl, alkyl, etc.) are dissolved in acetone solution, and potassium carbonate is added in two portions, and the mixture is stirred at 65 °C for 4-12 hours after the addition. After the reaction is completed (TLC monitoring, UV development), the reaction solution is subjected to suction filtration, and the filtrate is collected and concentrated by distillation under reduced pressure. The crude product is purified by silica gel column chromatography (petroleum ether/ethyl acetate) to give compound **cc2**. The yield is 70-90%.

Step 3-b: The compound **aa2** was dissolved in nitromethane, and ammonium acetate and acetic acid are added at room temperature. After the addition, the mixture is stirred at 80 °C for 2-4 hours. After the reaction completed (TLC monitoring and UV development), the mixture is concentrated by distillation under reduced pressure, and the obtained concentrate is poured into a saturated NaHCO_3 solution with stirring to give a yellow solid suspension. The suspension is suction-filtrated with a Buchner funnel. The obtained cake is added to isopropanol, and suction-filtered with a Buchner funnel. This operation is repeated twice to obtain a purified product **cc3** in a yield of 80%-95%.

Step 3-c: LiAlH_4 is dissolved in anhydrous THF in an ice water bath, and then a solution of compound **cc3** in tetrahydrofuran is added dropwise. After the addition is completed, the mixture is reacted in an ice water bath for 1 hour, then transferred to a 65 °C oil bath and stirred for 4-8 hours. After the reaction is completed (TLC monitoring and UV development), the reaction is cooled to room temperature, then the mixture is moved to an ice water bath to quench the reaction, and the quenched mixture is poured into a Buchner funnel to filter under reduced pressure. The filtrate was collected, and the crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to afford pale yellow liquid **cc4**, yield 30-70%.

Step 3-d: 5-methoxy-3-indolacetic acid is dissolved in anhydrous dichloromethane, and HOBt, EDC hydrochloride and triethylamine are added in one portion at room temperature. After the addition, the mixture is stirred at room temperature for 30 minutes. The solution of the compound **aa4** in dichloromethane is slowly added and stirred for 10-20 hours. After the reaction is completed (TLC monitoring UV development), an appropriate amount of water is added, and the mixture is extracted with dichloromethane, the organic

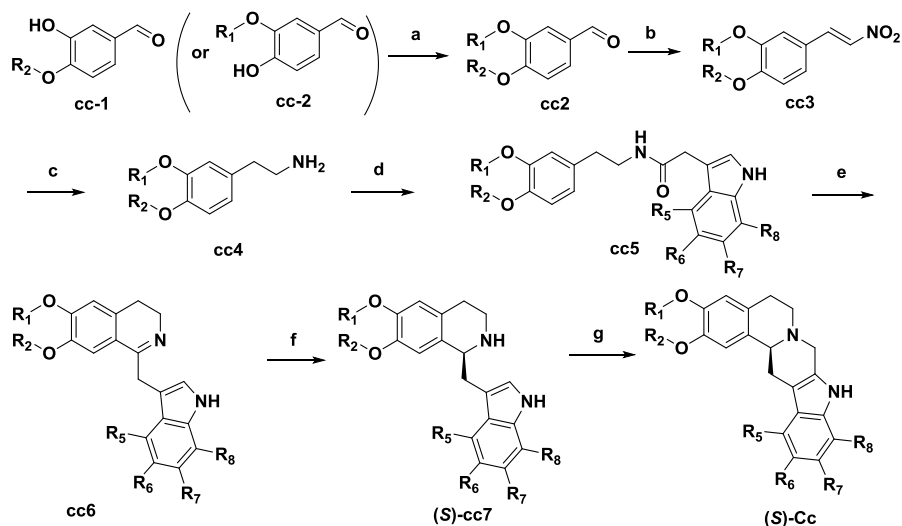
layers are combined, washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to provide compound **cc5** in a yield of 60-80%.

Step 3-e: The compound **cc5** is dissolved in anhydrous CH₃CN, and an appropriate amount of POCl₃ is added thereto at room temperature. After the addition, the mixture is reacted at 90 °C for 1-2 hours under argon. After the reaction is completed (TLC monitoring UV development), the reaction solution is directly concentrated by distillation under reduced pressure, and the concentrate is quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **cc6**, which is directly used in the next step without purification.

Step 3-f: The concentrate **cc6** is dissolved in anhydrous methanol, and sodium borohydride is added portionwise in an ice water bath. After the addition, the mixture was stirred at room temperature for 4-8 hours. After the reaction is completed (TLC monitoring UV development), the reaction solution is concentrated, and saturated NH₄Cl solution is added to the obtained concentrated liquid, and an appropriate amount of ethyl acetate is added to the mixed solution. The mixture is shaken until clear and transparent, and extracted with ethyl acetate. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated to give a spumous solid **cc7**, yield 20-30%.

Step 3-g: The compound **cc7** was dissolved in anhydrous acetonitrile, and equimolar quantities of a solution of formaldehyde and formic acid solution (or a solution of 4-fluorobenzaldehyde and formic acid solution) are added. After the addition, the mixture was stirred at 80 °C for 4-8 hours. After the reaction is completed (TLC monitoring UV development), the reaction liquid is concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution is added to the concentrate, and the mixture is extracted with ethyl acetate. The combined organic layer is washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product is purified by silica gel column chromatography (dichloromethane/methanol) to give a powdered solid **Cc** (yield: 60-70%).

Scheme 4:



Scheme 4 Step 4-a: 3-methoxy-4-hydroxy-benzaldehyde **1** and R_1X (R_1 = benzyl, alkyl, etc.) are dissolved in acetone solution, and potassium carbonate is added in two portions, and the mixture is stirred at 65 °C for 4-12 hours after the addition. After the reaction is completed (TLC monitoring, UV development), the reaction solution is subjected to suction filtration, and the filtrate is collected and concentrated by distillation under reduced pressure. The crude product is purified by silica gel column chromatography (petroleum ether/ethyl acetate) to give compound **cc2**. The yield is 70-90%.

Step 4-b: The compound **aa2** was dissolved in nitromethane, and ammonium acetate and acetic acid are added at room temperature. After the addition, the mixture is stirred at 80 °C for 2-4 hours. After the reaction completed (TLC monitoring and UV development), the mixture is concentrated by distillation under reduced pressure, and the obtained concentrate is poured into a saturated NaHCO_3 solution with stirring to give a yellow solid suspension. The suspension is suction-filtrated with a Buchner funnel. The obtained cake is added to isopropanol, and suction-filtered with a Buchner funnel. This operation is repeated twice to obtain a purified product **cc3** in a yield of 80%-95%.

Step 4-c: LiAlH_4 is dissolved in anhydrous THF in an ice water bath, and then a solution of compound **cc3** in tetrahydrofuran is added dropwise. After the addition is completed, the mixture is reacted in an ice water bath for 1 hour, then transferred to a 65 °C oil bath and stirred for 4-8 hours. After the reaction is completed (TLC monitoring and UV development), the reaction is cooled to room temperature, then the mixture is moved to an ice water bath to quench the reaction, and the quenched mixture is poured into a Buchner funnel to filter under reduced pressure. The filtrate was collected, and the crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to afford pale yellow liquid **cc4**, yield 30-70%.

Step 4-d: 5-methoxy-3-indolacetic acid is dissolved in anhydrous dichloromethane, and HOBT, EDC hydrochloride and triethylamine are added in one portion at room temperature. After the addition, the mixture is stirred at room temperature for 30 minutes. The solution of the compound **aa4** in dichloromethane is slowly added and stirred for 10-20 hours. After the reaction is completed (TLC monitoring UV development), an appropriate amount of water is added, and the mixture is extracted with dichloromethane, the organic layers are combined,

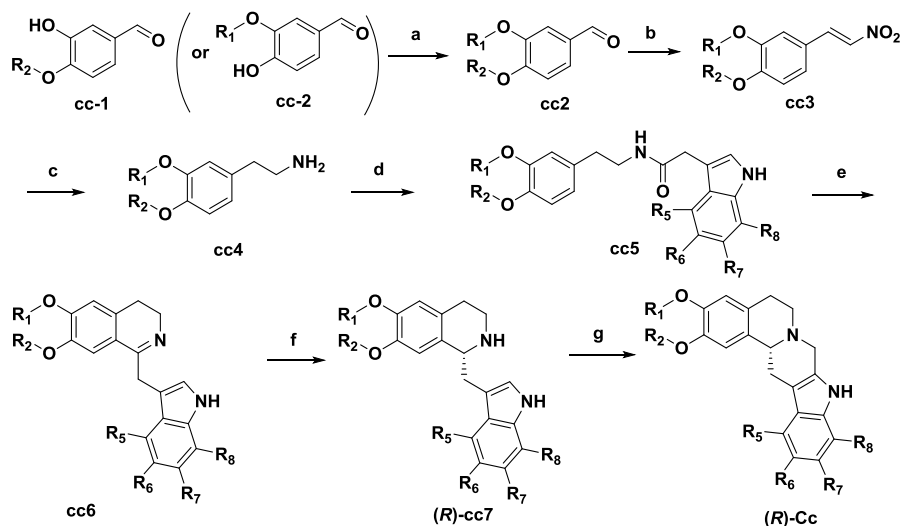
washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to provide compound **cc5** in a yield of 60-80%.

Step 4-e: The compound **cc5** is dissolved in anhydrous CH₃CN, and an appropriate amount of POCl₃ is added thereto at room temperature. After the addition, the mixture is reacted at 90 °C for 1-2 hours under argon. After the reaction is completed (TLC monitoring, UV development), the reaction solution is directly concentrated by distillation under reduced pressure, and the concentrate is quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **cc6**, which is directly used in the next step without purification.

Step 4-f: The concentrate **cc6** is dissolved in anhydrous DMF, and a catalytic amount of (R)-type Noyori catalyst is added, and then a mixture of formic acid-triethylamine (mixed in a ratio of 9:1) is added. After the addition, the mixture is stirred at room temperature for 24 hours. After the reaction is completed (TLC monitoring, UV development), the reaction solution is concentrated, and saturated NaHCO₃ solution is added to the obtained concentrated liquid, the pH of solution is adjusted to >7, and an appropriate amount of ethyl acetate is added to the mixed solution. The mixture is shaken until clear and transparent, and extracted with ethyl acetate. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated to give a spumous solid (*S*)-**cc7**, yield 50-60%.

Step 4-g: The compound (*S*)-**cc7** was dissolved in anhydrous acetonitrile, and equimolar quantities of a solution of formaldehyde and formic acid solution (or a solution of 4-fluorobenzaldehyde and formic acid solution) are added. After the addition, the mixture was stirred at 80 °C for 4-8 hours. After the reaction is completed (TLC monitoring UV development), the reaction liquid is concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution is added to the concentrate, and the mixture is extracted with ethyl acetate. The combined organic layer is washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product is purified by silica gel column chromatography (dichloromethane/methanol) to give a powdered solid (*S*)-**Cc** (yield: 60-70%).

Scheme 5:



Scheme 5 Step 5-a: 3-methoxy-4-hydroxy-benzaldehyde **1** and R_1X (R_1 = benzyl, alkyl, etc.) are dissolved in acetone solution, and potassium carbonate is added in two portions, and the mixture is stirred at 65 °C for 4-12 hours after the addition. After the reaction is completed (TLC monitoring, UV development), the reaction solution is subjected to suction filtration, and the filtrate is collected and concentrated by distillation under reduced pressure. The crude product is purified by silica gel column chromatography (petroleum ether/ethyl acetate) to give compound **cc2**. The yield is 70-90%.

Step 5-b: The compound **aa2** was dissolved in nitromethane, and ammonium acetate and acetic acid are added at room temperature. After the addition, the mixture is stirred at 80 °C for 2-4 hours. After the reaction completed (TLC monitoring and UV development), the mixture is concentrated by distillation under reduced pressure, and the obtained concentrate is poured into a saturated NaHCO_3 solution with stirring to give a yellow solid suspension. The suspension is suction-filtrated with a Buchner funnel. The obtained cake is added to isopropanol, and suction-filtered with a Buchner funnel. This operation is repeated twice to obtain a purified product **cc3** in a yield of 80%-95%.

Step 5-c: LiAlH_4 is dissolved in anhydrous THF in an ice water bath, and then a solution of compound **cc3** in tetrahydrofuran is added dropwise. After the addition is completed, the mixture is reacted in an ice water bath for 1 hour, then transferred to a 65 °C oil bath and stirred for 4-8 hours. After the reaction is completed (TLC monitoring and UV development), the reaction is cooled to room temperature, then the mixture is moved to an ice water bath to quench the reaction, and the quenched mixture is poured into a Buchner funnel to filter under reduced pressure. The filtrate was collected, and the crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to afford pale yellow liquid **cc4**, yield 30-70%.

Step 5-d: 5-methoxy-3-indolacetic acid is dissolved in anhydrous dichloromethane, and HOBT, EDC hydrochloride and triethylamine are added in one portion at room temperature. After the addition, the mixture is stirred at room temperature for 30 minutes. The solution of the compound **aa4** in dichloromethane is slowly added and stirred for 10-20 hours. After the reaction is completed (TLC monitoring UV development), an appropriate amount of water is added, and the mixture is extracted with dichloromethane, the organic layers are combined,

washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product is separated and purified by silica gel column chromatography (dichloromethane/methanol) to provide compound **cc5** in a yield of 60-80%.

Step 5-e: The compound **cc5** is dissolved in anhydrous CH₃CN, and an appropriate amount of POCl₃ is added thereto at room temperature. After the addition, the mixture is reacted at 90 °C for 1-2 hours under argon. After the reaction is completed (TLC monitoring UV development), the reaction solution is directly concentrated by distillation under reduced pressure, and the concentrate is quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **cc6**, which is directly used in the next step without purification.

Step 5-f: The concentrate **cc6** is dissolved in anhydrous DMF, and a catalytic amount of (S)-type Noyori catalyst is added, and then a mixture of formic acid-triethylamine (mixed in a ratio of 9:1) is added. After the addition, the mixture is stirred at room temperature for 24 hours. After the reaction is completed (TLC monitoring UV development), the reaction solution is concentrated, and saturated NaHCO₃ solution is added to the obtained concentrated liquid, the pH of solution is adjusted to >7, and an appropriate amount of ethyl acetate is added to the mixed solution. The mixture is shaken until clear and transparent, and extracted with ethyl acetate. The combined organic layer is washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated to give a spumous solid (*R*)-**cc7**, yield 50-60%.

Step 5-g: The compound (*R*)-**cc7** was dissolved in anhydrous acetonitrile, and equimolar quantities of a solution of formaldehyde and formic acid solution (or a solution of 4-fluorobenzaldehyde and formic acid solution) are added. After the addition, the mixture was stirred at 80 °C for 4-8 hours. After the reaction is completed (TLC monitoring UV development), the reaction liquid is concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution is added to the concentrate, and the mixture is extracted with ethyl acetate. The combined organic layer is washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product is purified by silica gel column chromatography (dichloromethane/methanol) to give a powdered solid (*R*)-**Cc** (yield: 60-70%).

PHARMACEUTICAL COMPOSITION AND THE ADMINISTRATION THEREOF

The compounds of the present invention possess outstanding lipid-lowering activity, the compound of the present invention, and the crystal forms, pharmaceutically acceptable inorganic or organic salts, hydrates or solvates thereof, and the pharmaceutical composition comprising the compound of the present invention as a main active ingredient can be used for treating, preventing and alleviating diseases related to the proprotein convertase subtilisin Kexin-9 (PCSK9). According to the prior art, the compound of the present invention can be used in drugs for the prevention and treatment of metabolic diseases such as hyperlipemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, obesity

and the like. The compounds disclosed herein can also reduce total cholesterol, LDL-cholesterol and triglycerides, and increase hepatic LDL receptor expression, inhibit PCSK9 expression, and activate AMP-activated protein kinases, etc..

The pharmaceutical composition of the invention comprises the compound of the present invention or the pharmaceutically acceptable salts thereof in a safe and effective dosage range and pharmaceutically acceptable excipients or carriers. Wherein the "safe and effective dosage" means that the amount of compound is sufficient to significantly ameliorate the condition without causing significant side effects. Generally, the pharmaceutical composition contains 1-2000 mg polymorphs of the invention per dose, preferably, 5-200mg polymorphs of the invention per dose. Preferably, the "dose" is one capsule or tablet.

"Pharmaceutically acceptable carrier" means one or more compatible solid or liquid fillers, or gelatinous materials which are suitable for human use and should be of sufficient purity and sufficiently low toxicity. "Compatibility" means that each component in the composition can be admixed with the compounds of the present invention and with each other without significantly reducing the efficacy of the compounds. Some examples of pharmaceutically acceptable carriers include cellulose and the derivatives thereof (such as sodium carboxymethyl cellulose, sodium ethyl cellulose, cellulose acetate, etc.), gelatin, talc, solid lubricants (such as stearic acid, magnesium stearate), calcium sulfate, vegetable oils (such as soybean oil, sesame oil, peanut oil, olive oil, etc.), polyols (such as propylene glycol, glycerol, mannitol, sorbitol, etc.), emulsifiers (such as Tween®), wetting agent (such as sodium dodecyl sulfate), coloring agents, flavoring agents, stabilizers, antioxidants, preservatives, pyrogen-free water, etc.

There is no special limitation of administration mode for the compound or pharmaceutical compositions of the present invention, and the representative administration mode includes (but is not limited to): oral, intratumoral, rectal, parenteral (intravenous, intramuscular or subcutaneous), and topical administration.

Solid dosage forms for oral administration include capsules, tablets, pills, powders and granules. In these solid dosage forms, the active compounds are mixed with at least one conventional inert excipient (or carrier), such as sodium citrate or CaHPO_4 , or mixed with any of the following components: (a) fillers or compatibilizer, for example, starch, lactose, sucrose, glucose, mannitol and silicic acid; (b) binders, for example, hydroxymethyl cellulose, alginates, gelatin, polyvinylpyrrolidone, sucrose and arabic gum; (c) humectant, such as, glycerol; (d) disintegrating agents such as agar, calcium carbonate, potato starch or tapioca starch, alginic acid, certain composite silicates, and sodium carbonate; (e) dissolution-retarding agents, such as paraffin; (f) absorption accelerators, for example, quaternary ammonium compounds; (g) wetting agents, such as cetyl alcohol and glyceryl monostearate; (h) adsorbents, for example, kaolin; and (i) lubricants such as talc, stearin calcium, magnesium stearate, solid polyethylene glycol, sodium lauryl sulfate, or the mixtures thereof. In capsules, tablets and pills, the dosage forms may also contain buffering agents.

The solid dosage forms such as tablets, sugar pills, capsules, pills and granules can be prepared by using coating and shell materials, such as enteric coatings and any other

materials known in the art. They can contain an opaque agent. The release of the active compounds or compounds in the compositions can be released in a delayed mode in a given portion of the digestive tract. Examples of the embedding components include polymers and waxes. If necessary, the active compounds and one or more above excipients can form microcapsules.

Liquid dosage forms for oral administration include pharmaceutically acceptable emulsions, solutions, suspensions, syrups or tinctures. In addition to the active compounds, the liquid dosage forms may contain any conventional inert diluents known in the art such as water or other solvents, solubilizers and emulsifiers, for example, ethanol, isopropanol, ethyl carbonate, ethyl acetate, propylene glycol, 1,3-butanediol, dimethyl formamide, as well as oil, in particular, cottonseed oil, peanut oil, corn germ oil, olive oil, castor oil and sesame oil, or the combination thereof.

Besides these inert diluents, the composition may also contain additives such as wetting agents, emulsifiers, and suspending agent, sweetener, flavoring agents and perfume.

In addition to the active compounds, the suspension may contain suspending agent, for example, ethoxylated isooctadecanol, polyoxyethylene sorbitol and sorbitan esters, microcrystalline cellulose, methanol aluminum and agar, or the combination thereof.

The compositions for parenteral injection may comprise physiologically acceptable sterile aqueous or anhydrous solutions, dispersions, suspensions or emulsions, and sterile powders which can be re-dissolved into sterile injectable solutions or dispersions. Suitable aqueous and non-aqueous carriers, diluents, solvents or excipients include water, ethanol, polyols and any suitable mixtures thereof.

The dosage forms for topical administration of compounds of the invention include ointments, powders, patches, aerosol, and inhalants. The active ingredients are mixed with physiologically acceptable carriers and any preservatives, buffers, or propellant if necessary, under sterile conditions.

Compounds of the present invention can be administrated alone, or in combination with any other pharmaceutically acceptable compounds.

When the pharmaceutical compositions are used, a safe and effective amount of compound of the present invention is applied to a mammal (such as human) in need of, wherein the dose of administration is a pharmaceutically effective dose. For a person weighed 60 kg, the daily dose is usually 1-2000 mg, preferably 5-500mg. Of course, the particular dose should also depend on various factors, such as the route of administration, patient healthy status, which are well within the skills of an experienced physician.

Compared with the prior art, the main advantages of the present invention include:

(1) A novel class of phenyl[a]indolo[2,3-g]quinolizine compounds and derivatives thereof are provided. The preparation method has advantages such as mild reaction conditions, abundant raw materials, easy operation and post-treatment, good corresponding selectivity, etc.. The compound has a good proprotein convertase subtilisin Kexin-9 type (PCSK9) inhibitory activity.

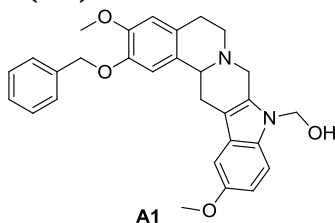
(2) A PCSK9 inhibitor is provided, which exhibits strong *in vivo* lipid-lowering activity in high-fat animal model experiments, and is effective in reducing LDL-cholesterol, total cholesterol, and triglyceride levels. It is a kind of potential hypolipidemic drug, which can be used for the prevention and treatment of drugs for metabolic diseases such as hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis and obesity. The compounds disclosed herein can also reduce total cholesterol, LDL-cholesterol and triglycerides, and increase hepatic LDL receptor expression, inhibit PCSK9 expression, and activate AMP-activated protein kinases.

(3) The phenyl[a]indolo[2,3-g]quinolizine compounds and derivatives of the present invention have good pharmacokinetic properties in animals.

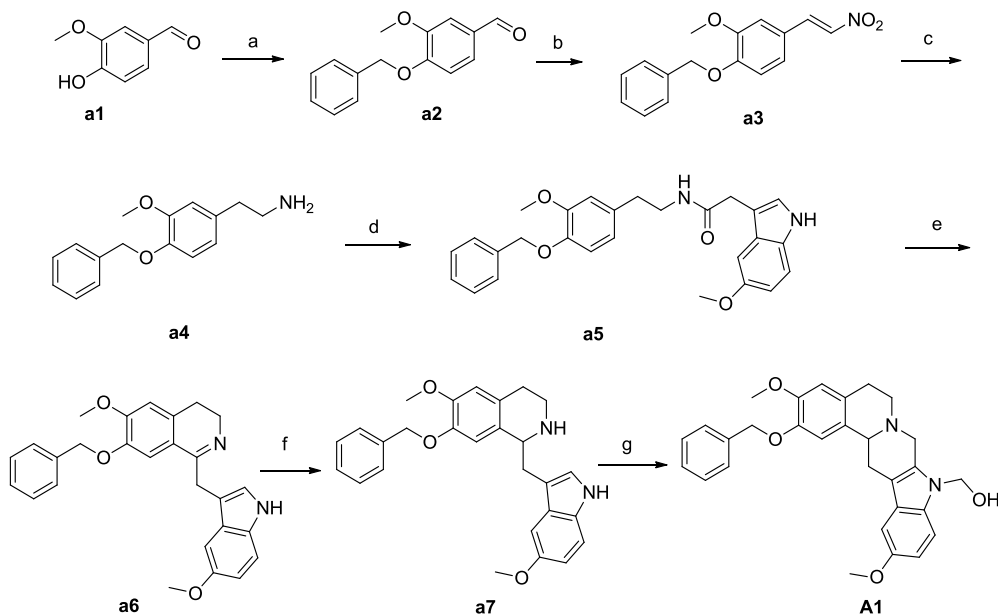
The present invention will be further illustrated below with reference to the specific examples. It should be understood that these examples are only to illustrate the invention but not to limit the scope of the invention. The experimental methods with no specific conditions described in the following examples are generally performed under the conventional conditions, or according to the manufacturer's instructions. Unless indicated otherwise, parts and percentage are calculated by weight.

Example 1

(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A1)



Synthetic route:



3-methoxy-4-benzyloxy-benzaldehyde (a2)

3-methoxy-4-hydroxy-benzaldehyde **a1-2** (20.00 g, 131.45 mmol) and benzylbromide (26.98 g, 157.74 mmol) were dissolved in acetone solution, and potassium carbonate (36.33 g, 262.90 mmol) was added in two portions, and the mixture was stirred at 65 °C for 6 hours after the addition. After the reaction was completed (TLC monitoring, UV development), the reaction solution was suction-filtrated, and the filtrate was collected and concentrated by distillation under reduced pressure. The concentrated crude product was purified by silica gel column chromatography (petroleum ether/ethyl acetate=8/1) to give compound **a2** (26.32 g, 106.47 mmol), yield 81%.

¹H NMR (400 MHz, Chloroform-*d*) δ 9.61 (s, 1H), 7.47 – 7.18 (m, 8H), 5.16 (s, 2H), 3.83 (s, 3H);

LRMS (ESI, *m/z*): 243 [M+H]⁺.

(E)-1-(benzyloxy)-2-methoxy-4-(2-nitrovinyl)benzene (a3)

Compound **a2** (26.32 g, 106.47 mmol) was dissolved in nitromethane (129.98 g, 2129.4 mmol), and ammonium acetate (16.41 g, 212.94 mmol) and acetic acid (59.86 g, 997.82 mmol) were added at room temperature, and stirred at 80 °C for 2 hours. After the reaction completed (TLC monitoring and UV development), the mixture was concentrated by distillation under reduced pressure, and the obtained concentrate was poured into a saturated NaHCO₃ solution with stirring to give a yellow solid suspension. The suspension was suction-filtrated under reduced pressure with a Buchner funnel. The obtained cake was added to isopropanol, and suction-filtered with a Buchner funnel. This operation was repeated twice, and the filter cake was collected and dried to obtain purified product **a3** (27.34 g, 95.82 mmol), yield 90 %.

¹H NMR (400 MHz, Chloroform-*d*) δ 8.16 – 8.14 (d, 1H), 7.98 – 7.96 (d, 1H), 7.47 – 6.94 (m, 8H), 5.16 (s, 2H), 3.83 (s, 3H);

LRMS (ESI, *m/z*): 286 [M+H]⁺.

2-(4-(benzyloxy)-3-methoxyphenyl)ethylamine (a4)

LiAlH₄ (10.91 g, 287.46 mmol) was dissolved in anhydrous THF in an ice water bath, and then a solution of compound **a3** (27.34 g, 95.82 mmol) in tetrahydrofuran was added dropwise with a separating funnel. After the addition was completed, the mixture was reacted in an ice water bath for 1 hour, then transferred to a oil bath at 65 °C and stirred for 8 hours. After the reaction was completed (TLC monitoring and UV development), the reaction was cooled to room temperature, then the mixture was moved into an ice water bath to quench the reaction, and when the stir bar was unable to stir, dichloromethane was added to the mixture. Such operation was repeated until the reaction was completely quenched. The quenched mixture was poured into a Buchner funnel and suction-filtered under reduced pressure. The filtrate was collected, and then the crude product was separated and purified by silica gel column chromatography (dichloromethane/methanol = 20/1) to give a pale yellow liquid **a4** (11.10 g, 43.12 mmol), yield 45%.

¹H NMR (400 MHz, Chloroform-*d*) δ 7.47 – 7.38 (m, 5H), 6.83 – 6.74 (m, 3H), 5.16 (s, 2H), 5.11 (s, 2H), 3.83 (s, 3H); 2.98 – 2.84 (m, 2H), 2.80 – 2.74 (m, 2H);

LRMS (ESI, *m/z*): 258 [M+H]⁺.

N-(4-(Benzyloxy)-3-methoxyphenethyl)-2-(5-methoxy-1H-indol-3-yl)acetamide (a5)

5-methoxy-3-indolacetic acid (9.73 g, 47.43 mmol) was added in anhydrous dichloromethane, and HOBt (10.48 g, 77.62 mmol), EDC hydrochloride (12.35 g, 64.68 mmol) and triethylamine (8.73 g, 86.24 mmol) were added in one portion at room temperature. After addition, the mixture was stirred at room temperature for 30 minutes, and compound **a4** (11.10 g, 43.12 mmol) in dichloromethane was slowly added and stirred for 18 hours. After the reaction was completed (TLC monitoring, UV development), an appropriate amount of water was added, and the mixture was extracted with dichloromethane, the organic layers were combined, washed twice with saturated sodium chloride solution, dried over anhydrous sodium sulfate, and concentrated. The crude product was separated and purified by silica gel column chromatography (dichloromethane/methanol = 50/1) to provide compound **a5** (13.03 g, 29.32 mmol), yield 68%.

¹H NMR (400 MHz, Chloroform-*d*) δ 12.46 (s, 1H), 7.47 – 7.38 (m, 5H), 6.83 – 6.74 (m, 3H), 5.16 (s, 2H), 5.11 (s, 2H), 3.83 (s, 3H); 2.98 – 2.84 (m, 2H), 2.80 – 2.74 (m, 2H);

LRMS (ESI, *m/z*): 258 [M+H]⁺.

7-(Benzyloxy)-6-methoxy-1-((5-methoxy-1H-indol-3-yl)methyl)-3,4-dihydroisoquinoline (a6)

Compound **a5** (13.03 g, 29.32 mmol) was dissolved in anhydrous CH₃CN, and POCl₃ (26.97 g, 175.92 mmol) was added at room temperature. After the addition, the mixture was reacted at 90 °C for 1 hour under argon protection. After the reaction was completed (TLC monitoring, UV development), the reaction solution was directly concentrated by distillation under reduced pressure, and the concentrate was quickly poured into a saturated NaHCO₃ ice water bath solution, rapidly stirred, and then extracted with dichloromethane. The combined organic layers was washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate, and concentrated to give a concentrate **a6**, which was very unstable imine, and was directly used in the next step without purification.

7-(Benzyloxy)-6-methoxy-1-((5-methoxy-1H-indol-3-yl)methyl)-1,2,3,4-tetrahydroisoquinoline (a7)

The concentrate **a6** was dissolved in anhydrous methanol, and NaBH₄ (11.09 g, 293.20 mmol) was added portionwise in an ice-water bath. The mixture was stirred at room temperature for 6 hours after the addition. After the reaction was completed (TLC monitoring, UV development), the reaction solution was concentrated, and saturated NH₄Cl solution was added to the obtained concentrated liquid, and an appropriate amount of ethyl acetate was added to the mixed solution. The mixture was shaken until it was clear and transparent, and extracted with ethyl acetate. The combined organic layers was washed with saturated sodium chloride solution twice, dried over anhydrous sodium sulfate and concentrated. The crude product was separated and purified by silica gel column chromatography (dichloromethane/methanol = 20/1) to give a spumous solid **a7** (2.51 g, 5.86 mmol), yield 20%.

¹H NMR (400 MHz, DMSO) δ 10.1 (s, 1H), 7.60 – 7.19 (m, 6H), 7.04 – 6.96 (m, 2H), 6.82 (s, 1H), 6.74 (dd, *J* = 8.8, 2.3 Hz, 1H), 5.07 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.82 (s,

3H), 3.78 (m, 3H), 3.72 – 3.56 (m, 2H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.13 (m, 1H), 2.95 (m, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.48 – 2.37 (m, 1H);

LRMS (ESI, m/z): 429 $[M+H]^+$.

(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A1)

The compound **a7** (2.51 g, 5.86 mmol) was dissolved in anhydrous acetonitrile, and formaldehyde (0.73 g, 23.44 mmol) and formic acid (0.035 g, 0.59 mmol) were added. After the addition, the mixture was stirred at 80 °C for 8 hours. After the reaction was completed (TLC monitoring, UV development), the reaction liquid was concentrated by distillation under reduced pressure, and a saturated sodium hydrogen carbonate solution was added to the concentrate, and the mixture was extracted with ethyl acetate. The combined organic layers was washed twice with saturated sodium chloride solution and dried over anhydrous sodium sulfate and concentrated. The crude product was purified by silica gel column chromatography (dichloromethane/methanol=20/1) to give a pale yellow powdered solid **A1** (1.98 g, 4.16 mmol), yield 71%.

Example A1

(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A1)

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

Example A2

(2-(Benzyloxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A2)

The title compound **A2** was synthesized with benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.56 – 7.37 (m, 7H), 7.08 (s, 1H), 6.97 (d, $J = 2.1$ Hz, 1H), 6.76 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 441 $[M+H]^+$.

Example A3

(3,12-Dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A3)

The title compound **A3** was synthesized with (4-trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).
LRMS (ESI, *m/z*): 539 [M+H]⁺.

Example A4

(3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-*a*]isoquinoline-9(8H)-yl)methanol (A4)

The title compound **A4** was synthesized with (trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 3H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 509 [M+H]⁺.

Example A5

(2-((4-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-*a*]isoquinoline-9(8H)-yl)methanol (A5)

The title compound **A5** was synthesized with 4-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 489 [M+H]⁺.

Example A6

(2-((4-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-*a*]isoquinoline-9(8H)-yl)methanol (A6)

The title compound **A6** was synthesized with 4-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 459 [M+H]⁺.

Example A7

(2-((3-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[

2,1-a]isoquinoline-9(8H)-yl)methanol (A7)

The title compound **A7** was synthesized with 3-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 [M+H]⁺.

Example A8

(2-((3-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A8)

The title compound **A8** was synthesized with 3-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.50 – 7.43 (m, 3H), 7.26 – 7.15 (m, 3H), 7.00 (s, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.80 (s, 1H), 6.65 (dd, J = 8.7, 2.4 Hz, 1H), 6.20 (t, 1H), 5.17 (s, 2H), 5.03 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.97 (d, J = 14.6 Hz, 1H), 3.77 (s, 3H), 3.61 (dd, J = 22.2, 12.4 Hz, 2H), 3.41 (d, J = 14.6 Hz, 1H), 3.11 (d, J = 11.1 Hz, 1H), 2.92 (d, J = 10.6 Hz, 1H), 2.60 (dd, J = 20.6, 13.0 Hz, 2H), 2.48 – 2.39 (m, 1H).

LRMS (ESI, m/z): 459 [M+H]⁺.

Example A9

(2-((2-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A5)

The title compound **A9** was synthesized with 2-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 [M+H]⁺.

Example A10

(2-((2-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A10)

The title compound **A10** was synthesized with 2-fluorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 3H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44

(d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A11

5 (3,12-Dimethoxy-2-((4-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A11)

The title compound **A11** was synthesized with 4-methoxybenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.37 (d, $J = 6.3$ Hz, 2H), 5.09 (q, $J = 11.9$ Hz, 2H), 4.16 (d, $J = 15.3$ Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 15.0$ Hz, 1H), 3.54 (dd, $J = 10.6, 2.9$ Hz, 1H), 3.32 (d, $J = 3.1$ Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, $J = 7.0$ Hz, 1H).

15 LRMS (ESI, m/z): 501 $[M+H]^+$.

Example A12

(3-methoxy-2-((4-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A12)

20 The title compound **A12** was synthesized with 4-methoxybenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.37 (d, $J = 6.3$ Hz, 2H), 5.09 (q, $J = 11.9$ Hz, 2H), 4.16 (d, $J = 15.3$ Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 15.0$ Hz, 1H), 3.54 (dd, $J = 10.6, 2.9$ Hz, 1H), 3.32 (d, $J = 3.1$ Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 25 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, $J = 7.0$ Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

Example A13

30 (3,12-Dimethoxy-2-((3-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A13)

The title compound **A13** was synthesized with 3-methoxybenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.37 (d, $J = 6.3$ Hz, 2H), 5.09 (q, $J = 11.9$ 35 Hz, 2H), 4.16 (d, $J = 15.3$ Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 15.0$ Hz, 1H), 3.54 (dd, $J = 10.6, 2.9$ Hz, 1H), 3.32 (d, $J = 3.1$ Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, $J = 7.0$ Hz, 1H).

LRMS (ESI, m/z): 501 $[M+H]^+$.

Example A14

40 (3-methoxy-2-((3-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A14)

The title compound **A14** was synthesized with 3-methoxybenzyl bromide,

3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example A15

(3,12-Dimethoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine [2,1-a]isoquinoline-9(8H)-yl)methanol (A15)

The title compound **A15** was synthesized with 4-methylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 485 [M+H]⁺.

Example A16

(3-methoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A16)

The title compound **A16** was synthesized with 4-methylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example A17

(2-((4-chlorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A17)

The title compound **A17** was synthesized with 4-chlorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.47 – 7.39 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, m/z): 506 $[M+H]^+$.

Example A18

(2-((4-chlorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-ylmethanol (A18)

The title compound **A18** was synthesized with 4-chlorobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.47 – 7.39 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, J = 6.9 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 476 $[M+H]^+$.

Example A19

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (A19)

The title compound **A19** was synthesized with 4-cyanobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.67 – 7.49 (m, 2H), 7.36 (d, J = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, J = 6.9 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 496 $[M+H]^+$.

Example A20

4-(((9-(Hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (A20)

The title compound **A20** was synthesized with 4-cyanobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.67 – 7.49 (m, 2H), 7.36 – 7.29 (m, 2H), 7.27 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, J = 6.9 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 466 $[M+H]^+$.

Example A21

(2-((4-bromobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-ylmethanol (A21)

The title compound **A21** was synthesized with 4-bromobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.41 – 7.38 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 549[M+H]⁺, 551[M+H]⁺.

Example A22

(2-((4-bromobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A22)

The title compound **A22** was synthesized with 4-bromobenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.41 – 7.38 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 519[M+H]⁺, 521[M+H]⁺.

Example A23

(2-((3-Fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A23)

The title compound **A23** was synthesized with 3-fluoro-4-(trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 557 [M+H]⁺.

Example A24

(2-((3-Fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3', 2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A24)

The title compound **A24** was synthesized with 3-fluoro-4-(trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 527 [M+H]⁺.

Example A25

(2-((2-Fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A25)

The title compound **A25** was synthesized with 2-fluoro-4-(trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 557 [M+H]⁺.

Example A26

(2-((2-Fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A26)

The title compound **A26** was synthesized with 2-fluoro-4-(trifluoromethyl)benzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 527 [M+H]⁺.

Example A27

(3,12-Dimethoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A27)

The title compound **A27** was synthesized with 4-ethylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 499 [M+H]⁺.

Example A28

(3-methoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A28)

The title compound **A28** was synthesized with 4-ethylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.21 – 7.05 (m, 2H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H),

4.18 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H), 2.34 (q, $J = 8.0$ Hz, 2H), 1.01 (t, $J = 8.0$ Hz, 3H).

LRMS (ESI, m/z): 469 $[M+H]^+$.

Example A29

(3,12-Dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A29)

The title compound **A29** was synthesized with 2-bromomethylnaphthalene, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 2H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 521 $[M+H]^+$.

Example A30

(3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A30)

The title compound **A30** was synthesized with 2-bromomethylnaphthalene, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 3H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 491 $[M+H]^+$.

Example A31

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (A31)

The title compound **A31** was synthesized with methyl 4-bromomethylbenzoate, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 529 $[M+H]^+$.

Example A32

4-(((9-(Hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (A32)

The title compound **A32** was synthesized with methyl 4-bromomethylbenzoate, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 8.01 – 7.95 (m, 2H), 7.51 – 7.35 (m, 6H), 7.05 – 6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, J = 4.8 Hz, 2H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 499 [M+H]⁺.

Example A33

(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A33)

The title compound **A33** was synthesized with 1-4-(bromomethyl)benzene-1H-pyrazole, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, J = 4.8 Hz, 2H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 537 [M+H]⁺.

Example A34

(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A34)

The title compound **A34** was synthesized with 1-4-(bromomethyl)benzene-1H-pyrazole, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 4H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, J = 4.8 Hz, 2H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 507 [M+H]⁺.

Example A35

(2-Butoxy-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A35)

The title compound **A35** was synthesized with bromobutane, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.36 (d, J = 8.8 Hz, 1H), 6.98 (d, J = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, J = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 6.23 (s, 1H), 5.37 (s, 2H), 4.16 (d, J = 14.8 Hz, 1H), 3.92 (t, J = 5.9 Hz, 2H), 3.79 (s, 3H), 3.77 (s, 3H), 3.65 (d, J = 15.6 Hz, 1H), 3.57 (d, J = 8.0 Hz, 1H), 3.44 – 3.40 (d, J = 15.0 Hz, 1H), 3.12 (d, J = 9.6 Hz, 1H), 3.03 –

2.86 (m, 1H), 2.63 (m, 2H), 2.47 – 2.37 (t, $J = 12.0$ Hz, 1H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, $J = 7.4$ Hz, 3H).

LRMS (ESI, m/z): 437 $[M+H]^+$.

Example A36

5 (2-Butoxy-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A36)

The title compound **A36** was synthesized with bromobutane, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (400 MHz, DMSO) δ 7.36 (d, $J = 8.8$ Hz, 1H), 6.98 (d, $J = 2.1$ Hz, 1H), 6.96 (s, 1H), 6.73 (dd, $J = 8.7, 2.3$ Hz, 1H), 6.69 (s, 1H), 6.23 (s, 1H), 5.37 (s, 2H), 4.16 (d, $J = 14.8$ Hz, 1H), 3.92 (t, $J = 5.9$ Hz, 2H), 3.77 (s, 3H), 3.65 (d, $J = 15.6$ Hz, 1H), 3.57 (d, $J = 8.0$ Hz, 1H), 3.44 – 3.40 (d, $J = 15.0$ Hz, 1H), 3.12 (d, $J = 9.6$ Hz, 1H), 3.03 – 2.86 (m, 1H), 2.63 (m, 2H), 2.47 – 2.37 (t, $J = 12.0$ Hz, 1H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, $J = 7.4$ Hz, 3H).

15 LRMS (ESI, m/z): 407 $[M+H]^+$.

Example A37 (2,3,12-Trimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A37)

The title compound **A37** was synthesized with 3,4-dimethoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

20 ^1H NMR (300 MHz, DMSO) δ 7.27 – 7.16 (m, 1H), 6.91 (d, $J = 2.1$ Hz, 1H), 6.80 (d, $J = 2.2$ Hz, 1H), 6.77 (s, 1H), 6.63 (s, 1H), 5.61 (s, 1H), 5.26 (dd, $J = 31.9, 10.9$ Hz, 2H), 3.91 (s, 3H), 3.87 (s, 3H), 3.85 (s, 3H), 3.64 (d, $J = 14.9$ Hz, 1H), 3.54 (d, $J = 7.4$ Hz, 1H), 3.48 – 3.35 (m, 1H), 3.16 (m, 2H), 2.86 (d, $J = 11.0$ Hz, 1H), 2.72 – 2.49 (m, 3H).

LRMS (ESI, m/z): 395 $[M+H]^+$.

25 Example A38 (2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A38)

The title compound **A38** was synthesized with 3,4-dimethoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

30 ^1H NMR (300 MHz, DMSO) δ 7.27 – 7.16 (m, 2H), 6.91 (d, $J = 2.1$ Hz, 1H), 6.80 (d, $J = 2.2$ Hz, 1H), 6.77 (s, 1H), 6.63 (s, 1H), 5.61 (s, 1H), 5.26 (dd, $J = 31.9, 10.9$ Hz, 2H), 3.91 (s, 3H), 3.85 (s, 3H), 3.64 (d, $J = 14.9$ Hz, 1H), 3.54 (d, $J = 7.4$ Hz, 1H), 3.48 – 3.35 (m, 1H), 3.16 (m, 2H), 2.86 (d, $J = 11.0$ Hz, 1H), 2.72 – 2.49 (m, 3H).

LRMS (ESI, m/z): 365 $[M+H]^+$.

Example A39

35 (3,12-Dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A39)

The title compound **A39** was synthesized with 2,2,2-trifluoroethyl-p-toluenesulfonate and 5-methoxy-3-indoleacetic acid according to Scheme 1.

40 ^1H NMR (400 MHz, DMSO) δ 7.37 (d, $J = 8.8$ Hz, 1H), 7.13 (s, 1H), 6.96 (d, $J = 2.4$ Hz, 1H), 6.79 (s, 1H), 6.74 (dd, $J = 8.8, 2.5$ Hz, 1H), 6.24 (s, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, $J = 15.0$ Hz, 1H), 3.78 (s, 3H), 3.77 (s, 3H), 3.65 (d, $J = 14.8$ Hz, 1H), 3.60 – 3.54 (m,

1H), 3.48 – 3.42 (m, 1H), 3.14 (dd, $J = 8.5, 2.6$ Hz, 1H), 2.98 (dd, $J = 18.7, 8.2$ Hz, 1H), 2.74 – 2.60 (m, 2H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, m/z): 463 $[M+H]^+$.

Example A40

5 (3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A40)

The title compound **A40** was synthesized with 2,2,2-trifluoroethyl-p-toluenesulfonate and 3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (400 MHz, DMSO) δ 7.37 (d, $J = 8.8$ Hz, 1H), 7.30 – 7.23 (m, 2H), 6.96 (d, $J = 2.4$ Hz, 1H), 6.79 (s, 1H), 6.74 (dd, $J = 8.8, 2.5$ Hz, 1H), 6.24 (s, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.65 (d, $J = 14.8$ Hz, 1H), 3.60 – 3.54 (m, 1H), 3.48 – 3.42 (m, 1H), 3.14 (dd, $J = 8.5, 2.6$ Hz, 1H), 2.98 (dd, $J = 18.7, 8.2$ Hz, 1H), 2.74 – 2.60 (m, 2H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, m/z): 433 $[M+H]^+$.

15 Example A41

(3,12-Dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A41)

20 The title compound **A41** was synthesized with 4-methanesulfonylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.22 (d, $J = 8.0$ Hz, 2H), 7.06 (s, 1H), 6.96 (d, $J = 2.3$ Hz, 1H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 6.22 (t, $J = 7.1$ Hz, 1H), 5.38 (d, $J = 6.5$ Hz, 1H), 5.05 (q, $J = 11.6$ Hz, 1H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, $J = 7.1$ Hz, 2H).

LRMS (ESI, m/z): 549 $[M+H]^+$.

Example A42

30 (3-methoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A42)

The title compound **A42** was synthesized with 4-methanesulfonylbenzyl bromide, 3-methoxy-4-hydroxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

35 ^1H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 4H), 7.22 (d, $J = 8.0$ Hz, 2H), 7.06 (s, 1H), 6.96 (d, $J = 2.3$ Hz, 1H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 6.22 (t, $J = 7.1$ Hz, 1H), 5.38 (d, $J = 6.5$ Hz, 1H), 5.05 (q, $J = 11.6$ Hz, 1H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, $J = 7.1$ Hz, 2H).

LRMS (ESI, m/z): 519 $[M+H]^+$.

Example A43

40 (2-(Benzyloxy)-11-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A43)

The title compound **A42** was synthesized with 6-fluoro-3-indolacetic acid,

3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[\text{M}+\text{H}]^+$.

Example A44

(2-(Benzyloxy)-12-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A44)

The title compound **A44** was synthesized with 5-fluoro-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[\text{M}+\text{H}]^+$.

Example A45

(2-(Benzyloxy)-13-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A45)

The title compound **A45** was synthesized with 4-fluoro-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[\text{M}+\text{H}]^+$.

Example A46

(2-(Benzyloxy)-11-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A46)

The title compound **A46** was synthesized with 6-chloro-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 475 $[\text{M}+\text{H}]^+$.

Example A47

(2-(Benzyloxy)-12-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A47)

The title compound **A47** was synthesized with 5-chloro-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 475 [M+H]⁺.

Example A48

(2-(Benzyloxy)-13-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A48)

The title compound **A48** was synthesized with 4-chloro-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 475 [M+H]⁺.

Example A49

(2-(Benzyloxy)-11-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A49)

The title compound **A49** was synthesized with 6-bromo-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

Example A50

(2-(Benzyloxy)-12-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A50)

The title compound **A50** was synthesized with 5-bromo-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz,

1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

Example A51

5 (2-(Benzyloxy)-13-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A51)

The title compound **A51** was synthesized with 4-bromo-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

10 ¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

15 Example A52

2-(Benzyloxy)-9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-12-phenol (A52)

The title compound **A52** was synthesized with 5-hydroxy-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

20 ¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.35 (s, 1H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

25 LRMS (ESI, *m/z*): 457 [M+H]⁺.

Example A53

(2-(Benzyloxy)-3-methoxy-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A53)

30 The title compound **A53** was synthesized with 6-methyl-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 1H), 5.05 (q, *J* = 11.6 Hz, 1H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example A54

(2-(Benzyloxy)-12-ethyl-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A54)

40 The title compound **A54** was synthesized with 5-ethyl-3-indolacetic acid, 3-methoxy-4-hydroxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 1H), 5.05 (q, *J* = 11.6 Hz, 1H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

Example A55

(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A55)

The title compound **A55** was synthesized with bromobenzyl, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example A56

(3-(Benzyloxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A56)

The title compound **A56** was synthesized with benzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.56 – 7.37 (m, 7H), 7.08 (s, 1H), 6.97 (d, *J* = 2.1 Hz, 1H), 6.76 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 441 [M+H]⁺.

Example A57

(2,12-Dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A57)

The title compound **A57** was synthesized with 4-trifluoromethylbenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 539 [M+H]⁺.

Example A58

(2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A58)

The title compound **A58** was synthesized with 4-trifluoromethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 3H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 509 [M+H]⁺.

Example A59

(3-((4-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A59)

The title compound **A59** was synthesized with 4-fluorobenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 489 [M+H]⁺.

Example A60

(3-((4-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A60)

The title compound **A60** was synthesized with 4-fluorobenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 459 [M+H]⁺.

Example A61

(3-((3-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A61)

The title compound **A61** was synthesized with 3-fluorobenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18

(d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 $[M+H]^+$.

5 **Example A62**

(3-((3-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A62)

The title compound **A62** was synthesized with 3-fluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (400 MHz, DMSO) δ 7.50 – 7.43 (m, 3H), 7.26 – 7.15 (m, 3H), 7.00 (s, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.80 (s, 1H), 6.65 (dd, J = 8.7, 2.4 Hz, 1H), 6.20 (t, 1H), 5.17 (s, 2H), 5.03 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.97 (d, J = 14.6 Hz, 1H), 3.77 (s, 3H), 3.61 (dd, J = 22.2, 12.4 Hz, 2H), 3.41 (d, J = 14.6 Hz, 1H), 3.11 (d, J = 11.1 Hz, 1H), 2.92 (d, J = 10.6 Hz, 1H), 2.60 (dd, J = 20.6, 13.0 Hz, 2H), 2.48 – 2.39 (m, 1H).

15 LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A63

(3-((2-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A63)

20 The title compound **A63** was synthesized with 2-fluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 $[M+H]^+$.

Example A64

30 **(3-((2-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A64)**

The title compound **A64** was synthesized with 2-fluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

35 ^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 3H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A65

40 **(2,12-Dimethoxy-3-((4-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A65)**

The title compound **A65** was synthesized with 4-methoxybenzyl bromide,

3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.09 (q, J = 11.9 Hz, 2H), 4.16 (d, J = 15.3 Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 15.0 Hz, 1H), 3.54 (dd, J = 10.6, 2.9 Hz, 1H), 3.32 (d, J = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, J = 7.0 Hz, 1H).

LRMS (ESI, m/z): 501 [M+H]⁺.

Example A66

(2-methoxy-3-((4-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A66)

The title compound **A66** was synthesized with 4-methoxybenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.09 (q, J = 11.9 Hz, 2H), 4.16 (d, J = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 15.0 Hz, 1H), 3.54 (dd, J = 10.6, 2.9 Hz, 1H), 3.32 (d, J = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, J = 7.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺.

Example A67

(2,12-Dimethoxy-3-((3-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A67)

The title compound **A67** was synthesized with 3-methoxybenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.09 (q, J = 11.9 Hz, 2H), 4.16 (d, J = 15.3 Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 15.0 Hz, 1H), 3.54 (dd, J = 10.6, 2.9 Hz, 1H), 3.32 (d, J = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, J = 7.0 Hz, 1H).

LRMS (ESI, m/z): 501 [M+H]⁺.

Example A68

(2-methoxy-3-((3-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A68)

The title compound **A68** was synthesized with 3-methoxybenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.09 (q, J = 11.9 Hz, 2H), 4.16 (d, J = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 15.0 Hz, 1H), 3.54 (dd, J = 10.6, 2.9 Hz, 1H), 3.32 (d, J = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, J = 7.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺.

Example A69

(2,12-Dimethoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine [2,1-a]isoquinoline-9(8H)-yl)methanol (A69)

The title compound **A69** was synthesized with 4-methylbenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 485 [M+H]⁺.

Example A70

(2-methoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A70)

The title compound **A70** was synthesized with 4-methylbenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example A71

(3-((4-chlorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A71)

The title compound **A71** was synthesized with 4-chlorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.47 – 7.39 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 506 [M+H]⁺.

Example A72

(3-((4-chlorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A72)

The title compound **A72** was synthesized with 4-methylbenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.47 – 7.39 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 476 [M+H]⁺.

Example A73

4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzonitrile (A73)

The title compound **A73** was synthesized with 4-cyanobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.67 – 7.49 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 496 [M+H]⁺.

Example A74

4-(((9-(Hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzonitrile (A74)

The title compound **A74** was synthesized with 4-cyanobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.67 – 7.49 (m, 2H), 7.36 – 7.29 (m, 2H), 7.27 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 466 [M+H]⁺.

Example A75

(3-((4-bromobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A75)

The title compound **A75** was synthesized with 4-bromobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.41 – 7.38 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, *J* = 6.9 Hz, 1H), 5.37 (d, *J* = 6.3 Hz, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 549[M+H]⁺, 551[M+H]⁺.

Example A76

(3-((4-bromobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A76)

The title compound **A76** was synthesized with 4-bromobenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.41 – 7.38 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 6.21 (t, J = 6.9 Hz, 1H), 5.37 (d, J = 6.3 Hz, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 519[M+H]⁺, 521[M+H]⁺.

Example A77

(3-((3-Fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A77)

The title compound **A77** was synthesized with 3-fluoro-4-trifluoromethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 557 [M+H]⁺.

Example A78

(3-((3-Fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3', 2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A78)

The title compound **A78** was synthesized with 3-fluoro-4-trifluoromethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 527 [M+H]⁺.

Example A79

(3-((2-Fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-ylmethanol (A79)

The title compound **A79** was synthesized with 2-fluoro-4-trifluoromethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz,

1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 557 [M+H]⁺.

Example A80

(3-((2-Fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A80)

The title compound **A80** was synthesized with 2-fluoro-4-trifluoromethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 527 [M+H]⁺.

Example A81

(2,12-Dimethoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A81)

The title compound **A81** was synthesized with 4-ethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 499 [M+H]⁺.

Example A82

(2-methoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A82)

The title compound **A82** was synthesized with 4-ethylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.21 – 7.05 (m, 2H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

Example A83

(2,12-Dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A83)

The title compound **A83** was synthesized with 2-bromomethylnaphthalene, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme

1.

¹H NMR (400 MHz, DMSO) δ 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 2H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 521 [M+H]⁺.

Example A84

(2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A84)

The title compound **A84** was synthesized with 2-bromomethylnaphthalene, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 3H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 491 [M+H]⁺.

Example A85

4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (A85)

The title compound **A85** was synthesized with methyl 4-bromomethylbenzoate, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 529 [M+H]⁺.

Example A86

4-(((9-(Hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (A86)

The title compound **A86** was synthesized with methyl 4-bromomethylbenzoate, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 8.01 – 7.95 (m, 2H), 7.51 – 7.35 (m, 6H), 7.05 – 6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 499 [M+H]⁺.

Example A87

(3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A87)

The title compound **A87** was synthesized with 1-4-(bromomethyl)benzene-1H-pyrazole, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.87 (d, *J* = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, *J* = 8 Hz, 1H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 537 [M+H]⁺.

Example A88

(3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A88)

The title compound **A88** was synthesized with 1-4-(bromomethyl)benzene-1H-pyrazole, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.87 (d, *J* = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 4H), 6.79 – 6.69 (m, 2H), 6.47 (q, *J* = 8 Hz, 1H), 6.26 (s, 1H), 5.37 (s, 2H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 507 [M+H]⁺.

Example A89

(3-Butoxy-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A89)

The title compound **A89** was synthesized with bromobutane, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.36 (d, *J* = 8.8 Hz, 1H), 6.98 (d, *J* = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, *J* = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 6.23 (s, 1H), 5.37 (s, 2H), 4.16 (d, *J* = 14.8 Hz, 1H), 3.92 (t, *J* = 5.9 Hz, 2H), 3.79 (s, 3H), 3.77 (s, 3H), 3.65 (d, *J* = 15.6 Hz, 1H), 3.57 (d, *J* = 8.0 Hz, 1H), 3.44 – 3.40 (d, *J* = 15.0 Hz, 1H), 3.12 (d, *J* = 9.6 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.63 (m, 2H), 2.47 – 2.37 (t, *J* = 12.0 Hz, 1H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, *J* = 7.4 Hz, 3H).

LRMS (ESI, *m/z*): 437 [M+H]⁺.

Example A90

(3-Butoxy-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A90)

The title compound **A90** was synthesized with bromobutane, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.36 (d, *J* = 8.8 Hz, 1H), 6.98 (d, *J* = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, *J* = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 6.23 (s, 1H), 5.37 (s, 2H), 4.16 (d, *J* = 14.8 Hz, 1H), 3.92 (t, *J* = 5.9 Hz, 2H), 3.77 (s, 3H), 3.65 (d, *J* = 15.6 Hz, 1H), 3.57 (d, *J* = 8.0 Hz, 1H), 3.44 – 3.40 (d, *J* = 15.0 Hz, 1H), 3.12 (d, *J* = 9.6 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.63 (m, 2H), 2.47 – 2.37 (t, *J* = 12.0 Hz, 1H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, *J* = 7.4 Hz, 3H).

LRMS (ESI, *m/z*): 407 [M+H]⁺.

Example A91

(12-fluoro-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A91)

The title compound **A91** was synthesized with 5-fluoro-3-indolacetic acid and 3,4-dimethoxybenzaldehyde according to Scheme 1.

¹H NMR (300 MHz, DMSO) δ 7.27 – 7.16 (m, 1H), 6.91 (d, *J* = 2.1 Hz, 1H), 6.80 (d, *J* = 2.2 Hz, 1H), 6.77 (s, 1H), 6.63 (s, 1H), 5.61 (s, 1H), 5.26 (dd, *J* = 31.9, 10.9 Hz, 2H), 3.87 (s, 3H), 3.85 (s, 3H), 3.64 (d, *J* = 14.9 Hz, 1H), 3.54 (d, *J* = 7.4 Hz, 1H), 3.48 – 3.35 (m, 1H), 3.16 (m, 2H), 2.86 (d, *J* = 11.0 Hz, 1H), 2.72 – 2.49 (m, 3H).

LRMS (ESI, *m/z*): 383 [M+H]⁺.

Example A92

(12-methyl-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A92)

The title compound **A91** was synthesized with 5-methyl-3-indolacetic acid and 3,4-dimethoxybenzaldehyde according to Scheme 1.

¹H NMR (300 MHz, DMSO) δ 7.27 – 7.16 (m, 2H), 6.91 (d, *J* = 2.1 Hz, 1H), 6.80 (d, *J* = 2.2 Hz, 1H), 6.77 (s, 1H), 6.63 (s, 1H), 5.61 (s, 1H), 5.26 (dd, *J* = 31.9, 10.9 Hz, 2H), 3.91 (s, 3H), 3.85 (s, 3H), 3.64 (d, *J* = 14.9 Hz, 1H), 3.54 (d, *J* = 7.4 Hz, 1H), 3.48 – 3.35 (m, 1H), 3.16 (m, 2H), 2.86 (d, *J* = 11.0 Hz, 1H), 2.72 – 2.49 (m, 3H), 2.34 (s, 3H).

LRMS (ESI, *m/z*): 379 [M+H]⁺.

Example A93

(2,12-Dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A93)

The title compound **A93** was synthesized with 2,2,2-trifluoroethyl-p-toluenesulfonate, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.37 (d, *J* = 8.8 Hz, 1H), 7.13 (s, 1H), 6.96 (d, *J* = 2.4 Hz, 1H), 6.79 (s, 1H), 6.74 (dd, *J* = 8.8, 2.5 Hz, 1H), 6.24 (s, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, *J* = 15.0 Hz, 1H), 3.78 (s, 3H), 3.77 (s, 3H), 3.65 (d, *J* = 14.8 Hz, 1H), 3.60 – 3.54 (m, 1H), 3.48 – 3.42 (m, 1H), 3.14 (dd, *J* = 8.5, 2.6 Hz, 1H), 2.98 (dd, *J* = 18.7, 8.2 Hz, 1H), 2.74 – 2.60 (m, 2H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, *m/z*): 463 [M+H]⁺.

Example A94

(2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A94)

The title compound **A94** was synthesized with 2,2,2-trifluoroethyl-p-toluenesulfonate, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.37 (d, *J* = 8.8 Hz, 1H), 7.30 – 7.23 (m, 2H), 6.96 (d, *J* = 2.4 Hz, 1H), 6.79 (s, 1H), 6.74 (dd, *J* = 8.8, 2.5 Hz, 1H), 6.24 (s, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.65 (d, *J* = 14.8 Hz, 1H), 3.60 – 3.54 (m, 1H), 3.48 – 3.42 (m, 1H), 3.14 (dd, *J* = 8.5, 2.6 Hz, 1H), 2.98 (dd, *J* = 18.7, 8.2 Hz, 1H), 2.74 – 2.60 (m, 2H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, *m/z*): 433 [M+H]⁺.

Example A95

(2,12-Dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A95)

The title compound **A95** was synthesized with 4-methanesulfonylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 549 [M+H]⁺.

Example A96

(2-methoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A96)

The title compound **A96** was synthesized with 4-methanesulfonylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.09 – 7.06 (m, 2H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example A97

(3-(Benzyloxy)-11-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A97)

The title compound **A97** was synthesized with 6-fluoro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A98

3-(Benzyloxy)-12-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A98)

The title compound **A98** was synthesized with 5-fluoro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A99

(3-(Benzyloxy)-13-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A99)

The title compound **A45** was synthesized with 4-fluoro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example A100

(3-(Benzyloxy)-11-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A100)

The title compound **A100** was synthesized with 6-chloro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 475 $[M+H]^+$.

Example A101

(3-(Benzyloxy)-12-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A101)

The title compound **A101** was synthesized with 5-chloro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz,

1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 475 [M+H]⁺.

Example A102

(3-(Benzyloxy)-13-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A102)

The title compound **A102** was synthesized with 4-chloro-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 475 [M+H]⁺.

Example A103

(3-(Benzyloxy)-11-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A103)

The title compound **A103** was synthesized with 6-bromo-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

Example A104

(3-(Benzyloxy)-12-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A104)

The title compound **A104** was synthesized with 5-bromo-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

Example A105

(3-(Benzyloxy)-13-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A105)

The title compound **A105** was synthesized with 4-bromo-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 519 [M+H]⁺, 521 [M+H]⁺.

Example A106

(3-(Benzyloxy)-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A106)

The title compound **A106** was synthesized with 6-methyl-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example A107

(3-(Benzyloxy)-12-ethyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A107)

The title compound **A107** was synthesized with 5-ethyl-3-indolacetic acid, 3-hydroxy-4-methoxybenzaldehyde and benzyl bromide according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 6.22 (t, *J* = 7.1 Hz, 1H), 5.38 (d, *J* = 6.5 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

Example A108

(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A108)

The title compound **A108** was synthesized with piperonal and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.46 (d, 7.9 Hz, 1H), 7.18 – 7.07 (m, 1H), 7.03 (dd, *J* = 13.1, 5.7 Hz, 2H), 6.69 (s, 1H), 6.28 (s, 1H), 5.97 (d, *J* = 4.4 Hz, 2H), 5.41 (s, 2H), 4.18 (d, *J* = 15.1 Hz, 1H), 3.75 (s, 3H), 3.68 (d, *J* = 15.2 Hz, 1H), 3.58 (dd, *J* = 10.4, 3.1 Hz, 1H), 3.35 (d, *J* = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.93 (m, 1H), 2.64 (dd, *J* = 18.2, 10.6 Hz, 2H), 2.44 (d, *J* = 12.5 Hz, 1H).

LRMS (ESI, *m/z*): 379 [M+H]⁺.

Example A109

(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A109)

The title compound **A109** was synthesized with piperonal and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.46 (dd, J = 14.0, 7.9 Hz, 2H), 7.18 – 7.07 (m, 1H), 7.03 (dd, J = 13.1, 5.7 Hz, 2H), 6.69 (s, 1H), 6.28 (s, 1H), 5.97 (d, J = 4.4 Hz, 2H), 5.41 (s, 2H), 4.18 (d, J = 15.1 Hz, 1H), 3.68 (d, J = 15.2 Hz, 1H), 3.58 (dd, J = 10.4, 3.1 Hz, 1H), 3.35 (d, J = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.93 (m, 1H), 2.64 (dd, J = 18.2, 10.6 Hz, 2H), 2.44 (d, J = 12.5 Hz, 1H).

LRMS (ESI, m/z): 349 [M+H]⁺.

Example A110

(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A110)

The title compound **A110** was synthesized with 1-benzothiophene-5-carboxaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.78 – 7.37 (m, 4H), 7.21 – 7.17 (m, 1H), 7.03 – 6.87 (m, 2H), 6.28 (s, 1H), 5.97 (d, J = 4.4 Hz, 2H), 4.18 (d, J = 15.1 Hz, 1H), 3.75 (s, 3H), 3.68 (d, J = 15.2 Hz, 1H), 3.58 (dd, J = 10.4, 3.1 Hz, 1H), 3.35 (d, J = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.93 (m, 1H), 2.64 (dd, J = 18.2, 10.6 Hz, 2H), 2.44 (d, J = 12.5 Hz, 1H).

LRMS (ESI, m/z): 391 [M+H]⁺.

Example A111

(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A111)

The title compound **A111** was synthesized with 1-benzothiophene-5-carboxaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.78 – 7.37 (m, 4H), 7.21 – 7.17 (m, 2H), 7.03 – 6.87 (m, 2H), 6.28 (s, 1H), 5.97 (d, J = 4.4 Hz, 2H), 4.18 (d, J = 15.1 Hz, 1H), 3.68 (d, J = 15.2 Hz, 1H), 3.58 (dd, J = 10.4, 3.1 Hz, 1H), 3.35 (d, J = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.93 (m, 1H), 2.64 (dd, J = 18.2, 10.6 Hz, 2H), 2.44 (d, J = 12.5 Hz, 1H).

LRMS (ESI, m/z): 361 [M+H]⁺.

Example A112 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)acetate (A112)

The target compound **A112** was synthesized with acetic acid and **A1**.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.21 (s, 3H).

LRMS (ESI, m/z): 513 [M+H]⁺.

Example A113 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)cyclohexylsulfonate (A113)

The target compound **A113** was synthesized with cyclohexylsulfonic acid and **A1**.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.09-1.84 (m, 4H), 1.53-1.43 (m, 4H), 1.49-1.47 (m, 2H).

LRMS (ESI, m/z): 617 [M+H]⁺.

Example A114 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzenesulfonate (A114)

The target compound **A114** was synthesized with benzenesulfonic acid and **A1**.

¹H NMR (400 MHz, DMSO) δ 8.07 – 7.68 (m, 5H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 611 [M+H]⁺.

Example A115 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzenesulfonate (A115)

The target compound **A115** was synthesized with 4-fluorobenzenesulfonic acid and **A1**.

¹H NMR (400 MHz, DMSO) δ 7.85-7.46 (m, 4H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 629 [M+H]⁺.

Example A116 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzenesulfonate (A116)

The target compound **A116** was synthesized with 3-fluorobenzenesulfonic acid and **A1**.

¹H NMR (400 MHz, DMSO) δ 7.90-7.60 (m, 4H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 629 [M+H]⁺.

Example A117 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,

1-*a*lisoquinoline-9(8*H*)-yl)2-fluorobenzenesulfonate (A117)

The target compound **A117** was synthesized with 2-fluorobenzenesulfonic acid and **A1**.

¹HNMR (400 MHz, DMSO) δ 8.11-7.45 (m, 4H), 7.85-7.46(m, 4H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.94(m, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 629 [M+H]⁺.

Example A118 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-*a*]isoquinoline-9(8*H*)-yl)benzylbenzenesulfonate (A118)

The target compound **A118** was synthesized with benzylbenzenesulfonic acid and **A1**.

¹HNMR (400 MHz, DMSO) δ 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H), 7.51 – 7.35 (m, 6H), 7.39-7.26(m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.94(m, 1H), 2.65(d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 625 [M+H]⁺.

Example A119 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-*a*]isoquinoline-9(8*H*)-yl)benzoic acid (A119)

The target compound **A119** was synthesized with benzoic acid and **A1**.

¹HNMR (400 MHz, DMSO) δ 8.05-7.56 (m, 5H), 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H), 7.51 – 7.35 (m, 6H), 7.39-7.26 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 575 [M+H]⁺.

Example A120 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-*a*]isoquinoline-9(8*H*)-yl)N,N-dimethylformate (A120)

The target compound **A120** was synthesized with N,N-dimethylformic acid and **A1**.

¹HNMR(400 MHz, DMSO) δ 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H),7.51–7.35 (m, 6H), 7.39-7.26 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H),3.47(s,6H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 542 [M+H]⁺.

Example A121 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzoate (A121)

The target compound **A121** was synthesized with 4-fluorobenzoic acid and **A1**.

5 $^1\text{HNMR}$ (400 MHz, DMSO) δ 8.03-7.35 (m, 4H), 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H), 7.51-7.35 (m, 6H), 7.39-7.26 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H),
10 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz,1H).

LRMS (ESI, m/z): 593 $[\text{M}+\text{H}]^+$.

Example A122 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzoate (A122)

15 The target compound **A122** was synthesized by 3-fluorobenzoic acid and **A1**.

$^1\text{HNMR}$ (400 MHz, DMSO) δ 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H), 7.82-7.42 (m, 4H), 7.51-7.35 (m, 6H), 7.39-7.26 (m, 5H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H),
20 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0Hz, 1H).

LRMS (ESI, m/z): 593 $[\text{M}+\text{H}]^+$.

Example A123 methyl

(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)2-fluorobenzoate (A123)

25 The target compound **A123** was synthesized by 2-fluorobenzoic acid and **A1**.

$^1\text{HNMR}$ (400 MHz, DMSO) δ 8.03-7.33 (m, 4H), 7.90-7.60 (m, 4H), 7.85-7.46 (m, 4H), 7.51-7.35 (m, 6H), 7.39-7.26 (m, 5H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.67(s,2H),4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H),
30 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.94 (m, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 593 $[\text{M}+\text{H}]^+$.

Example A124

35 9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine [2,1-a]isoquinolin-3-ylbenzenesulfonate

The title compound **A124** was synthesized with benzenesulfonyl chloride, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

40 $^1\text{H NMR}$ (400 MHz, DMSO) δ 7.86 –7.35 (m, 4H), 7.22 (d, J = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.74 (dd, J = 9.7, 3.3 Hz, 2H), 6.22 (t, J = 7.1 Hz, 1H), 5.38 (d, J = 6.5 Hz, 2H), 4.17 (d, J = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz,

1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, m/z): 521 $[M+H]^+$.

Example A125

5 **9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine [2,1-a]isoquinolin-3-ylbenzenesulfonate**

The title compound **A125** was synthesized with benzenesulfonyl chloride, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (400 MHz, DMSO) δ 7.86 – 7.35 (m, 4H), 7.22 – 7.06 (m, 3H), 6.96 (d, $J = 2.3$ Hz, 1H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 6.22 (t, $J = 7.1$ Hz, 1H), 5.38 (d, $J = 6.5$ Hz, 2H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

15 LRMS (ESI, m/z): 521 $[M+H]^+$.

Example A126

(S)-(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A126)

20 The title compound **A126** was synthesized with benzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 25 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

Example A127

30 **(R)-(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A127)**

The title compound **A127** was synthesized with benzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

35 ^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, $J = 7.0$ Hz, 1H), 5.38 (d, $J = 7.4$ Hz, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

40 Example A128

(S)-(2-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A128)

The title compound **A128** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺.

Example A129

(R)-(2-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A129)

The title compound **A129** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺.

Example A130

(3-(Benzyloxy)-8-isopropyl-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A130)

The title compound **A130** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.89 (d, J = 7.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (m, 1H), 2.44 (t, J = 12.0 Hz, 1H), 0.91 (d, J = 7.2 Hz, 6H).

LRMS (ESI, m/z): 513 [M+H]⁺.

Example A131

(2-(Benzyloxy)-8-isopropyl-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A131)

The title compound **A131** was synthesized with benzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05-6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.89 (d, J = 7.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J

= 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (m, 1H), 2.44 (t, J = 12.0 Hz, 1H), 0.91 (d, J = 7.2 Hz, 6H).

LRMS (ESI, *m/z*): 513 [M+H]⁺.

Example A132

5 2-(benzyloxy)-3,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (A132)

The title compound **A132** was synthesized with benzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

10 ¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.51 – 7.35 (m, 6H), 7.05-6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.89 (d, J = 7.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (m, 1H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 581 [M+H]⁺.

15 Example A133

3-(benzyloxy)-2,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (A133)

The title compound **A133** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

20 ¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 5H), 7.51 – 7.35 (m, 6H), 7.05-6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.89 (d, J = 7.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (m, 1H), 2.44 (t, J = 12.0 Hz, 1H).

25 LRMS (ESI, *m/z*): 581 [M+H]⁺.

Example A134

(2-((4-aminobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A134)

The title compound **A134** was synthesized with p-aminobenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

35 ¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 486 [M+H]⁺.

Example A135

40 3-((4-aminobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (A135)

The title compound **A135** was synthesized with p-aminobenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme

1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 486 [M+H]⁺.

Example A136

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)phenol (A136)

The title compound **A136** was synthesized with p-hydroxybenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.31 (s, 1H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 487 [M+H]⁺.

Example A137

4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)phenol (A137)

The title compound **A137** was synthesized with p-hydroxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.31 (s, 1H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 487 [M+H]⁺.

Example A138

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoic acid (A138)

The title compound **A138** was synthesized with p-carboxybenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (400 MHz, DMSO) δ 11.01 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, *J* = 7.0 Hz, 1H), 5.38 (d, *J* = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, m/z): 515 $[M+H]^+$.

Example A139

4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoic acid (A139)

The title compound **A139** was synthesized with p-carboxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 11.01 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 515 $[M+H]^+$.

Example (S)-A55

(S)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol ((S)-A55)

The title compound **(S)-A55** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.16 (s, 2H), 4.29 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$

Example (R)-A55

(R)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol ((R)-A55)

The title compound **(R)-A55** was synthesized with benzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.16 (s, 2H), 4.29 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$

Example (S)-A1

(S)-(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (S)-A1)

^1H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.16 (s, 2H), 4.29

(d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺

Example (R)-A1

(R)-(2-(Benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (R)-A1

¹H NMR (400 MHz, DMSO) δ 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.16 (s, 2H), 4.29 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺

Example A140

(2,12-Dimethoxy-3-((2-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A140)

The title compound **A140** was synthesized with 2-methoxybenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.26 (s, 1H), 7.18 (s, 1H), 6.96 – 6.84 (m, 5H), 6.81 (s, 1H), 6.32 (s, 1H), 6.11 – 6.07 (m, 2H), 5.23 – 5.19 (m, 2H), 4.49 (s, 1H), 3.86 – 3.84 (m, 3H), 3.84 – 3.73 (m, 8H), 3.67 (s, 1H), 3.18 (s, 1H), 3.07 (s, 1H), 3.02 (s, 1H), 2.77 (d, J = 0.8 Hz, 2H), 2.60 (s, 1H), 1.00 (s, 1H).

LRMS (ESI, m/z): 501 [M+H]⁺

Example A141

(2-methoxy-3-((2-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A141)

The title compound **A141** was synthesized with 2-methoxybenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.33 (s, 1H), 7.25 – 7.14 (m, 3H), 7.04 (s, 1H), 6.94 – 6.81 (m, 4H), 6.62 (s, 1H), 6.11 – 6.07 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.83 (s, 1H), 3.83 – 3.74 (m, 3H), 3.74 – 3.70 (m, 3H), 3.54 (s, 1H), 3.09 (s, 1H), 2.84 (s, 1H), 2.79 (d, J = 0.8 Hz, 2H), 2.73 (s, 1H), 2.66 (s, 1H), 1.08 (s, 1H).

LRMS (ESI, m/z): 471 [M+H]⁺

Example A142

(2,12-Dimethoxy-3-((3-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4, 5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A142)

The title compound **A142** was synthesized with 3-methylbenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.08 – 6.93 (m, 17H), 6.91 (s, 1H), 6.84 (s, 3H), 6.64 (s, 3H), 6.26 (s, 3H), 6.11 – 6.07 (m, 6H), 5.01 – 4.97 (m, 6H), 4.29 (s, 3H), 3.87 – 3.83

(m, 9H), 3.82 – 3.78 (m, 9H), 3.75 (s, 3H), 3.37 (s, 3H), 3.08 (s, 2H), 2.82 (d, $J = 0.8$ Hz, 6H), 2.63 (s, 3H), 2.37 – 2.33 (m, 9H), 2.27 (s, 2H), 2.00 (s, 2H), 1.51 (s, 3H).

LRMS (ESI, m/z): 485 $[M+H]^+$.

Example A143

5 (2-methoxy-3-((3-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A143)

The title compound **A143** was synthesized with 3-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

10 ^1H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.22 (d, $J = 4.6$ Hz, 2H), 7.15 (dd, $J = 14.7, 5.2$ Hz, 4H), 7.08 (s, 1H), 6.89 (s, 1H), 6.63 (s, 1H), 6.11 – 6.07 (m, 2H), 5.17 – 5.13 (m, 2H), 4.29 (s, 1H), 3.85 – 3.64 (m, 4H), 3.53 (s, 1H), 3.11 (s, 1H), 2.91 (d, $J = 0.8$ Hz, 2H), 2.78 (s, 1H), 2.71 (s, 1H), 2.64 (s, 1H), 2.38 – 2.34 (m, 3H), 1.20 (s, 1H).

LRMS (ESI, m/z): 455 $[M+H]^+$.

Example A144

15 (2,12-Dimethoxy-3-((2-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A144)

The title compound **A144** was synthesized with 2-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

20 ^1H NMR (500 MHz, Chloroform) δ 7.15 (d, $J = 3.5$ Hz, 53H), 7.10 (s, 25H), 7.00 (s, 2H), 7.00 – 6.84 (m, 105H), 6.77 (s, 26H), 6.50 (s, 26H), 6.11 – 6.07 (m, 52H), 5.22 – 5.18 (m, 52H), 4.29 (s, 25H), 3.96 – 3.80 (m, 107H), 3.80 – 3.76 (m, 79H), 3.52 (s, 27H), 3.12 (s, 26H), 2.95 (d, $J = 0.8$ Hz, 52H), 2.76 (s, 21H), 2.72 (s, 29H), 2.60 (s, 20H), 2.34 – 2.30 (m, 78H), 1.11 (s, 26H).

25 LRMS (ESI, m/z): 485 $[M+H]^+$.

Example A145

(2-methoxy-3-((2-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A145)

30 The title compound **A145** was synthesized with 2-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

^1H NMR (500 MHz, Chloroform) δ 7.34 (s, 2H), 7.21 (d, $J = 13.7$ Hz, 5H), 7.13 (dd, $J = 18.1, 14.5$ Hz, 7H), 7.03 (s, 2H), 6.89 (s, 2H), 6.62 (s, 2H), 6.11 – 6.07 (m, 4H), 5.23 – 5.19 (m, 4H), 4.29 (s, 2H), 3.85 – 3.64 (m, 8H), 3.53 (s, 2H), 3.12 (s, 2H), 2.94 (d, $J = 0.8$ Hz, 4H), 2.78 (s, 1H), 2.73 (s, 2H), 2.66 (s, 2H), 2.39 – 2.35 (m, 6H), 1.20 (s, 2H).

35 LRMS (ESI, m/z): 455 $[M+H]^+$.

Example A146

(3,12-Dimethoxy-2-((2-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A146)

40 The title compound **A146** was synthesized with 2-methoxybenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

^1H NMR (500 MHz, Chloroform) δ 7.22 (d, $J = 18.6$ Hz, 2H), 7.07 (s, 1H), 6.95 (d, $J = 1.8$ Hz, 2H), 6.89 – 6.84 (m, 3H), 6.31 (s, 1H), 6.11 – 6.07 (m, 2H), 5.24 – 5.20 (m, 2H),

4.29 (s, 1H), 3.88 – 3.84 (m, 6H), 3.83 – 3.60 (m, 4H), 3.54 (s, 1H), 3.10 (s, 1H), 2.94 (s, 1H), 2.78 (d, $J = 0.8$ Hz, 2H), 2.72 (s, 1H), 2.46 (s, 1H), 1.18 (s, 1H).

LRMS (ESI, m/z): 501 $[M+H]^+$.

Example A147

5 (3-methoxy-2-((2-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A147)

The title compound **A147** was synthesized with 2-methoxybenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.36 (s, 3H), 7.29 – 7.18 (m, 9H), 6.96 – 6.82 (m, 12H), 6.75 (s, 3H), 6.64 (s, 3H), 6.11 – 6.07 (m, 6H), 5.24 – 5.20 (m, 6H), 4.29 (s, 3H), 3.87 – 3.73 (m, 21H), 3.55 (s, 3H), 3.12 (s, 3H), 2.79 (d, $J = 0.8$ Hz, 6H), 2.70 (d, $J = 5.0$ Hz, 5H), 2.48 (s, 2H), 0.93 (s, 3H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

Example A148

15 (3,12-Dimethoxy-2-((3-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A148)

The title compound **A148** was synthesized with 3-methylbenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.20 (d, $J = 5.7$ Hz, 2H), 7.13 (d, $J = 4.2$ Hz, 2H), 7.06 (s, 1H), 6.94 (d, $J = 19.6$ Hz, 2H), 6.87 (s, 1H), 6.28 (s, 1H), 6.11 – 6.07 (m, 2H), 5.20 – 5.16 (m, 2H), 4.29 (s, 1H), 3.90 – 3.62 (m, 7H), 3.53 (s, 1H), 3.14 (s, 1H), 2.95 (d, $J = 0.8$ Hz, 2H), 2.73 (d, $J = 2.5$ Hz, 2H), 2.56 (s, 1H), 2.37 – 2.33 (m, 3H), 1.20 (s, 1H).

LRMS (ESI, m/z): 485 $[M+H]^+$.

Example A149

25 (3-methoxy-2-((3-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A149)

The title compound **A149** was synthesized with 3-methylbenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.22 (d, $J = 6.1$ Hz, 2H), 7.16 (d, $J = 1.9$ Hz, 2H), 7.12 (s, 1H), 7.07 (s, 1H), 7.00 (s, 1H), 6.89 (s, 1H), 6.63 (s, 1H), 6.11 – 6.07 (m, 2H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.86 – 3.64 (m, 4H), 3.53 (s, 1H), 3.12 (s, 1H), 2.94 (d, $J = 0.8$ Hz, 2H), 2.80 (s, 1H), 2.72 (s, 1H), 2.68 (s, 1H), 2.37 – 2.33 (m, 3H), 1.20 (s, 1H).

LRMS (ESI, m/z): 455 $[M+H]^+$.

35 Example A150

(3,12-Dimethoxy-2-((2-methylbenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A150)

The title compound **A150** was synthesized with 2-methylbenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.23 (s, 1H), 7.19 – 7.08 (m, 4H), 6.86 (d, $J = 1.9$ Hz, 2H), 6.78 (s, 1H), 6.29 (s, 1H), 6.11 – 6.07 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.86 – 3.82 (m, 3H), 3.82 – 3.75 (m, 4H), 3.53 (s, 1H), 3.10 (s, 1H), 2.91 (s, 1H), 2.76 (t, $J =$

7.4 Hz, 3H), 2.66 (s, 1H), 2.33 – 2.29 (m, 3H), 1.20 (s, 1H).

LRMS (ESI, m/z): 485 [M+H]⁺.

Example A151

(3-methoxy-2-((2-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A151)

The title compound **A151** was synthesized with 2-methylbenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.35 (s, 1H), 7.22 (d, J = 17.4 Hz, 2H), 7.15 (dd, J = 11.3, 8.2 Hz, 4H), 6.92 (d, J = 14.7 Hz, 2H), 6.66 (s, 1H), 6.11 – 6.07 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.86 – 3.65 (m, 4H), 3.56 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 0.8 Hz, 2H), 2.80 (s, 1H), 2.73 (s, 1H), 2.69 (s, 1H), 2.40 – 2.36 (m, 3H), 1.17 (s, 1H).

LRMS (ESI, m/z): 455 [M+H]⁺.

Example A152

(2-methoxy-3-((3,4-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A152)

The title compound **A152** was synthesized with 3,4-difluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.23 (s, 1H), 7.10 (s, 1H), 7.01 (q, J = 8.0 Hz, 4H), 6.89 (s, 1H), 6.62 (s, 1H), 6.11 – 6.07 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.87 – 3.64 (m, 4H), 3.53 (s, 1H), 3.12 (s, 1H), 2.95 (d, J = 0.8 Hz, 2H), 2.78 (s, 1H), 2.73 (s, 1H), 2.66 (s, 1H), 1.20 (s, 1H).

LRMS (ESI, m/z): 477 [M+H]⁺.

Example A153

(2,12-dimethoxy-3-((3,4-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A153)

The title compound **A153** was synthesized with 3,4-difluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.04 – 6.84 (m, 7H), 6.44 (s, 1H), 6.11 – 6.07 (m, 2H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.84 – 3.62 (m, 7H), 3.54 (s, 1H), 3.12 (s, 1H), 2.90 (d, J = 0.8 Hz, 2H), 2.78 (s, 1H), 2.67 (s, 1H), 2.56 (s, 1H), 1.14 (s, 1H).

LRMS (ESI, m/z): 507 [M+H]⁺.

Example A154

(2-methoxy-3-((3,5-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A154)

The title compound **A154** was synthesized with 3,5-difluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.23 (s, 1H), 7.13 (s, 1H), 7.05 (s, 1H), 6.96 – 6.80 (m, 2H), 6.77 (d, J = 20.3 Hz, 1H), 6.73 (s, 1H), 6.63 (s, 1H), 6.11 – 6.07 (m, 2H), 5.20 – 5.16 (m, 2H), 4.29 (s, 1H), 3.86 – 3.64 (m, 4H), 3.53 (s, 1H), 3.11 (s, 1H), 2.91 (d, J = 0.8 Hz, 2H), 2.78 (s, 1H), 2.71 (s, 1H), 2.64 (s, 1H), 1.20 (s, 1H).

LRMS (ESI, m/z): 477 [M+H]⁺.

Example A155

(2,12-dimethoxy-3-((3,5-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A155)

The title compound **A155** was synthesized with 3,5-difluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.04 – 6.87 (m, 3H), 6.85 (s, 1H), 6.81 – 6.66 (m, 2H), 6.57 (s, 1H), 6.46 (s, 1H), 6.11 – 6.07 (m, 2H), 5.25 – 5.21 (m, 2H), 4.29 (s, 1H), 3.85 – 3.64 (m, 7H), 3.54 (s, 1H), 3.12 (s, 1H), 2.95 (d, J = 0.8 Hz, 2H), 2.76 (d, J = 15.8 Hz, 2H), 2.57 (s, 1H), 1.20 (s, 1H).

LRMS (ESI, m/z): 507 [M+H]⁺.

Example A156

(2-Methoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A156)

The title compound **A156** was synthesized with 3,4,5-trifluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.23 (s, 1H), 7.04 (s, 1H), 6.99 (s, 1H), 6.89 (s, 1H), 6.85 – 6.81 (m, 2H), 6.63 (s, 1H), 6.11 – 6.07 (m, 2H), 5.21 – 5.17 (m, 2H), 4.29 (s, 1H), 3.85 – 3.66 (m, 4H), 3.53 (s, 1H), 3.12 (s, 1H), 2.92 (d, J = 0.8 Hz, 2H), 2.80 (s, 1H), 2.72 (s, 1H), 2.66 (s, 1H), 1.19 (s, 1H).

LRMS (ESI, m/z): 495 [M+H]⁺.

Example A157

(2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A157)

The title compound **A157** was synthesized with 3,4,5-trifluorobenzyl bromide, 3-hydroxy-4methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 6.95 (d, J = 13.7 Hz, 6H), 6.89 (s, 3H), 6.83 (s, 3H), 6.75 – 6.71 (m, 6H), 6.48 (s, 3H), 6.11 – 6.07 (m, 6H), 5.24 – 5.20 (m, 6H), 4.29 (s, 3H), 3.92 – 3.78 (m, 21H), 3.49 (s, 3H), 3.10 (s, 2H), 3.04 (d, J = 0.8 Hz, 6H), 2.91 (s, 2H), 2.68 (s, 2H), 2.58 (s, 3H), 1.13 (s, 3H).

LRMS (ESI, m/z): 525 [M+H]⁺.

Example A158

(3-methoxy-2-((3,4-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A158)

The title compound **A158** was synthesized with 3,4-difluorobenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 4H), 7.23 (s, 4H), 7.12 (s, 4H), 7.07 – 6.97 (m, 16H), 6.89 (s, 5H), 6.63 (s, 4H), 6.11 – 6.07 (m, 8H), 5.22 – 5.18 (m, 8H), 4.29 (s, 4H), 3.85 – 3.65 (m, 16H), 3.53 (s, 4H), 3.12 (s, 4H), 2.94 (d, J = 0.8 Hz, 8H), 2.80 (s, 3H), 2.72 (s, 5H), 2.68 (s, 2H), 1.20 (s, 4H).

LRMS (ESI, m/z): 477 [M+H]⁺.

Example A159

(3,12-dimethoxy-2-((3,4-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A159)

The title compound **A159** was synthesized with 3,4-difluorobenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.15 (s, 1H), 7.06 (s, 1H), 7.03 – 6.94 (m, 3H), 6.84 (d, *J* = 5.8 Hz, 2H), 6.32 (s, 1H), 6.11 – 6.07 (m, 2H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.86 – 3.76 (m, 7H), 3.61 (s, 1H), 3.12 (s, 1H), 3.04 – 2.93 (m, 3H), 2.76 (s, 1H), 2.58 (s, 1H), 1.13 (s, 1H).

LRMS (ESI, *m/z*): 507 [M+H]⁺.

Example A160

(3-methoxy-2-((3,5-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A160)

The title compound **A160** was synthesized with 3,5-difluorobenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.35 (s, 36H), 7.23 (s, 36H), 7.13 (s, 36H), 6.89 (s, 65H), 6.79 (dd, *J* = 4.7, 1.6 Hz, 120H), 6.65 (s, 38H), 6.11 – 6.07 (m, 72H), 5.23 – 5.19 (m, 72H), 4.29 (s, 35H), 3.95 – 3.62 (m, 150H), 3.74 – 3.62 (m, 2H), 3.52 (s, 38H), 3.10 (s, 36H), 2.92 (s, 27H), 2.79 (s, 29H), 2.75 (d, *J* = 0.8 Hz, 76H), 2.66 (s, 37H), 1.19 (s, 36H).

LRMS (ESI, *m/z*): 477 [M+H]⁺.

Example A161

(3,12-dimethoxy-2-((3,5-difluorobenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A161)

The title compound **A161** was synthesized with 3,5-difluorobenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.14 (s, 90H), 6.96 (s, 91H), 6.88 (d, *J* = 8.6 Hz, 184H), 6.85 – 6.76 (m, 189H), 6.74 (s, 88H), 6.32 (s, 90H), 6.11 – 6.07 (m, 180H), 5.25 – 5.21 (m, 180H), 4.29 (s, 87H), 3.86 (s, 9H), 4.10 – 3.67 (m, 654H), 3.60 (s, 94H), 3.22 (s, 78H), 2.89 (dd, *J* = 15.0, 3.5 Hz, 355H), 2.75 (s, 71H), 1.17 (s, 90H).

LRMS (ESI, *m/z*): 507 [M+H]⁺.

Example A162

(3-Methoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A162)

The title compound **A162** was synthesized with 3,4,5-trifluorobenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.24 (s, 1H), 7.03 (s, 1H), 6.91 (s, 1H), 6.83 – 6.78 (m, 3H), 6.66 (s, 1H), 6.11 – 6.07 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.86 – 3.82 (m, 4H), 3.56 (s, 1H), 3.15 (s, 1H), 2.94 (d, *J* = 0.8 Hz, 2H), 2.80 (s, 1H), 2.73 (s, 1H), 2.68 (s, 1H), 0.95 (s, 1H).

LRMS (ESI, *m/z*): 495 [M+H]⁺.

Example A163

(3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (A163)

The title compound **A163** was synthesized with 3,4,5-trifluorobenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 1.

¹H NMR (500 MHz, Chloroform) δ 7.07 (s, 1H), 6.91 – 6.84 (m, 3H), 6.84 – 6.80 (m, 2H), 6.27 (s, 1H), 6.11 – 6.07 (m, 2H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.86 – 3.67 (m, 7H), 3.54 (s, 1H), 3.12 (s, 1H), 2.94 (d, J = 0.8 Hz, 2H), 2.78 (s, 1H), 2.74 (s, 1H), 2.68 (s, 1H), 1.20 (s, 1H).

LRMS (ESI, m/z): 525 [M+H]⁺.

Example B1

2-(benzyloxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B1)

The target compound **B1** was synthesized by repeating A1 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 8H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 535 [M+H]⁺.

Example B2

2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B2)

The target compound **B2** was synthesized by repeating A2 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 505 [M+H]⁺.

Example B3

8-(4-Fluorophenyl)-3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B3)

The target compound **B3** was synthesized by repeating A3 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 603 [M+H]⁺.

Example B4

8-(4-Fluorophenyl)-3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B4)

The target compound **B4** was synthesized by repeating A4 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 8H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

5 LRMS (ESI, *m/z*): 573 [M+H]⁺.

Example B5

2-((4-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B5)

The target compound **B5** was synthesized by repeating A5 with 4-fluorobenzaldehyde.

10 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 553 [M+H]⁺.

15 Example B6

2-((4-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B6)

The target compound **B6** was synthesized by repeating A6 with 4-fluorobenzaldehyde.

20 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 523 [M+H]⁺.

Example B7

25 2-(((3-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B7)

The target compound **B7** was synthesized by repeating A7 with 4-fluorobenzaldehyde.

30 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 553 [M+H]⁺.

Example B8

35 2-(((3-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B8)

The target compound **B8** was synthesized by repeating A8 with 4-fluorobenzaldehyde.

40 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 523 [M+H]⁺.

Example B9

2-((2-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B9)

The target compound **B9** was synthesized by repeating A9 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 553 [M+H]⁺.

Example B10

2-((2-fluorobenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B10)

The target compound **B10** was synthesized by repeating A10 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 [M+H]⁺.

Example B11

8-(4-Fluorophenyl)-3,12-dimethoxy-2-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B11)

The target compound **B11** was synthesized by repeating A11 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 565 [M+H]⁺.

Example B12

8-(4-Fluorophenyl)-3-methoxy-2-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B12)

The target compound **B12** was synthesized by repeating A12 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 535 [M+H]⁺.

Example B13

8-(4-Fluorophenyl)-3,12-dimethoxy-2-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B13)

The target compound **B13** was synthesized by repeating A13 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H).

LRMS (ESI, *m/z*): 565 [M+H]⁺.

Example B14

8-(4-Fluorophenyl)-3-methoxy-2-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B13)

The target compound **B14** was synthesized by repeating A14 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H).

LRMS (ESI, *m/z*): 535 [M+H]⁺.

Example B15

8-(4-Fluorophenyl)-3,12-dimethoxy-2-((4-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B13)

The target compound **B15** was synthesized by repeating A15 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H), 2.36 (s, 3H).

LRMS (ESI, *m/z*): 549 [M+H]⁺.

Example B16

8-(4-Fluorophenyl)-3-methoxy-2-((4-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B13)

The target compound **B16** was synthesized by repeating A16 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m,

1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H), 2.36 (s, 3H).

LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example B17

5 2-(((4-chlorobenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B17)

The target compound **B17** was synthesized by repeating A17 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 570 [M+H]⁺.

Example B18

15 2-(((4-chlorobenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B18)

The target compound **B18** was synthesized by repeating A18 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 540 [M+H]⁺.

Example B19

25 4-(((8-(4-Fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (B19)

The target compound **B19** was synthesized by repeating A19 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.43 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 560 [M+H]⁺.

Example B20

35 4-(((8-(4-Fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (B20)

The target compound **B20** was synthesized by repeating A20 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.43 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 530 $[M+H]^+$.

Example B21

2-((4-bromobenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B21)

The target compound **B21** was synthesized by repeating A21 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.35 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 613 $[M+H]^+$, 615 $[M+H]^+$

Example B22

2-((4-bromobenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B22)

The target compound **B22** was synthesized by repeating A22 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.35 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[M+H]^+$, 585 $[M+H]^+$

Example B23

2-((3-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B23)

The target compound **B23** was synthesized by repeating A23 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 621 $[M+H]^+$.

Example B24

2-((3-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B24)

The target compound **B24** was synthesized by repeating A24 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 591 $[M+H]^+$.

Example B25

2-((2-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B25)

The target compound **B25** was synthesized by repeating A25 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 621 [M+H]⁺.

Example B26

2-((2-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B26)

The target compound **B26** was synthesized by repeating A26 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 591 [M+H]⁺.

Example B27

2-((4-ethylbenzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B27)

The target compound **B27** was synthesized by repeating A27 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H), 2.36 (q, J = 8.0 Hz, 2H), 1.06 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 563 [M+H]⁺.

Example B28

2-((4-ethylbenzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B28)

The target compound **B28** was synthesized by repeating A28 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H), 2.36 (q, J = 8.0 Hz, 2H), 1.06 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 533 $[M+H]^+$.

Example B29

8-(4-Fluorophenyl)-3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B29)

The target compound **B29** was synthesized by repeating A29 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 10H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 585 $[M+H]^+$.

Example B30

8-(4-Fluorophenyl)-3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B30)

The target compound **B30** was synthesized by repeating A30 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 11H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 555 $[M+H]^+$.

Example B31

4-(((8-(4-Fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (B31)

The target compound **B31** was synthesized by repeating A31 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, $J = 2.4$ Hz, 1H), 6.95 (d, $J = 2.3$ Hz, 1H), 6.89 (dd, $J = 8.4, 2.7$ Hz, 1H), 6.68 (d, $J = 3.3$ Hz, 1H), 5.14 (s, 1H), 5.01 (q, $J = 12.2$ Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, $J = 12.7$ Hz, 1H).

LRMS (ESI, m/z): 593 $[M+H]^+$.

Example B32

4-(((8-(4-Fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (B31)

The target compound **B32** was synthesized by repeating A32 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, $J = 2.4$ Hz, 1H), 6.95 (d, $J = 2.3$ Hz, 1H), 6.89 (dd, $J = 8.4, 2.7$ Hz, 1H), 6.68 (d, $J = 3.3$ Hz, 1H), 5.14 (s, 1H), 5.01 (q, $J = 12.2$ Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, $J = 12.7$ Hz, 1H).

LRMS (ESI, m/z): 563 $[M+H]^+$.

Example B33

2-((4-(1H-pyrazol-1-yl)benzyl)oxo)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B33)

The target compound **B33** was synthesized by repeating A33 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.26 – 7.09 (m, 4H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (s, 1H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 601 $[M+H]^+$.

Example B34

2-((4-(1H-pyrazol-1-yl)benzyl)oxo)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B34)

The target compound **B34** was synthesized by repeating A34 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.26 – 7.09 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (s, 1H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (s, 3H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 571 $[M+H]^+$.

Example B35

2-butoxy-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B35)

The target compound **B35** was synthesized by repeating A35 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.66 (s, 1H), 7.36 (d, J = 8.8 Hz, 1H), 7.26 – 7.09 (m, 4H), 6.98 (d, J = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, J = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 5.37 (t, J = 12.0 Hz, 2H), 4.16 (s, 1H), 3.92 (t, J = 5.9 Hz, 2H), 3.77 (s, 3H), 3.65 (s, 1H), 3.44 – 3.40 (d, J = 15.0 Hz, 1H), 3.12 (d, J = 9.6 Hz, 1H), 2.47 – 2.37 (t, J = 5.9 Hz, 2H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, J = 7.4 Hz, 3H).

LRMS (ESI, m/z): 501 $[M+H]^+$.

Example B36

2-butoxy-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B36)

The target compound **B36** was synthesized by repeating A36 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.66 (s, 1H), 7.36 (d, J = 8.8 Hz, 1H), 7.26 – 7.09 (m, 5H), 6.98 (d, J = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, J = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 5.37 (t, J = 12.0 Hz, 2H), 4.16 (s, 1H), 3.92 (t, J = 5.9 Hz, 2H), 3.77 (s, 3H), 3.72 (s, 3H), 3.65 (s,

1H), 3.44 – 3.40 (d, *J* = 15.0 Hz, 1H), 3.12 (d, *J* = 9.6 Hz, 1H), 2.47 – 2.37 (t, *J* = 5.9 Hz, 2H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, *J* = 7.4 Hz, 3H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example B37

5 8-(4-Fluorophenyl)-12-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline (B37)

The target compound **B37** was synthesized by repeating A37 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.63 (s, 1H), 7.78 – 7.37 (m, 4H), 7.29 – 7.07 (m, 5H),
10 7.03 – 6.87 (m, 2H), 4.18 (d, *J* = 15.1 Hz, 1H), 3.75 (s, 3H), 3.68 (d, *J* = 15.2 Hz, 1H), 3.58 (dd, *J* = 10.4, 3.1 Hz, 1H), 3.35 (d, *J* = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.64 (dd, *J* = 18.2, 10.6 Hz, 2H), 2.44 (d, *J* = 12.5 Hz, 1H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

15 Example B38 8-(4-Fluorophenyl)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline (B38)

The target compound **B38** was synthesized by repeating A38 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.63 (s, 1H), 7.78 – 7.37 (m, 4H), 7.29 – 7.07 (m, 5H),
20 7.03 – 6.87 (m, 2H), 4.18 (d, *J* = 15.1 Hz, 1H), 3.75 (s, 3H), 3.68 (d, *J* = 15.2 Hz, 1H), 3.58 (dd, *J* = 10.4, 3.1 Hz, 1H), 3.35 (d, *J* = 3.2 Hz, 1H), 3.16 – 3.06 (m, 1H), 2.64 (dd, *J* = 18.2, 10.6 Hz, 2H), 2.44 (d, *J* = 12.5 Hz, 1H).

LRMS (ESI, *m/z*): 425 [M+H]⁺.

Example B39

25 8-(4-Fluorophenyl)-3,12-dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B39)

The target compound **B39** was synthesized by repeating A39 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.71 (s, 1H), 7.37 (d, *J* = 8.8 Hz, 1H), 7.29 – 7.07 (m, 5H),
30 6.96 (d, *J* = 2.4 Hz, 1H), 6.79 (s, 1H), 6.74 (dd, *J* = 8.8, 2.5 Hz, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, *J* = 15.0 Hz, 1H), 3.78 (s, 3H), 3.77 (s, 3H), 3.65 (d, *J* = 14.8 Hz, 1H), 3.14 (dd, *J* = 8.5, 2.6 Hz, 1H), 2.98 (dd, *J* = 18.7, 8.2 Hz, 1H), 2.74 – 2.60 (m, 1H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, *m/z*): 527 [M+H]⁺.

Example B40

35 8-(4-Fluorophenyl)-3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B40)

The target compound **B40** was synthesized by repeating A40 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.71 (s, 1H), 7.37 (d, *J* = 8.8 Hz, 1H), 7.29 – 7.07 (m, 6H),
40 6.96 (d, *J* = 2.4 Hz, 1H), 6.79 (s, 1H), 6.74 (dd, *J* = 8.8, 2.5 Hz, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.65 (d, *J* = 14.8 Hz, 1H), 3.14 (dd, *J* = 8.5, 2.6 Hz, 1H), 2.98 (dd, *J* = 18.7, 8.2 Hz, 1H), 2.74 – 2.60 (m, 1H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, *m/z*): 497 [M+H]⁺.

Example B41

8-(4-Fluorophenyl)-3,12-dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B41)

The target compound **B41** was synthesized by repeating A41 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.67 (s, 1H), 7.39 – 7.35 (m, 3H), 7.29 – 7.07 (m, 6H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 2H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 1H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 613 [M+H]⁺.

Example B42

8-(4-Fluorophenyl)-3-methoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B42)

The target compound **B42** was synthesized by repeating A42 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.67 (s, 1H), 7.39 – 7.35 (m, 3H), 7.29 – 7.07 (m, 7H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 2H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 1H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 583 [M+H]⁺.

Example B43

2-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B43)

The target compound **B43** was synthesized by repeating A43 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 523 [M+H]⁺.

Example B44

2-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B44)

The target compound **B44** was synthesized by repeating A44 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 523 [M+H]⁺.

Example B45

2-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B45)

The target compound **B45** was synthesized by repeating A45 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 [M+H]⁺.

Example B46

2-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B46)

The target compound **B46** was synthesized by repeating A46 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 [M+H]⁺.

Example B47

2-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B47)

The target compound **B47** was synthesized by repeating A47 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 [M+H]⁺.

Example B48

2-(benzyloxy)-13-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B48)

The target compound **B48** was synthesized by repeating A48 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 [M+H]⁺.

Example B49

2-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B49)

The target compound **B49** was synthesized by repeating A49 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[\text{M}+\text{H}]^+$, 585 $[\text{M}+\text{H}]^+$.

Example B50

2-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B50)

The target compound **B50** was synthesized by repeating A50 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[\text{M}+\text{H}]^+$, 585 $[\text{M}+\text{H}]^+$.

Example B51

2-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B51)

The target compound **B51** was synthesized by repeating A51 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[\text{M}+\text{H}]^+$, 585 $[\text{M}+\text{H}]^+$.

Example B52

2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline-12-phenol (B52)

The target compound **B52** was synthesized by repeating A52 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.32 (s, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 521 $[\text{M}+\text{H}]^+$.

Example B53

2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B53)

The target compound **B53** was synthesized by repeating A53 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.32 (s, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H), 2.35 (s, 3H).

LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example B54

2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B54)

The target compound **B54** was synthesized by repeating A54 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.32 (s, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H), 2.35 (q, *J* = 8.4 Hz, 2H), 1.05 (t, *J* = 8.4 Hz, 3H).

LRMS (ESI, *m/z*): 533 [M+H]⁺.

Example B55

3-(benzyloxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B55)

The target compound **B55** was synthesized by repeating A55 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 8H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 535 [M+H]⁺.

Example B56

3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B56)

The target compound **B56** was synthesized by repeating A56 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, *m/z*): 505 [M+H]⁺.

Example B57

8-(4-Fluorophenyl)-2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B57)

The target compound **B57** was synthesized by repeating A57 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 603 $[\text{M}+\text{H}]^+$.

Example B58

8-(4-Fluorophenyl)-2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B58)

The target compound **B58** was synthesized by repeating A58 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 8H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 573 $[\text{M}+\text{H}]^+$.

Example B59

3-((4-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B59)

The target compound **B59** was synthesized by repeating A59 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 553 $[\text{M}+\text{H}]^+$.

Example B60

3-((4-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B60)

The target compound **B60** was synthesized by repeating A60 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 $[\text{M}+\text{H}]^+$.

Example B61

3-((3-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B61)

The target compound **B61** was synthesized by repeating A61 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 553 [M+H]⁺.

Example B62

3-((3-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B62)

The target compound **B62** was synthesized by repeating A62 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 [M+H]⁺.

Example B63

3-((2-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B63)

The target compound **B63** was synthesized by repeating A63 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 553 [M+H]⁺.

Example B64

3-((2-fluorobenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B64)

The target compound **B64** was synthesized by repeating A64 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 [M+H]⁺.

Example B65

8-(4-Fluorophenyl)-2,12-dimethoxy-3-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B65)

The target compound **B65** was synthesized by repeating A65 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 565 [M+H]⁺.

Example B66

8-(4-Fluorophenyl)-2-methoxy-2-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B66)

The target compound **B66** was synthesized by repeating A66 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 535 [M+H]⁺.

Example B67

8-(4-Fluorophenyl)-2,12-dimethoxy-3-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B67)

The target compound **B67** was synthesized by repeating A67 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 565 [M+H]⁺.

Example B68

8-(4-Fluorophenyl)-2-methoxy-3-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B68)

The target compound **B68** was synthesized by repeating A68 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m,

1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H).

LRMS (ESI, *m/z*): 535 [M+H]⁺.

Example B69

5 **8-(4-Fluorophenyl)-2,12-dimethoxy-3-((4-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B69)**

The target compound **B69** was synthesized by repeating A69 with 4-fluorobenzaldehyde.

10 ¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H), 2.36 (s, 3H).

LRMS (ESI, *m/z*): 549 [M+H]⁺.

15 **Example B70**

8-(4-Fluorophenyl)-2-methoxy-3-((4-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B70)

The target compound **B70** was synthesized by repeating A70 with 4-fluorobenzaldehyde.

20 ¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H), 2.36 (s, 3H).

25 LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example B71

3-((4-chlorobenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B71)

30 The target compound **B71** was synthesized by repeating A71 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, *J* = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, *J* = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

35 LRMS (ESI, *m/z*): 570 [M+H]⁺.

Example B72

3-((4-chlorobenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B72)

40 The target compound **B72** was synthesized by repeating A72 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 (dd, *J* = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, *J* = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, *J* = 8.7, 2.5 Hz, 1H),

5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 $[M+H]^+$.

Example B73

5 4-(((8-(4-Fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzonitrile (B73)

The target compound **B73** was synthesized by repeating A73 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.43 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 560 $[M+H]^+$.

Example B74

15 4-(((8-(4-Fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzonitrile (B74)

The target compound **B74** was synthesized by repeating A74 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.43 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 530 $[M+H]^+$.

Example B75

25 3-(((4-bromobenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B75)

The target compound **B75** was synthesized by repeating A75 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.35 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 613 $[M+H]^+$, 615 $[M+H]^+$.

Example B76

35 3-(((4-bromobenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B76)

The target compound **B76** was synthesized by repeating A76 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.35 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.75 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 [M+H]⁺, 585 [M+H]⁺.

Example B77

3-((3-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B77)

The target compound **B77** was synthesized by repeating A77 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 621 [M+H]⁺.

Example B78

3-((3-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B78)

The target compound **B78** was synthesized by repeating A78 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 591 [M+H]⁺.

Example B79

3-((2-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B79)

The target compound **B79** was synthesized by repeating A79 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 621 [M+H]⁺.

Example B80

3-((2-fluoro-4-(trifluoromethyl)benzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B80)

The target compound **B80** was synthesized by repeating A80 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 9H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 591 [M+H]⁺.

Example B81

3-((4-ethylbenzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B81)

The target compound **B81** was synthesized by repeating A81 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H), 2.36 (q, J = 8.0 Hz, 2H), 1.06 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 563 [M+H]⁺.

Example B82

3-((4-ethylbenzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B82)

The target compound **B82** was synthesized by repeating A82 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H), 2.36 (q, J = 8.0 Hz, 2H), 1.06 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 533 [M+H]⁺.

Example B83

8-(4-Fluorophenyl)-2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B83)

The target compound **B83** was synthesized by repeating A83 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 10H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 585 [M+H]⁺.

Example B84

8-(4-Fluorophenyl)-2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B84)

The target compound **B84** was synthesized by repeating A84 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 11H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.75 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 555 [M+H]⁺.

Example B85

4-(((8-(4-Fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (B85)

The target compound **B85** was synthesized by repeating A85 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 3H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.76 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 593 [M+H]⁺.

Example B86

4-(((8-(4-Fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (B85)

The target compound **B86** was synthesized by repeating A86 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, J = 2.4 Hz, 1H), 6.95 (d, J = 2.3 Hz, 1H), 6.89 (dd, J = 8.4, 2.7 Hz, 1H), 6.68 (d, J = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, J = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.72 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, J = 12.7 Hz, 1H).

LRMS (ESI, m/z): 563 [M+H]⁺.

Example B87

3-(((4-(1H-pyrazol-1-yl)benzyl)oxo)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B87)

The target compound **B87** was synthesized by repeating A87 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.26 – 7.09 (m, 4H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (s, 1H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 601 [M+H]⁺.

Example B88

3-(((4-(1H-pyrazol-1-yl)benzyl)oxo)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B88)

The target compound **B88** was synthesized by repeating A88 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.26 – 7.09 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (s, 1H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (s, 3H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz,

2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 571 [M+H]⁺.

Example B89

3-butoxy-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B89)

The target compound **B89** was synthesized by repeating A89 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.66 (s, 1H), 7.36 (d, *J* = 8.8 Hz, 1H), 7.26 – 7.09 (m, 4H), 6.98 (d, *J* = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, *J* = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 5.37 (t, *J* = 12.0 Hz, 2H), 4.16 (s, 1H), 3.92 (t, *J* = 5.9 Hz, 2H), 3.77 (s, 3H), 3.65 (s, 1H), 3.44 – 3.40 (d, *J* = 15.0 Hz, 1H), 3.12 (d, *J* = 9.6 Hz, 1H), 2.47 – 2.37 (t, *J* = 5.9 Hz, 2H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, *J* = 7.4 Hz, 3H).

LRMS (ESI, *m/z*): 501 [M+H]⁺.

Example B90

3-butoxy-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B90)

The target compound **B90** was synthesized by repeating A90 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.66 (s, 1H), 7.36 (d, *J* = 8.8 Hz, 1H), 7.26 – 7.09 (m, 5H), 6.98 (d, *J* = 2.1 Hz, 1H), 6.96 (s, 1H), 6.73 (dd, *J* = 8.7, 2.3 Hz, 1H), 6.69 (s, 1H), 5.37 (t, *J* = 12.0 Hz, 2H), 4.16 (s, 1H), 3.92 (t, *J* = 5.9 Hz, 2H), 3.77 (s, 3H), 3.72 (s, 3H), 3.65 (s, 1H), 3.44 – 3.40 (d, *J* = 15.0 Hz, 1H), 3.12 (d, *J* = 9.6 Hz, 1H), 2.47 – 2.37 (t, *J* = 5.9 Hz, 2H), 1.77 – 1.61 (m, 2H), 1.51 – 1.36 (m, 2H), 0.94 (t, *J* = 7.4 Hz, 3H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example B91

3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B91)

The target compound **B91** was synthesized by repeating A91 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7 Hz, 1H), 6.68 (d, *J* = 3.3 Hz, 1H), 5.14 (s, 1H), 5.01 (q, *J* = 12.2 Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, *J* = 12.7 Hz, 1H), 2.36 (s, 3H).

LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example B92

3-(Benzyloxy)-8-(4-fluorophenyl)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindole[3' , 2':4,5]pyridine[2,1-a]isoquinoline (B92)

The target compound **B92** was synthesized by repeating A92 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.64 (s, 1H), 8.03 – 7.97 (m, 3H), 7.38 – 7.27 (m, 3H), 7.23 – 7.09 (m, 4H), 7.02 (d, *J* = 2.4 Hz, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.89 (dd, *J* = 8.4, 2.7

Hz, 1H), 6.68 (d, $J = 3.3$ Hz, 1H), 5.14 (s, 1H), 5.01 (q, $J = 12.2$ Hz, 2H), 3.96 – 3.89 (m, 1H), 3.77 (s, 3H), 3.21 – 3.05 (m, 2H), 2.84 – 2.75 (m, 2H), 2.70 – 2.60 (m, 1H), 2.56 (d, $J = 12.7$ Hz, 1H), 2.36 (q, $J = 8.0$ Hz, 2H), 1.06 (t, $J = 8.0$ Hz, 3H).

LRMS (ESI, m/z): 533 $[M+H]^+$.

5 **Example B93**

8-(4-Fluorophenyl)-2,12-dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B93)

The target compound **B93** was synthesized by repeating A93 with 4-fluorobenzaldehyde.

10 ^1H NMR (400 MHz, DMSO) δ 10.71 (s, 1H), 7.37 (d, $J = 8.8$ Hz, 1H), 7.29 – 7.07 (m, 5H), 6.96 (d, $J = 2.4$ Hz, 1H), 6.79 (s, 1H), 6.74 (dd, $J = 8.8, 2.5$ Hz, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, $J = 15.0$ Hz, 1H), 3.78 (s, 3H), 3.77 (s, 3H), 3.65 (d, $J = 14.8$ Hz, 1H), 3.14 (dd, $J = 8.5, 2.6$ Hz, 1H), 2.98 (dd, $J = 18.7, 8.2$ Hz, 1H), 2.74 – 2.60 (m, 1H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, m/z): 527 $[M+H]^+$.

15 **Example B94**

8-(4-Fluorophenyl)-2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B94)

The target compound **B94** was synthesized by repeating A94 with 4-fluorobenzaldehyde.

20 ^1H NMR (400 MHz, DMSO) δ 10.71 (s, 1H), 7.37 (d, $J = 8.8$ Hz, 1H), 7.29 – 7.07 (m, 6H), 6.96 (d, $J = 2.4$ Hz, 1H), 6.79 (s, 1H), 6.74 (dd, $J = 8.8, 2.5$ Hz, 1H), 5.37 (s, 2H), 4.76 – 4.65 (m, 2H), 4.17 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.65 (d, $J = 14.8$ Hz, 1H), 3.14 (dd, $J = 8.5, 2.6$ Hz, 1H), 2.98 (dd, $J = 18.7, 8.2$ Hz, 1H), 2.74 – 2.60 (m, 1H), 2.46 – 2.35 (m, 1H).

LRMS (ESI, m/z): 497 $[M+H]^+$.

25 **Example B95**

8-(4-Fluorophenyl)-2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B95)

The target compound **B95** was synthesized by repeating A95 with 4-fluorobenzaldehyde.

30 ^1H NMR (400 MHz, DMSO) δ 10.67 (s, 1H), 7.39 – 7.35 (m, 3H), 7.29 – 7.07 (m, 6H), 7.06 (s, 1H), 6.96 (d, $J = 2.3$ Hz, 2H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 5.05 (q, $J = 11.6$ Hz, 2H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 1H), 2.37 (m, 1H).

35 LRMS (ESI, m/z): 613 $[M+H]^+$.

Example B96

8-(4-Fluorophenyl)-2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (B96)

40 The target compound **B96** was synthesized by repeating A96 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.67 (s, 1H), 7.39 – 7.35 (m, 3H), 7.29 – 7.07 (m, 7H), 7.06 (s, 1H), 6.96 (d, $J = 2.3$ Hz, 2H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 5.05 (q, $J = 11.6$ Hz,

2H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7$, 3.0 Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 1H), 2.37 (m, 1H).

LRMS (ESI, m/z): 583 $[M+H]^+$.

5 **Example B97**

3-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B97)

The target compound **B97** was synthesized by repeating A97 with 4-fluorobenzaldehyde.

10 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6$, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7$, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4$, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5$, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 $[M+H]^+$.

15 **Example B98**

3-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B98)

The target compound **B98** was synthesized by repeating A98 with 4-fluorobenzaldehyde.

20 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6$, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7$, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4$, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5$, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 $[M+H]^+$.

25 **Example B99**

3-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B99)

The target compound **B99** was synthesized by repeating A99 with 4-fluorobenzaldehyde.

30 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6$, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7$, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4$, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5$, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 523 $[M+H]^+$.

35 **Example B100**

3-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B100)

The target compound **B100** was synthesized by repeating A100 with 4-fluorobenzaldehyde.

40 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6$, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7$, 2.5 Hz, 1H),

5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 $[M+H]^+$.

Example B101

5 3-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B101)

The target compound **B101** was synthesized by repeating A101 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 $[M+H]^+$.

Example B102

15 3-(benzyloxy)-13-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B102)

The target compound **B102** was synthesized by repeating A102 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 540 $[M+H]^+$.

Example B103

25 3-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B103)

The target compound **B103** was synthesized by repeating A103 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[M+H]^+$, 585 $[M+H]^+$.

Example B104

35 3-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B104)

The target compound **B104** was synthesized by repeating A104 with 4-fluorobenzaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, $J = 8.6, 5.7$ Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, $J = 2.4$ Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, $J = 8.7, 2.5$ Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, $J = 10.4, 4.7$ Hz, 1H), 3.72 (s, 3H), 3.16 (dd, $J = 15.5, 4.7$ Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[M+H]^+$, 585 $[M+H]^+$.

Example B105

3-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B105)

The target compound **B105** was synthesized by repeating A105 with 4-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.48 (dd, J = 8.6, 5.7 Hz, 2H), 7.26 – 7.09 (m, 7H), 6.97 (d, J = 2.4 Hz, 1H), 6.85 (s, 1H), 6.76 (s, 1H), 6.68 (dd, J = 8.7, 2.5 Hz, 1H), 5.12 (s, 1H), 4.99 (s, 2H), 3.94 (dd, J = 10.4, 4.7 Hz, 1H), 3.72 (s, 3H), 3.16 (dd, J = 15.5, 4.7 Hz, 2H), 2.87 – 2.72 (m, 2H), 2.69 – 2.51 (m, 2H).

LRMS (ESI, m/z): 583 $[M+H]^+$, 585 $[M+H]^+$.

Example B106

2-(benzyloxy)-8-phenyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B106)

The target compound **B106** was synthesized by repeating B1 with benzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.37-7.26(m,5H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 517 $[M+H]^+$.

Example B107

2-(benzyloxy)-8-(3-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B107)

The target compound **B107** was synthesized by repeating B1 with 3-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.14-7.05(m,4H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 535 $[M+H]^+$.

Example B108

2-(benzyloxy)-8-(2-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (B108)

The target compound **B108** was synthesized by repeating B1 with 2-fluorobenzaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.48-7.10(m,4H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 535 $[M+H]^+$.

Example B109

2-(benzyloxy)-8-benzyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B109)

The target compound **B109** was synthesized by repeating B1 with phenylacetaldehyde. ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.40-7.27(m,5H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (t, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 3.00-2.75(d,2H),2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 531 $[M+H]^+$.

Example B110

2-(benzyloxy)-8-thiophene-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B110)

The target compound **B110** was synthesized by repeating B1 with thiophenecarboxaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.40-6.83(m,3H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 523 $[M+H]^+$.

Example B111

2-(benzyloxy)-8-furan-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B111)

The target compound **B111** was synthesized by repeating B1 with furaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.65-6.26(m,3H),7.61 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 507 $[M+H]^+$.

Example B112

2-(benzyloxy)-8-(3-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B112)

The target compound **B112** was synthesized by repeating B1 with 3-methyl furaldehyde.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.50-6.24(m,2H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H),1.93(s,3H).

LRMS (ESI, m/z): 521 $[M+H]^+$.

Example B113

2-(benzyloxy)-8-(5-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B113)

The target compound **B113** was synthesized by repeating B1 with 5-methyl furaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.14-6.02(m,2H),5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H),2.30(s,3H).

LRMS (ESI, m/z): 521 [M+H]⁺.

Example B114

2-(benzyloxy)-8-(5-cyanofuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B114)

The target compound **B114** was synthesized by repeating B1 with 5-cyano furaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.09-6.58(m,2H),7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 1H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 532 [M+H]⁺.

Example B115

2-(benzyloxy)-8-pyrrole-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (B115)

The target compound **B115** was synthesized by repeating B1 with pyrrole formaldehyde.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.69-5.72(m,3H),5.08 (s, 1H), 5.00(s,1H),4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 506 [M+H]⁺.

Example C1

2-((2,4-bis(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C1)

The title compound **C1** was synthesized with benzyl bromide and

3-methoxy-4-hydroxybenzaldehyde according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.61 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 577 [M+H]⁺.

Example C2

2-((2,4-bis(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C2)

The title compound **C2** was synthesized with benzyl bromide and 3-methoxy-4-hydroxybenzaldehyde according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.56 – 7.37 (m, 7H), 7.08 (s, 1H), 6.97 (d, *J* = 2.1 Hz, 1H), 6.76 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 547 [M+H]⁺.

Example C3 3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C3)

The title compound **C3** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 509 [M+H]⁺.

Example C4

3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C4)

The title compound **C4** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 3H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 479 [M+H]⁺.

Example C5

2-((4-Fluorobenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C5)

The title compound **C5** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 459 [M+H]⁺.

Example C6

2-((4-Fluorobenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C6)

The title compound **C6** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.57 – 7.47 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C7

2-((3-Fluorobenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C7)

The title compound **C7** was synthesized according to Scheme 1, while benzyl bromide was substituted with 3-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 459 [M+H]⁺.

Example C8

2-((3-Fluorobenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C8)

The title compound **C8** was synthesized according to Scheme 1, while benzyl bromide was substituted with 3-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.50 – 7.43 (m, 3H), 7.26 – 7.15 (m, 3H), 7.00 (s, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.80 (s, 1H), 6.65 (dd, *J* = 8.7, 2.4 Hz, 1H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.97 (d, *J* = 14.6 Hz, 1H), 3.77 (s, 3H), 3.61 (dd, *J* = 22.2, 12.4 Hz, 2H), 3.41 (d, *J* = 14.6 Hz, 1H), 3.11 (d, *J* = 11.1 Hz, 1H), 2.92 (d, *J* = 10.6 Hz, 1H), 2.60 (dd, *J* = 20.6, 13.0 Hz, 2H), 2.48 – 2.39 (m, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C9

2-((2-Fluorobenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C9)

The title compound **C9** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H),

3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example C10

5 2-((2-Fluorobenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C10)

The title compound **C10** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-fluorobenzyl bromide.

10 ^1H NMR (400 MHz, DMSO) δ 10.68 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 3H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 429 $[M+H]^+$.

Example C11

15 3,12-dimethoxy-2-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C11)

The title compound **C11** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methoxybenzyl bromide.

20 ^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, $J = 11.9$ Hz, 2H), 4.16 (d, $J = 15.3$ Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 15.0$ Hz, 1H), 3.54 (dd, $J = 10.6, 2.9$ Hz, 1H), 3.32 (d, $J = 3.1$ Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, $J = 7.0$ Hz, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$.

25 Example C12

3-methoxy-2-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C12)

The title compound **C12** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methoxybenzyl bromide.

30 ^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, $J = 11.9$ Hz, 2H), 4.16 (d, $J = 15.3$ Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 15.0$ Hz, 1H), 3.54 (dd, $J = 10.6, 2.9$ Hz, 1H), 3.32 (d, $J = 3.1$ Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, $J = 7.0$ Hz, 1H).

35 LRMS (ESI, m/z): 441 $[M+H]^+$.

Example C13

3,12-dimethoxy-2-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C13)

40 The title compound **C13** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-methoxybenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, $J = 11.9$ Hz, 2H), 4.16 (d, $J = 15.3$ Hz,

1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

5 **Example C14**

(3-methoxy-2-((3-methoxybenzyl)oxo)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol (C14)

The title compound **C14** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-methoxybenzyl bromide.

10 ¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

15 LRMS (ESI, *m/z*): 441 [M+H]⁺.

Example C15

3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C15)

20 The title compound **C15** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 1H), 4.17 (d, *J* = 14.9 Hz, 2H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

25 LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example C16

3-methoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C16)

30 The title compound **C16** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 1H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

35 LRMS (ESI, *m/z*): 425 [M+H]⁺.

Example C17

2-((4-chlorobenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C17)

40 The title compound **C17** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-chlorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.47 – 7.39 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 476 [M+H]⁺.

Example C18

2-((4-chlorobenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C18)

The title compound **C18** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-chlorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.47 – 7.39 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 446 [M+H]⁺.

Example C19

4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (C19)

The title compound **C19** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-cyanobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.67 – 7.49 (m, 2H), 7.36 (d, *J* = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 466 [M+H]⁺.

Example C20 4-(((3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzonitrile (C20)

The title compound **C20** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-cyanobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.67 – 7.49 (m, 2H), 7.36 – 7.29 (m, 2H), 7.27 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, *J* = 11.3 Hz, 2H), 4.16 (d, *J* = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, *J* = 14.3 Hz, 1H), 3.55 (d, *J* = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, *J* = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, *J* = 12.1 Hz, 2H), 2.33 (t, *J* = 11.5 Hz, 1H).

LRMS (ESI, *m/z*): 436 [M+H]⁺.

Example C21

2-((4-bromobenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C21)

The title compound **C21** was synthesized according to Scheme 3, while benzyl bromide

was substituted with 4-bromobenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.41 – 7.38 (m, 2H), 7.36 (d, J = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 519[$\text{M}+\text{H}$] $^+$, 521[$\text{M}+\text{H}$] $^+$.

Example C22

2-((4-bromobenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C22)

The title compound **C22** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-bromobenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.41 – 7.38 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 489[$\text{M}+\text{H}$] $^+$, 491[$\text{M}+\text{H}$] $^+$.

Example C23

2-(((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C23)

The title compound **C23** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 527 [M+H] $^+$.

Example C24

2-(((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C24)

The title compound **C24** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 497 [M+H] $^+$.

Example C25

2-(((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C25)

The title compound **C25** was synthesized according to Scheme 2, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 527 [M+H]⁺.

Example C26

2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C26)

The title compound **C26** was synthesized according to Scheme 2, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 497 [M+H]⁺.

Example C27

2-((4-ethylbenzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine [2,1-a]isoquinoline (C27)

The title compound **C27** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-ethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.34 (q, J = 8.0 Hz, 2H), 1.01 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 469 [M+H]⁺.

Example C28

2-((4-ethylbenzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C28)

The title compound **C28** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-ethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 5H), 7.21 – 7.05 (m, 2H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.34 (q, J = 8.0 Hz, 2H), 1.01 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 439 [M+H]⁺.

Example C29

3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C29)

The title compound **C29** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-bromomethylnaphthalene.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 2H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 491 [M+H]⁺.

Example C30

3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C30)

The title compound **C30** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-bromomethylnaphthalene.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 3H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 461 [M+H]⁺.

Example C31

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (C31)

The title compound **C31** was synthesized according to Scheme 3, while benzyl bromide was substituted with methyl 4-bromomethyl benzoate.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 499 [M+H]⁺.

Example C32

4-(((9-(Hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoate (C32)

The title compound **C32** was synthesized according to Scheme 3, while benzyl bromide was substituted with methyl 4-bromomethylbenzoate.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 8.01 – 7.95 (m, 2H), 7.51 – 7.35 (m, 6H), 7.05 – 6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

Example C33

2-((4-(1H-pyrazol-1-yl)benzyl)oxo)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C33)

The title compound **C33** was synthesized according to Scheme 3, while benzyl bromide was substituted with 1-(4-(bromomethyl)benzene-1H-pyrazole).

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (d, J = 4.8 Hz, 2H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 507 [M+H]⁺.

Example C34

2-((4-(1H-pyrazol-1-yl)benzyl)oxo)-3-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C34)

The title compound **C34** was synthesized according to Scheme 3, while benzyl bromide was substituted with 1-(4-(bromomethyl)benzene-1H-pyrazole).

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, J = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 4H), 6.79 – 6.69 (m, 2H), 6.47 (q, J = 8 Hz, 1H), 5.11 (d, J = 4.8 Hz, 2H), 4.16 (d, J = 15.1 Hz, 1H), 3.77 (d, J = 11.4 Hz, 6H), 3.64 (d, J = 15.6 Hz, 1H), 3.54 (d, J = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, J = 11.4 Hz, 1H), 2.64 (dd, J = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, m/z): 477 [M+H]⁺.

Example C35 3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C35)

The title compound **C35** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-fluoro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.72 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 429 [M+H]⁺.

Example C36 3-(benzyloxy)-12-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C36)

The title compound **C36** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-fluoro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 429 [M+H]⁺.

Example C37 3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (C37)

The title compound **C37** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-fluoro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 429 [M+H]⁺.

Example C38 3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (C38)

The title compound **C38** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 445 [M+H]⁺.

Example C39 3-(benzyloxy)-12-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (C39)

The title compound **C39** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 445 [M+H]⁺.

Example C40

(3-(Benzyloxy)-13-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline-9(8H)-yl)methanol (C40)

The title compound **C40** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 445 [M+H]⁺.

Example C41

3-(benzyloxy)-11-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C41)

The title compound **C41** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-bromo-3-indoleacetic acid.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 $[\text{M}+\text{H}]^+$, 491 $[\text{M}+\text{H}]^+$.

Example C42

3-(benzyloxy)-12-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C42)

The title compound **C42** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-bromo-3-indoleacetic acid.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 $[\text{M}+\text{H}]^+$, 491 $[\text{M}+\text{H}]^+$.

Example C43

3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C43)

The title compound **C43** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-bromo-3-indoleacetic acid.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 489 $[\text{M}+\text{H}]^+$, 491 $[\text{M}+\text{H}]^+$.

Example C44

3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C44)

The title compound **C44** was synthesized according to Scheme 3, while 5-methoxyindoleacetic acid was replaced with 6-methyl-3-indoleacetic acid.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.74 (dd, J = 9.7, 3.3 Hz, 2H), 5.05 (q, J = 11.6 Hz, 2H), 4.17 (d, J = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0

Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, J = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, m/z): 425 $[M+H]^+$.

Example C45

5 3-(benzyloxy)-12-ethyl-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C45)

The title compound **C45** was synthesized according to Scheme 1, while 5-methoxyindoleacetic acid was replaced with 5-ethyl-3-indoleacetic acid.

10 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.74 (dd, J = 9.7, 3.3 Hz, 2H), 5.05 (q, J = 11.6 Hz, 2H), 4.17 (d, J = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, J = 7.1 Hz, 2H), 2.34 (q, J = 8.0 Hz, 2H), 1.01 (t, J = 8.0 Hz, 3H).

LRMS (ESI, m/z): 439 $[M+H]^+$.

15 Example C46

3-(benzyloxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-12-phenol (C46)

The title compound **C46** was synthesized according to Scheme -3, while 5-methoxyindoleacetic acid was replaced with 5-hydroxy-3-indoleacetic acid.

20 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.74 (dd, J = 9.7, 3.3 Hz, 2H), 5.26 (s, 1H), 5.05 (q, J = 11.6 Hz, 2H), 4.17 (d, J = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, J = 7.1 Hz, 2H).

25 LRMS (ESI, m/z): 427 $[M+H]^+$.

Example C47 2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C47)

The title compound **C47** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

30 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

35 LRMS (ESI, m/z): 509 $[M+H]^+$.

Example C48

2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C48)

40 The title compound **C48** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 3H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H),

4.18 (d, $J = 15.0$ Hz, 1H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 479 $[M+H]^+$.

5 **Example C49**

3-((4-Fluorobenzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C49)

The title compound **C49** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-fluorobenzyl bromide.

10 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.57 – 7.47 (m, 2H), 7.36 (d, $J = 8.5$ Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, $J = 11.3$ Hz, 2H), 4.16 (d, $J = 15.7$ Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 14.3$ Hz, 1H), 3.55 (d, $J = 8.0$ Hz, 1H), 3.31 (m, 1H), 3.12 (d, $J = 7.7$ Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, $J = 12.1$ Hz, 2H), 2.33 (t, $J = 11.5$ Hz, 1H).

15 LRMS (ESI, m/z): 459 $[M+H]^+$.

Example C50

3-((4-fluorobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C50)

20 The title compound **C50** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-fluorobenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.57 – 7.47 (m, 2H), 7.36 (d, $J = 8.5$ Hz, 1H), 7.32 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, $J = 11.3$ Hz, 2H), 4.16 (d, $J = 15.7$ Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, $J = 14.3$ Hz, 1H), 3.55 (d, $J = 8.0$ Hz, 1H), 3.31 (m, 1H), 3.12 (d, $J = 7.7$ Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, $J = 12.1$ Hz, 2H), 2.33 (t, $J = 11.5$ Hz, 1H).

LRMS (ESI, m/z): 429 $[M+H]^+$.

Example C51

3-((3-Fluorobenzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C51)

30 The title compound **C51** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluorobenzyl bromide.

^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 459 $[M+H]^+$.

Example C52

3-((3-fluorobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C52)

40 The title compound **C52** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.50 – 7.43 (m, 3H), 7.26 – 7.15 (m, 3H), 7.00 (s, 1H), 6.95 (d, *J* = 2.3 Hz, 1H), 6.80 (s, 1H), 6.65 (dd, *J* = 8.7, 2.4 Hz, 1H), 5.03 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.97 (d, *J* = 14.6 Hz, 1H), 3.77 (s, 3H), 3.61 (dd, *J* = 22.2, 12.4 Hz, 2H), 3.41 (d, *J* = 14.6 Hz, 1H), 3.11 (d, *J* = 11.1 Hz, 1H), 2.92 (d, *J* = 10.6 Hz, 1H), 2.60 (dd, *J* = 20.6, 13.0 Hz, 2H), 2.48 – 2.39 (m, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C53

3-((2-Fluorobenzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C53)

The title compound **C53** was synthesized according to Scheme 2, while benzyl bromide was substituted with 2-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 459 [M+H]⁺.

Example C54

3-((2-fluorobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C54)

The title compound **C54** was synthesized according to Scheme 2, while benzyl bromide was substituted with 2-fluorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 3H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C55

(2,12-dimethoxy-3-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C55)

The title compound **C55** was synthesized according to Scheme 4, while benzyl bromide was substituted with 4-methoxybenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example C56

(2-methoxy-3-((4-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C56)

The title compound **C56** was synthesized according to Scheme 4, while benzyl bromide

was substituted with 4-methoxybenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 441 [M+H]⁺.

Example C57

2,12-dimethoxy-3-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C57)

The title compound **C57** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-methoxybenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 3H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 471 [M+H]⁺.

Example C58

(2-methoxy-3-((3-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C58)

The title compound **C58** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-methoxybenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.40 – 7.28 (m, 2H), 7.10 – 7.03 (m, 4H), 6.98 – 6.87 (m, 2H), 6.79 – 6.68 (m, 2H), 5.09 (q, *J* = 11.9 Hz, 2H), 4.16 (d, *J* = 15.3 Hz, 1H), 3.79 (s, 3H), 3.76 (s, 3H), 3.64 (d, *J* = 15.0 Hz, 1H), 3.54 (dd, *J* = 10.6, 2.9 Hz, 1H), 3.32 (d, *J* = 3.1 Hz, 1H), 3.17 – 3.08 (m, 1H), 3.03 – 2.85 (m, 1H), 2.73 – 2.56 (m, 2H), 2.33 (t, *J* = 7.0 Hz, 1H).

LRMS (ESI, *m/z*): 441 [M+H]⁺.

Example C59

(2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C59)

The title compound **C59** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 1H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺.

Example C60

(2-methoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C60))

The title compound **C60** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-methylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.74 (dd, J = 9.7, 3.3 Hz, 2H), 5.05 (q, J = 11.6 Hz, 2H), 4.17 (d, J = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, J = 7.1 Hz, 2H), 2.32 (s, 3H).

LRMS (ESI, m/z): 425 [M+H]⁺.

Example C61

(3-((4-chlorobenzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C61))

The title compound **C61** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-chlorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.47 – 7.39 (m, 2H), 7.36 (d, J = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 476 [M+H]⁺.

Example C62

(3-((4-chlorobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C62))

The title compound **C62** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-chlorobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.47 – 7.39 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 446 [M+H]⁺.

Example C63

3-((4-chlorobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C63)

The title compound **C63** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-cyanobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.49 (m, 2H), 7.36 (d, J = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55

(d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 466 [M+H]⁺.

Example C64 4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzonitrile (C64)

The title compound **C64** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-cyanobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.49 (m, 2H), 7.36 – 7.29 (m, 2H), 7.27 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 436 [M+H]⁺.

Example C65

(3-((4-bromobenzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C65)

The title compound **C65** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-bromobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.41 – 7.38 (m, 2H), 7.36 (d, J = 8.5 Hz, 1H), 7.32 – 7.24 (m, 2H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.78 (s, 3H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 519[M+H]⁺, 521[M+H]⁺.

Example C66

(3-((4-bromobenzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C66)

The title compound **C66** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-bromobenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.41 – 7.38 (m, 2H), 7.36 – 7.29 (m, 2H), 7.28 – 7.24 (m, 3H), 7.03 (s, 1H), 6.94 (m, 1H), 6.77 – 6.68 (m, 2H), 5.08 (q, J = 11.3 Hz, 2H), 4.16 (d, J = 15.7 Hz, 1H), 3.76 (s, 3H), 3.64 (d, J = 14.3 Hz, 1H), 3.55 (d, J = 8.0 Hz, 1H), 3.31 (m, 1H), 3.12 (d, J = 7.7 Hz, 1H), 3.03 – 2.88 (m, 1H), 2.66 (dd, J = 12.1 Hz, 2H), 2.33 (t, J = 11.5 Hz, 1H).

LRMS (ESI, m/z): 489[M+H]⁺, 491[M+H]⁺.

Example C67

3-(((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C67)

The title compound **C67** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H),

3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 527 [M+H]⁺.

5 **Example C68**

3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C68)

The title compound **C68** was synthesized according to Scheme 3, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

10 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 497 [M+H]⁺.

15 **Example C69**

3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C69)

The title compound **C69** was synthesized according to Scheme 2, while benzyl bromide was substituted with 2-fluoro-4-(trifluoromethyl)benzyl bromide.

20 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

25 LRMS (ESI, m/z): 527 [M+H]⁺.

Example C70

3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C70)

30 The title compound **C70** was synthesized according to Scheme 2, while benzyl bromide was substituted with 3-fluoro-4-(trifluoromethyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

35 LRMS (ESI, m/z): 497 [M+H]⁺.

Example C71

(2,12-dimethoxy-3-((4-ethylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C71)

40 The title compound **C71** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-ethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H),

3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.34 (q, J = 8.0 Hz, 2H), 1.01 (t, J = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

5 **Example C72**

(2-methoxy-3-((4-ethylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C72)

The title compound **C72** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-ethylbenzyl bromide.

10 ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.21 – 7.05 (m, 2H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.22 (t, J = 7.0 Hz, 1H), 5.38 (d, J = 7.4 Hz, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H), 2.34 (q, J = 8.0 Hz, 2H), 1.01 (t, J = 8.0
15 Hz, 3H).

LRMS (ESI, *m/z*): 439 [M+H]⁺.

Example C73

(2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C73)

20 The title compound **C73** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-bromomethylnaphthalene.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 2H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).
25

LRMS (ESI, *m/z*): 491 [M+H]⁺.

Example C74

(2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C74)

30 The title compound **C74** was synthesized according to Scheme 3, while benzyl bromide was substituted with 2-bromomethylnaphthalene.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.67 – 7.32 (m, 7H), 7.25 – 7.12 (m, 3H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).
35

LRMS (ESI, *m/z*): 461 [M+H]⁺.

Example C75

4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (C75)

40 The title compound **C75** was synthesized according to Scheme 3, while benzyl bromide was substituted with methyl 4-bromomethyl benzoate.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 6H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 499 [M+H]⁺.

Example C76 4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoate (C76)

The title compound **C76** was synthesized according to Scheme 3, while benzyl bromide was substituted with methyl 4-bromomethyl benzoate.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 8.01 – 7.95 (m, 2H), 7.51 – 7.35 (m, 6H), 7.05 – 6.94 (m, 2H), 6.79 – 6.69 (m, 2H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 469 [M+H]⁺.

Example C77

(3-((4-(1H-pyrazol-1-yl)benzyl)oxo)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C77)

The title compound **C77** was synthesized according to Scheme 3, while benzyl bromide was substituted with 1-(4-(bromomethyl)benzene-1H-pyrazole).

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, *J* = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 3H), 6.79 – 6.69 (m, 2H), 6.47 (q, *J* = 8 Hz, 1H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 507 [M+H]⁺.

Example C78

(3-((4-(1H-pyrazol-1-yl)benzyl)oxo)-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C78)

The title compound **C78** was synthesized according to Scheme 3, while benzyl bromide was substituted with 1-(4-(bromomethyl)benzene-1H-pyrazole).

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.87 (d, *J* = 8 Hz, 1H), 7.62 – 7.45 (m, 5H), 7.05 – 6.84 (m, 4H), 6.79 – 6.69 (m, 2H), 6.47 (q, *J* = 8 Hz, 1H), 5.11 (d, *J* = 4.8 Hz, 2H), 4.16 (d, *J* = 15.1 Hz, 1H), 3.77 (d, *J* = 11.4 Hz, 6H), 3.64 (d, *J* = 15.6 Hz, 1H), 3.54 (d, *J* = 7.2 Hz, 1H), 3.31 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 11.4 Hz, 1H), 2.64 (dd, *J* = 21.1, 13.3 Hz, 2H), 2.40 – 2.27 (m, 1H).

LRMS (ESI, *m/z*): 477 [M+H]⁺.

Example C79

2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C79)

The title compound **C79** was synthesized according to Scheme 3, while benzyl bromide

was substituted with 4-(methylsulfonyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 3H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H).

LRMS (ESI, *m/z*): 519 [M+H]⁺.

Example C80

2-methoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C80)

The title compound **C80** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-(methylsulfonyl)benzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.39 – 7.35 (m, 4H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 5.05 (q, *J* = 11.6 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.05 (s, 3H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, *J* = 7.1 Hz, 2H).

LRMS (ESI, *m/z*): 489 [M+H]⁺.

Example C81 (3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C81)

The title compound **C81** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-fluoro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C82 3-(benzyloxy)-12-fluoro-2-methoxy-5,6,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C82)

The title compound **C82** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-fluoro-3-indoleacetic acid. ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C83 (3-(benzyloxy)-13-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C83)

The title compound **C82** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-fluoro-3-indoleacetic acid. ¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H),

6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 429 [M+H]⁺.

Example C84 3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (C84)

The title compound **C84** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 445 [M+H]⁺.

Example C85 3-(benzyloxy)-12-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3', 2':4,5]pyridine[2,1-a]isoquinoline (C85)

The title compound **C85** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 445 [M+H]⁺.

Example C86 3-(Benzyloxy)-13-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2, 1-a]isoquinoline (C86)

The title compound **C86** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-chloro-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 445 [M+H]⁺.

Example C87 3-(benzyloxy)-11-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2, 1-a]isoquinoline (C87)

The title compound **C87** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 6-bromo-3-indoleacetic acid.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H),

3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

LRMS (ESI, m/z): 489 $[M+H]^+$, 491 $[M+H]^+$.

5 **Example C88**

3-(benzyloxy)-12-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C88)

The title compound **C88** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 5-bromo-3-indoleacetic acid.

10 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

15 LRMS (ESI, m/z): 489 $[M+H]^+$, 491 $[M+H]^+$.

Example C89

3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C89)

The title compound **C89** was synthesized according to Scheme 3, while 5-methoxy-3-indoleacetic acid was replaced with 4-bromo-3-indoleacetic acid.

20 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 5H), 7.05 (s, 1H), 6.94 (d, $J = 2.1$ Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, $J = 15.0$ Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, $J = 14.2$ Hz, 1H), 3.60 (d, $J = 9.6$ Hz, 1H), 3.44 (d, $J = 14.2$ Hz, 1H), 3.14 (d, $J = 8.3$ Hz, 1H), 2.95 (t, $J = 12.0$ Hz, 1H), 2.65 (d, $J = 13.4$ Hz, 2H), 2.44 (t, $J = 12.0$ Hz, 1H).

25 LRMS (ESI, m/z): 489 $[M+H]^+$, 491 $[M+H]^+$.

Example C90

3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C90)

30 The title compound **C90** was synthesized according to Scheme -3, while 5-methoxy-3-indoleacetic acid was replaced with 6-methyl-3-indoleacetic acid.

^1H NMR (400 MHz, DMSO) δ 10.65 (s, 1H), 7.39 – 7.35 (m, 3H), 7.28 – 7.21 (m, 3H), 7.06 (s, 1H), 6.96 (d, $J = 2.3$ Hz, 1H), 6.74 (dd, $J = 9.7, 3.3$ Hz, 2H), 5.05 (q, $J = 11.6$ Hz, 1H), 4.17 (d, $J = 14.9$ Hz, 1H), 3.75 (s, 3H), 3.65 (d, $J = 15.1$ Hz, 1H), 3.55 (dd, $J = 10.7, 3.0$ Hz, 1H), 3.39 (d, $J = 3.7$ Hz, 1H), 3.13 (d, $J = 11.2$ Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (t, $J = 7.1$ Hz, 2H), 2.32 (s, 3H).

35 LRMS (ESI, m/z): 425 $[M+H]^+$.

Example C91

3-(benzyloxy)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline (C91)

40 The title compound **C91** was synthesized according to Scheme 3, while benzyl bromide was substituted with 4-ethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.75 (s, 1H), 7.51 – 7.35 (m, 5H), 7.21 – 7.05 (m, 2H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H), 2.34 (q, *J* = 8.0 Hz, 2H), 1.01 (t, *J* = 8.0 Hz, 3H).

LRMS (ESI, *m/z*): 439 [M+H]⁺.

Example C92

2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl benzenesulfonate

The title compound **C92** was synthesized with benzenesulfonyl chloride, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 491 [M+H]⁺.

Example C93

3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl benzenesulfonate

The title compound **C93** was synthesized with benzenesulfonyl chloride, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (d, *J* = 8.0 Hz, 2H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.74 (dd, *J* = 9.7, 3.3 Hz, 2H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 491 [M+H]⁺.

Example C94

2,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-3-ylbenzenesulfonate

The title compound **C94** was synthesized with benzenesulfonyl chloride, 3-hydroxy-4-methoxybenzaldehyde and 5,6-dimethoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (s, 1H), 7.06 (s, 1H), 6.96 (d, *J* = 2.3 Hz, 1H), 6.94 (s, 1H), 6.74 (s, 1H), 4.17 (d, *J* = 14.9 Hz, 1H), 3.79 (s, 3H), 3.77 (s, 3H), 3.75 (s, 3H), 3.65 (d, *J* = 15.1 Hz, 1H), 3.55 (dd, *J* = 10.7, 3.0 Hz, 1H), 3.39 (d, *J* = 3.7 Hz, 1H), 3.13 (d, *J* = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, *m/z*): 521 [M+H]⁺.

Example C95

3,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-ylbenzenesulfonate

The title compound **C95** was synthesized with benzenesulfonyl chloride, 4-hydroxy-3-methoxybenzaldehyde and 5,6-dimethoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (s, 1H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.94 (s, 1H), 6.74 (s, 1H), 4.17 (d, J = 14.9 Hz, 1H), 3.79 (s, 3H), 3.77 (s, 3H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, m/z): 521 [M+H]⁺.

Example C96

2,3,11-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-12-ylbenzenesulfonate

The title compound **C96** was synthesized with 3,4-dimethoxybenzaldehyde and 5-hydroxy-6-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (s, 1H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.94 (s, 1H), 6.74 (s, 1H), 4.17 (d, J = 14.9 Hz, 1H), 3.79 (s, 3H), 3.77 (s, 3H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, m/z): 521 [M+H]⁺.

Example C97

2,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-11-ylbenzenesulfonate

The title compound **C97** was synthesized with 3,4-dimethoxybenzaldehyde and 5-methoxy-6-hydroxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.86 – 7.35 (m, 4H), 7.22 (s, 1H), 7.06 (s, 1H), 6.96 (d, J = 2.3 Hz, 1H), 6.94 (s, 1H), 6.74 (s, 1H), 4.17 (d, J = 14.9 Hz, 1H), 3.79 (s, 3H), 3.77 (s, 3H), 3.75 (s, 3H), 3.65 (d, J = 15.1 Hz, 1H), 3.55 (dd, J = 10.7, 3.0 Hz, 1H), 3.39 (d, J = 3.7 Hz, 1H), 3.13 (d, J = 11.2 Hz, 1H), 3.03 – 2.86 (m, 1H), 2.74 – 2.57 (m, 2H), 2.37 (m, 1H).

LRMS (ESI, m/z): 521 [M+H]⁺.

Example C98

4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoic acid (C98)

The title compound **C98** was synthesized with p-carboxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 11.01 (s, 1H), 10.71 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 3H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H),

3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 485 [M+H]⁺.

Example C99

4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)aniline (C99)

The title compound **C99** was synthesized with p-aminobenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 456 [M+H]⁺.

Example C100

4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)aniline (C100)

The title compound **C100** was synthesized with p-aminobenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 2H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 456 [M+H]⁺.

Example C101

4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)phenol (C101)

The title compound **C101** was synthesized with p-hydroxybenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 1H), 5.31 (s, 1H), 5.08 (s, 2H), 4.18 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 457 [M+H]⁺.

Example C102

4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)phenol (C101)

The title compound **C102** was synthesized with p-hydroxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 6.27 (s, 1H), 5.31 (s, 1H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 457 [M+H]⁺.

Example C103

4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoic acid (C103)

The title compound **C103** was synthesized with p-carboxybenzyl bromide, 4-hydroxy-3-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (400 MHz, DMSO) δ 11.01 (s, 1H), 10.71 (s, 1H), 7.51 – 7.35 (m, 4H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 3H), 5.08 (s, 2H), 4.18 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 485 [M+H]⁺.

Example (S)-C3 S)-3,12-Dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline ((S)-C3)

The title compound **(S)-C3** was synthesized according to Scheme 4, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.16 (s, 2H), 4.29 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* = 9.6 Hz, 1H), 3.44 (d, *J* = 14.2 Hz, 1H), 3.14 (d, *J* = 8.3 Hz, 1H), 2.95 (t, *J* = 12.0 Hz, 1H), 2.65 (d, *J* = 13.4 Hz, 2H), 2.44 (t, *J* = 12.0 Hz, 1H).

LRMS (ESI, *m/z*): 509 [M+H]⁺.

Example (R)-C3 R)-3,12-Dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline ((R)-C3)

The title compound **(R)-C3** was synthesized according to Scheme 4, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

¹H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, *J* = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.16 (s, 2H), 4.29 (d, *J* = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, *J* = 14.2 Hz, 1H), 3.60 (d, *J* =

9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 509 $[M+H]^+$.

Example (S)-C47

5 (S)-2,12-Dimethoxy-3-((4-(trifluoromethyl)benzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline ((S)-C47)

The title compound **(S)-C47** was synthesized according to Scheme 4, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

10 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.16 (s, 2H), 4.29 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

LRMS (ESI, m/z): 509 $[M+H]^+$

15 Example (R)-C47

(R)-2,12-Dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline ((R)-C47)

The title compound **(R)-C47** was synthesized according to Scheme 4, while benzyl bromide was substituted with 4-trifluoromethylbenzyl bromide.

20 ^1H NMR (400 MHz, DMSO) δ 10.70 (s, 1H), 7.71 – 7.53 (m, 2H), 7.50 – 7.35 (m, 1H), 7.31 – 7.15 (m, 2H), 7.05 (s, 1H), 6.94 (d, J = 2.1 Hz, 1H), 6.79 – 6.69 (m, 2H), 5.18 (s, 2H), 4.29 (d, J = 15.0 Hz, 1H), 3.80 (s, 3H), 3.77 (s, 3H), 3.67 (d, J = 14.2 Hz, 1H), 3.60 (d, J = 9.6 Hz, 1H), 3.44 (d, J = 14.2 Hz, 1H), 3.14 (d, J = 8.3 Hz, 1H), 2.95 (t, J = 12.0 Hz, 1H), 2.65 (d, J = 13.4 Hz, 2H), 2.44 (t, J = 12.0 Hz, 1H).

25 LRMS (ESI, m/z): 509 $[M+H]^+$

Example C104

2,12-dimethoxy-3-((2-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C104)

30 The title compound **C104** was synthesized with 2-methoxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

^1H NMR (500 MHz, Chloroform) δ 7.21 (s, 1H), 7.04 (d, J = 3.9 Hz, 2H), 6.91 (dd, J = 9.8, 5.4 Hz, 4H), 6.78 (s, 1H), 6.73 (d, J = 5.6 Hz, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.92 – 3.66 (m, 10H), 3.52 (s, 1H), 3.10 (s, 1H), 2.88 (d, J = 0.8 Hz, 2H), 2.80 (s, 1H), 2.69 (s, 1H), 2.58 (s, 1H).

LRMS (ESI, m/z): 471 $[M+H]^+$

Example C105

2-methoxy-3-((2-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C104)

40 The title compound **C105** was synthesized with 2-methoxybenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.23 (d, *J* = 5.0 Hz, 8H), 7.17 (d, *J* = 3.2 Hz, 8H), 7.03 (d, *J* = 13.5 Hz, 8H), 7.00 – 6.93 (m, 11H), 6.86 (d, *J* = 6.4 Hz, 9H), 5.21 – 5.17 (m, 8H), 4.29 (s, 4H), 3.79 (s, 4H), 3.73 – 3.69 (m, 12H), 3.64 – 3.60 (m, 12H), 3.54 (s, 4H), 3.12 (s, 3H), 2.95 (d, *J* = 0.8 Hz, 8H), 2.82 (s, 3H), 2.71 (s, 4H), 2.63 (s, 3H).

LRMS (ESI, *m/z*): 441 [M+H]⁺

Example C106

2,12-dimethoxy-3-((3-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C106)

The title compound **C106** was synthesized with 3-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.34 (s, 1H), 7.22 (s, 1H), 7.14 – 7.04 (m, 4H), 7.02 (s, 1H), 6.91 (s, 1H), 6.76 (d, *J* = 19.9 Hz, 2H), 4.78 – 4.74 (m, 2H), 4.29 (s, 1H), 3.83 – 3.69 (m, 4H), 3.69 – 3.40 (m, 4H), 3.12 (s, 1H), 2.94 (t, *J* = 6.1 Hz, 3H), 2.79 (s, 1H), 2.60 (s, 1H), 2.37 – 2.33 (m, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺

Example C107

2-methoxy-3-((3-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C107)

The title compound **C107** was synthesized with 3-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.21 (dd, *J* = 18.1, 12.8 Hz, 12H), 7.11 – 6.99 (m, 15H), 6.91 (s, 4H), 6.83 (s, 2H), 5.23 – 5.19 (m, 6H), 4.29 (s, 3H), 3.86 – 3.84 (m, 7H), 3.77 (s, 5H), 3.57 (s, 3H), 3.21 (s, 3H), 2.86 (d, *J* = 4.0 Hz, 6H), 2.74 (t, *J* = 2.0 Hz, 9H), 2.37 – 2.33 (m, 9H).

LRMS (ESI, *m/z*): 425 [M+H]⁺

Example C108

2,12-dimethoxy-3-((2-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C108)

The title compound **C108** was synthesized with 2-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.12 (s, 1H), 7.09 – 7.00 (m, 5H), 6.99 – 6.78 (m, 3H), 6.70 (s, 1H), 5.21 – 5.17 (m, 2H), 4.29 (s, 1H), 3.83 – 3.69 (m, 7H), 3.54 (s, 1H), 3.12 (s, 1H), 2.90 (d, *J* = 0.8 Hz, 2H), 2.69 (d, *J* = 7.6 Hz, 2H), 2.56 (s, 1H), 2.37 – 2.33 (m, 3H).

LRMS (ESI, *m/z*): 455 [M+H]⁺

Example C109

2-methoxy-3-((2-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C109)

The title compound **C109** was synthesized with 2-methylbenzyl bromide, 3-hydroxy-4-methoxybenzaldehyde and 3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.23 (s, 1H), 7.20 – 7.12 (m, 5H), 7.04 (dd, *J* = 19.3, 8.0 Hz, 4H), 6.87 (s, 1H), 5.20 – 5.16 (m, 2H), 4.29 (s, 1H), 3.84 – 3.64 (m, 4H), 3.55 (s, 1H), 3.13 (s, 1H), 2.95 (d, *J* = 0.8 Hz, 2H), 2.81 (s, 1H), 2.72 (s, 1H), 2.66 (s, 1H), 2.40 – 2.36 (m, 3H).

5 LRMS (ESI, *m/z*): 425 [M+H]⁺

Example C110

3,12-dimethoxy-2-((2-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C110)

10 The title compound **C110** was synthesized with 2-methoxybenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.19 (d, *J* = 18.2 Hz, 8H), 7.11 (s, 4H), 7.09 – 6.90 (m, 16H), 6.88 (s, 1H), 6.84 (d, *J* = 39.4 Hz, 7H), 6.53 (s, 4H), 5.21 – 5.17 (m, 8H), 4.29 (s, 4H), 3.85 – 3.61 (m, 40H), 3.55 (s, 4H), 3.12 (s, 4H), 2.93 (d, *J* = 0.8 Hz, 8H), 2.83 (s, 3H), 2.70 (d, *J* = 19.5 Hz, 7H).

15 LRMS (ESI, *m/z*): 471 [M+H]⁺

Example C111

3-methoxy-2-((2-methoxybenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C111)

20 The title compound **C111** was synthesized with 2-methoxybenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.25 (d, *J* = 16.4 Hz, 2H), 7.18 (d, *J* = 4.0 Hz, 2H), 7.10 (s, 1H), 7.05 (d, *J* = 9.0 Hz, 2H), 6.97 – 6.82 (m, 4H), 5.24 – 5.20 (m, 2H), 4.29 (s, 1H), 3.86 – 3.66 (m, 7H), 3.55 (s, 1H), 3.14 (s, 1H), 2.94 (d, *J* = 0.8 Hz, 2H), 2.80 (s, 1H), 2.71 (d, *J* = 14.1 Hz, 2H).

25 LRMS (ESI, *m/z*): 441 [M+H]⁺

Example C112

3,12-dimethoxy-2-((3-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C112)

30 The title compound **C112** was synthesized with 3-methylbenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.20 (d, *J* = 5.4 Hz, 8H), 7.14 (d, *J* = 5.8 Hz, 8H), 7.09 – 6.95 (m, 12H), 6.92 (s, 4H), 6.79 (s, 4H), 6.52 (s, 4H), 5.20 – 5.16 (m, 8H), 4.29 (s, 4H), 3.85 – 3.61 (m, 28H), 3.55 (s, 4H), 3.13 (s, 3H), 2.94 (d, *J* = 0.8 Hz, 8H), 2.81 (s, 3H), 2.72 (s, 5H), 2.67 (s, 2H), 2.37 – 2.33 (m, 12H).

35 LRMS (ESI, *m/z*): 455 [M+H]⁺

Example C113

3-methoxy-2-((3-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C113)

40 The title compound **C113** was synthesized with 3-methylbenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 3.

¹H NMR (500 MHz, Chloroform) δ 7.18 (dt, *J* = 19.8, 10.6 Hz, 6H), 7.05 (t, *J* = 15.5 Hz, 3H), 6.92 (s, 1H), 6.87 (s, 1H), 5.20 – 5.16 (m, 2H), 4.29 (s, 1H), 3.85 – 3.63 (m, 4H), 3.55

(s, 1H), 3.12 (s, 1H), 2.93 (d, $J = 0.8$ Hz, 2H), 2.78 (s, 1H), 2.74 (s, 1H), 2.68 (s, 1H), 2.37 – 2.33 (m, 3H).

LRMS (ESI, m/z): 425 $[M+H]^+$

Example C114

5 **3,12-dimethoxy-2-((2-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C114)**

The title compound **C114** was synthesized with 2-methylbenzyl bromide, vanillin and 5-methoxy-3-indoleacetic acid according to Scheme 3.

^1H NMR (500 MHz, Chloroform) δ 7.23 (s, 1H), 7.18 – 7.08 (m, 4H), 6.99 (d, $J = 5.0$ Hz, 2H), 6.79 (d, $J = 8.2$ Hz, 2H), 6.54 (s, 1H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.86 – 3.82 (m, 3H), 3.82 – 3.75 (m, 4H), 3.54 (s, 1H), 3.10 (s, 1H), 2.91 (s, 1H), 2.76 (t, $J = 8.7$ Hz, 3H), 2.66 (s, 1H), 2.33 – 2.29 (m, 3H).

LRMS (ESI, m/z): 455 $[M+H]^+$

Example C115

15 **3-methoxy-2-((2-methylbenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C115)**

The title compound **C115** was synthesized with 2-methylbenzyl bromide, vanillin and 3-indoleacetic acid according to Scheme 3.

^1H NMR (500 MHz, Chloroform) δ 7.27 – 7.10 (m, 21H), 7.06 (d, $J = 11.4$ Hz, 6H), 6.92 (d, $J = 17.8$ Hz, 6H), 5.22 – 5.18 (m, 6H), 4.29 (s, 3H), 3.98 – 3.64 (m, 12H), 3.55 (s, 3H), 3.14 (s, 3H), 2.94 (d, $J = 0.8$ Hz, 6H), 2.80 (s, 2H), 2.73 (s, 4H), 2.69 (s, 2H), 2.40 – 2.36 (m, 9H).

LRMS (ESI, m/z): 425 $[M+H]^+$

Example C116

25 **2-methoxy-3-((3,4-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C116)**

^1H NMR (500 MHz, Chloroform) δ 7.23 (s, 130H), 7.15 (d, $J = 13.8$ Hz, 265H), 7.07 – 6.97 (m, 787H), 6.87 (s, 137H), 5.19 – 5.15 (m, 258H), 4.29 (s, 125H), 3.85 (s, 8H), 4.06 – 3.64 (m, 537H), 3.55 (s, 134H), 3.12 (s, 127H), 2.90 (d, $J = 0.8$ Hz, 258H), 2.78 (s, 98H), 2.71 (s, 132H), 2.65 (s, 101H).

LRMS (ESI, m/z): 525 $[M+H]^+$

Example C117

35 **2,12-dimethoxy-3-((3,4-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C117)**

^1H NMR (500 MHz, Chloroform) δ 7.09 – 6.94 (m, 76H), 6.93 (s, 2H), 6.93 – 6.79 (m, 125H), 6.71 (s, 25H), 5.23 – 5.19 (m, 49H), 4.29 (s, 24H), 3.88 – 3.69 (m, 178H), 3.55 (s, 26H), 3.13 (s, 19H), 2.95 (d, $J = 0.8$ Hz, 49H), 2.72 (d, $J = 3.9$ Hz, 47H), 2.60 (s, 19H).

LRMS (ESI, m/z): 477 $[M+H]^+$

Example C118

40 **2-methoxy-3-((3,5-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C118)**

¹H NMR (500 MHz, Chloroform) δ 7.23 (s, 4H), 7.17 (s, 4H), 7.13 (s, 4H), 7.03 (d, *J* = 11.6 Hz, 8H), 6.92 – 6.79 (m, 14H), 6.73 (s, 5H), 6.71 (d, *J* = 1.5 Hz, 1H), 5.24 – 5.20 (m, 8H), 4.29 (s, 4H), 3.84 – 3.64 (m, 16H), 3.53 (s, 4H), 3.11 (s, 4H), 2.90 (s, 3H), 2.82 (d, *J* = 0.8 Hz, 8H), 2.77 (s, 3H), 2.66 (s, 4H).

5 LRMS (ESI, *m/z*): 447 [M+H]⁺

Example C119

2,12-dimethoxy-3-((3,5-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C119)

10 ¹H NMR (500 MHz, Chloroform) δ 7.08 – 6.99 (m, 12H), 6.87 (d, *J* = 33.0 Hz, 8H), 6.78 – 6.66 (m, 12H), 6.44 (s, 4H), 5.25 – 5.21 (m, 8H), 4.29 (s, 4H), 3.84 – 3.64 (m, 28H), 3.53 (s, 4H), 3.12 (s, 3H), 2.97 (d, *J* = 0.8 Hz, 8H), 2.81 (s, 3H), 2.67 (d, *J* = 0.6 Hz, 6H).

LRMS (ESI, *m/z*): 477 [M+H]⁺

Example C120

15 **2-methoxy-3-((3,4,5-trifluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C120)**

¹H NMR (500 MHz, Chloroform) δ 7.23 (s, 1H), 7.17 (s, 1H), 7.05 (dd, *J* = 21.8, 6.8 Hz, 4H), 6.86 (s, 1H), 6.84 – 6.80 (m, 2H), 5.22 – 5.18 (m, 2H), 4.29 (s, 1H), 3.87 – 3.68 (m, 4H), 3.55 (s, 1H), 3.13 (s, 1H), 2.95 (d, *J* = 0.8 Hz, 2H), 2.80 (s, 1H), 2.73 (s, 1H), 2.66 (s, 1H).

20 LRMS (ESI, *m/z*): 465 [M+H]⁺

Example C121

2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C121)

25 ¹H NMR (500 MHz, Chloroform) δ 7.08 (s, 1H), 7.03 (d, *J* = 3.5 Hz, 2H), 6.89 (d, *J* = 12.6 Hz, 2H), 6.74 – 6.66 (m, 3H), 5.10 – 5.06 (m, 2H), 4.29 (s, 1H), 3.83 – 3.77 (m, 7H), 3.56 (s, 1H), 3.13 (s, 1H), 3.03 (d, *J* = 0.8 Hz, 2H), 2.79 (d, *J* = 4.8 Hz, 2H), 2.67 (s, 1H).

LRMS (ESI, *m/z*): 495 [M+H]⁺

Example C122

30 **3-methoxy-2-((3,4-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C122)**

¹H NMR (500 MHz, Chloroform) δ 7.23 (s, 9H), 7.17 (s, 9H), 7.08 – 6.96 (m, 65H), 6.88 (s, 10H), 5.24 – 5.20 (m, 18H), 4.29 (s, 9H), 3.85 (s, 1H), 3.85 – 3.64 (m, 36H), 3.55 (s, 9H), 3.14 (s, 9H), 2.89 (d, *J* = 0.8 Hz, 18H), 2.75 (d, *J* = 17.3 Hz, 17H), 2.66 (s, 7H).

LRMS (ESI, *m/z*): 447 [M+H]⁺

35 **Example C123**

3,12-dimethoxy-2-((3,4-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C123)

40 ¹H NMR (500 MHz, Chloroform) δ 7.07 – 6.96 (m, 7H), 6.81 (s, 1H), 6.56 (s, 1H), 5.24 – 5.20 (m, 2H), 4.29 (s, 1H), 3.86 – 3.82 (m, 6H), 3.80 (s, 1H), 3.55 (s, 1H), 3.15 (s, 1H), 2.91 (d, *J* = 0.8 Hz, 2H), 2.82 (s, 1H), 2.70 (d, *J* = 11.2 Hz, 2H).

LRMS (ESI, *m/z*): 477 [M+H]⁺

Example C124

3-methoxy-2-((3,5-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C124)

¹H NMR (500 MHz, Chloroform) δ 7.24 (s, 1H), 7.17 (s, 1H), 7.13 (s, 1H), 7.04 (d, J = 15.6 Hz, 2H), 6.89 (s, 1H), 6.80 (dd, J = 4.1, 0.9 Hz, 4H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.94 – 3.73 (m, 4H), 3.54 (s, 1H), 3.10 (s, 1H), 2.92 (s, 1H), 2.77 (t, J = 10.1 Hz, 3H), 2.66 (s, 1H).

LRMS (ESI, m/z): 447 [M+H]⁺

Example C125

3,12-dimethoxy-2-((3,5-difluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C125)

¹H NMR (500 MHz, Chloroform) δ 7.15 (s, 1H), 6.99 (d, J = 13.0 Hz, 2H), 6.84 – 6.75 (m, 4H), 6.73 (s, 1H), 6.54 (s, 1H), 5.24 – 5.20 (m, 2H), 4.29 (s, 1H), 3.85 – 3.71 (m, 7H), 3.54 (s, 1H), 3.10 (s, 1H), 2.91 (s, 1H), 2.78 (t, J = 7.4 Hz, 3H), 2.66 (s, 1H).

LRMS (ESI, m/z): 477 [M+H]⁺

Example C126

3-methoxy-2-((3,4,5-trifluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C126)

¹H NMR (500 MHz, Chloroform) δ 7.24 (s, 1H), 7.16 (d, J = 11.8 Hz, 2H), 7.04 (d, J = 14.7 Hz, 2H), 6.88 (s, 1H), 6.84 – 6.79 (m, 3H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.86 – 3.75 (m, 4H), 3.54 (s, 1H), 3.10 (s, 1H), 2.91 (s, 1H), 2.78 (t, J = 4.2 Hz, 3H), 2.66 (s, 1H).

LRMS (ESI, m/z): 465 [M+H]⁺

Example C127

3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxo)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline (C127)

¹H NMR (500 MHz, Chloroform) δ 7.15 (s, 1H), 6.99 (d, J = 11.9 Hz, 2H), 6.84 – 6.74 (m, 4H), 6.53 (s, 1H), 5.23 – 5.19 (m, 2H), 4.29 (s, 1H), 3.85 – 3.75 (m, 7H), 3.54 (s, 1H), 3.10 (s, 1H), 2.91 (s, 1H), 2.78 (t, J = 6.2 Hz, 3H), 2.66 (s, 1H).

LRMS (ESI, m/z): 495 [M+H]⁺

Examples of biological experiments

Example 1. *in vitro* study of lipid-lowering activity

(1) Experimental method

HepG2 cells were inoculated in 24-well plates, cultured in DMEM containing 10% FBS for 24h or 48h, and then transferred to DMEM containing 2% defatted serum and cultivated for 24h. The old culture solution was discarded and replaced with new 2% defatted serum DMEM, and a test compound (the working concentration of which is 5 μ M, triplicate for each sample) was added and incubated for 24h. The old culture solution was abandoned and DMEM containing DiI-LDL (20 μ g/ml) was added (300 μ l/per 24 wells), incubated for 3 h. DMEM containing DiI-LDL was discarded, and cells were rinsed twice with PBS containing 0.4% BSA, and 3 times with PBS to remove excess DiI-LDL. Isopropanol was added (500 μ l/per well of a 24-well plate), and was kept in darkness. After shaken for 20 minutes, 200 μ l of supernatant was sucked to a black fluorescent plate, and fluorescence intensity (FLU) was

detected at excitation light 520 nm and emission light 578 nm.

The experimental results were calculated: LDL uptake rate = (FLU value of sample group to be tested / FLU value of blank group) × 100%.

(2) experimental results

5

Table 1 *in vitro* lipid-lowering activity

Serial No.	No.	LDL uptake rate
1	A1	148.46%
2	A5	155.94%
3	A9	113.39%
4	A10	108.39%
5	A13	107.39%
6	A15	115.47%
7	A37	99.08%
8	A38	123.30%
9	A39	146.93%
10	A55	194.41%
11	A57	112.04%
12	A60	108.39%
13	A61	165.45%
13	A63	137.64%
14	A69	139.91%
15	A70	80.61%
16	A109	100.49%
17	(S)-A55	120.49%
18	(R)-A55	199.94%
19	(S)-A1	115.86%
20	(R)-A1	185.15%
21	A142	108.21%
22	A143	91.08%
23	B5	133.74%
24	B6	107.85%
25	B9	94.26%
26	B10	107.85%
27	B13	104.62%
28	B15	110.80%
29	B16	107.13%
30	B55	125.41%
31	B59	108.82%
32	B60	114.18%
33	B61	116.33%
34	C47	149.82%
35	C49	194.03%
36	C51	191.73%
37	C53	111.61%
38	C54	110.08%
39	C59	147.46%
35	C60	84.31%
36	(S)-C3	111.02%

37	(R)-C3	218.44%
38	(S)-C47	272.92%
39	(R)-C47	292.48%
40	C106	110.95%
41	C107	69.51%
42	CVI-LM001	79.31%
43	Positive control	137.93%

Example 2 test of cell biological activity

(1) Experimental method

HEK293 cells stably expressing $\alpha 1A$ -adrenergic receptor ($\alpha 1A$ -AR) and G protein G $\alpha 16$ were seeded in 96-well plates. After 24 hours of culture, the medium was removed, and 40 μ L of Hank's balanced salt solution (HBSS: containing 5.4 mM KCl, 0.3 mM Na₂HPO₄, 0.4 mM KH₂PO₄, 4.2 mM NaHCO₃, 1.3 mM CaCl₂, 0.5 mM MgCl₂, 0.6 mM MgSO₄, 137 mM NaCl, 5.6 mM D-glucose and 250 μ M sulfinpyridone, pH 7.4) containing 2 μ M of MFluo-4AM was added to each well, and incubated for 45 minutes in an incubator. The dye was aspirated and 50 μ L of HBSS containing a test compound or 1% DMSO (negative control) was added and incubated for 10 minutes at room temperature, and then read with Flex Station 3 microplate reader. At the specified time point, 25 μ L of agonist phenylephrine (final concentration 30 nM) will be automatically added by the detector into the reaction system, and simultaneously stimulated with 485 nm light, and the change in intensity of fluorescence caused by the change in the intracellular calcium ion concentration was detected at 525 nm. After incubated with different drugs, the response rate of cells to $\alpha 1A$ -AR agonist phenylephrine is calculated by the following formula: % reaction rate=(DB)/(SB)*100%; where D is phenylephrine-induced signal peak after incubated with the drug to be tested; B is phenylephrine-induced signal peak after incubated with 10 μ M positive control drug Tamsulosin; S is phenylephrine-induced signal peak after incubated with negative control 1% DMSO. The response rate of different doses of the same drug was analyzed by GraphPad Prism software to obtain a dose-response curve and the IC₅₀ value was measured. Each experiment was performed in *ex vivo* tissues of 3 Beagle dogs.

(2) experimental results

Table 2. Antagonistic activity of compounds on $\alpha 1A$ -AR

Serial No.	No.	$\alpha 1A$ -AR/IC ₅₀ (nM)
1	A61	4531
2	A63	57730
3	A69	>>100000
4	B5	>>100000
5	B55	>>100000
6	C47	>>100000
7	C49	6583
8	C53	17540
9	C59	>>100000

10	Positive control	2.141
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In vitro antagonistic activities of the compounds to $\alpha 1A$ -AR were studied. The antagonistic activity of each compound to $\alpha 1A$ -AR was weak, and the antagonistic activity of most compounds to $\alpha 1A$ -AR was less than 10000 nM (such as **A63**, **A69**, **B5**, **B55**, **C47**, **C49**, **C53**, **C59**), and these compounds have a strong activity-regulating effect on PCSK9 (as known from Table 1). Meanwhile, such compounds are inactive against D₁, D₂ and 5-HT.

Example 3 *in vivo* study of lipid-lowering activity

(1) Experimental method

After adaptively feeding Syrian golden hamsters (male, 80-100g) for a week, all hamsters were fed with high-fat diet. Two weeks later, blood was collected from the orbital venous plexus, serum was separated, and levels of total cholesterol (TC), triglyceride (TG), high-density lipoprotein (HDL-C) and low-density lipoprotein (LDL-C) in serum were measured. They were evenly grouped according to blood lipid levels into 7 groups: model control group, A1 intragastric administration group, A1 intraperitoneal administration group, A5 intragastric administration group, A5 intraperitoneal administration group, A55 intragastric administration group, A55 intraperitoneal administration group, B5 intragastric administration group, B5 intraperitoneal administration group, and the animals in each group were continued to be administered with high fat diet. The compound was formulated with 0.5% CMC-Na (7.5 mg/ml), and the intragastric administration group was intragastrically administered once a day (administered dose: 30 mg/kg) for three weeks. The compound was formulated with physiological saline containing 5% DMSO, 10% hydrogenated castor oil (7.5 mg/ml), and the intraperitoneal administration group was intraperitoneally administered once a day (administered dose: 30 mg/kg) for three weeks. Blood lipid levels and body weights were measured every 10 days. After three weeks, the animals were sacrificed and the liver was stored in a -80 °C refrigerator.

(2) experimental results

Table 3. Study of lipid-lowering activity in golden hamsters

Compound	Administration pathway	CHOL	TG	HDL-C	LDL-C	body weight (g)
		mmol/L	mmol/L	mmol/L	mmol/L	
A1	oral	27.93	28.61	2.56	13.64	169.67
	abdominal	9.75	8.16	1.63	5.25	148.17
A5	oral	15.32	15.46	4.01	7.44	148.43
	abdominal	11.36	13.26	1.77	6.16	150.57
A55	oral	11.81	6.74	3.88	5.56	138.86
	abdominal	17.86	19.77	2.98	9.39	144.57
B5	oral	14.79	11.94	3.99	7.66	147.86
	abdominal	14.92	16.14	2.90	7.89	142.71
Model group		22.99	24.42	3.92	12.22	166.00

The results showed that in the hyperlipidemia model, compounds A1, A5, A55 and B5 significantly reduced the contents of cholesterol (CHOL), triglyceride (TG) and low density

lipoprotein (LDL-C) in the blood of golden hamsters.

Table 4. Study of lipid-lowering activity in golden hamsters

Compound	Dose	Administration pathway	TC mmol/L	TG mmol/L	LDL-C mmol/L
A61	30	oral	37.11±11.19	30.29±12.36	21.45±6.27
A61	100	oral	22.57±6.37	10.32±5.41	13.76±4.15
C3	30	oral	25.08±16.98	13.66±15.87	14.33±8.74
C3	100	oral	21.17±3.89	4.56±1.16	13.31±3.01
CVI-LM001	30	oral	30.78±11.5	23.2±13.2	18.44±6.25
CVI-LM001	100	oral	20.14±5.41	9.61±5.11	12.39±4
C9	30	oral	36.87±23.13	33.6±34	20.52±11.15
C47	30	oral	19.73±6.44	8.7±4.72	11.73±4.16
Model group			37.32±13.12	30.27±17.04	22.66±7.94

Example 4: Pharmacokinetics

(1) Experimental method

A1 10 µL of a plasma sample was taken in a centrifuge tube and 100 µL of methanol: acetonitrile (1:1, v/v) was added, vortexed for 1 min, centrifugated (14000 rpm) for 5 min, and 50 µL supernatant was taken, mixed with equal volume of water, and analysed after vortex mixing. The linear range of A1 is: 0.1-300 ng/mL for oral administration and 1-3000 ng/mL for intravenous injection.

A55 10 µL of a plasma sample was taken in a centrifuge tube and 100 µL of methanol: acetonitrile (1:1, v/v) was added, vortexed for 1 min, centrifugated (14000 rpm) for 5 min, and 50 µL supernatant was taken, mixed with equal volume of water, and analysed after vortex mixing. The linear range of A55 is: 0.1-300 ng/mL for oral administration and 0.3-3000 ng/mL for intravenous injection.

(1) experimental results

Table 5. Rat pharmacokinetic parameters of compounds A1 and A55

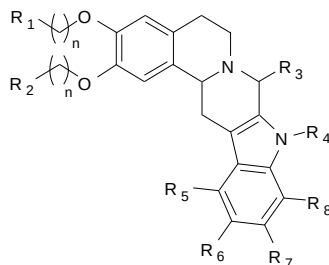
Compound		T _{1/2} (h)	T _{max} (h)	C _{max} (ng/mL)	AUC _{last} (h*ng/mL)	AUC _{INF_obs} (h*ng/mL)	CL _{obs} (mL/min/kg)	MRT _{INF_obs} (h)	V _{ss_obs} (mL/kg)	F%
A1	p.o.	*	6.00	159	776	--	--	--	--	20.3
	i.v.	2.58	0.083	1109	1910	1980	5051	3.3	16582	
A55	p.o.	0.71	4.00	62	334	335	--	4.8	--	6.2
	i.v.	1.88	0.083	2741	2716	2731	3662	1.7	6407	
C3	i.g	6.53	4	296.8	3963.9	4337.9	\	7.74	\	57.2
	i.p	18.5	\	\	3465.2	9362.4	1.07	15.3	28.6	
C47	i.g	38.2	4	251	9245	563535	\	56.1	\	31.0
	i.p	51.2	24	276	14914	1120348	\	66.4	\	

It can be found from the experimental results that the phenyl[a]indolo[2,3-g]quinolizine compounds and derivatives of the present invention have low toxicity and good solubility.

All literatures mentioned in the present application are incorporated herein by reference, as though each one is individually incorporated by reference. Additionally, it should be understood that after reading the above teachings, those skilled in the art can make various changes and modifications to the present invention. These equivalents also fall within the scope defined by the appended claims.

Claims

1. A phenyl [a] indole [2,3-g] quinazine compound of formula (I), or a enantiomer, diastereomer, racemate, and mixture thereof, a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof,



formula (I)

wherein R₁ and R₂ are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C1-C6 alkyl (5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, substituted or unsubstituted C2-C10 acyl, substituted or unsubstituted C2- C10 ester group, amino group, substituted or unsubstituted C1-C6 amide group, -SO₂R₉, -OSO₂R₉, -OCOR₉; and not both of R₁ and R₂ are hydrogen;

or the R₁ and R₂ and the adjacent -(CH₂)_n-O and C=C together form a substituted or unsubstituted 5-7 membered heterocyclic ring, wherein the heterocyclic ring is a fully saturated heterocyclic ring, partially unsaturated heterocyclic ring or aromatic heterocyclic ring;

R₃, R₄ are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, amine, hydroxy, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C3-C12 cycloalkyl, substituted or unsubstituted C2-C10 acyl, substituted or unsubstituted C2-C10 ester group, amino, C1-C6 alkylamino, substituted or unsubstituted C1-C6 amide group, -SO₂R₉, -OSO₂R₉, -OCOR₉;

R₅, R₆, R₇ and R₈ are each independently selected from the group consisting of hydrogen, deuterium, tritium, halogen, hydroxy, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C1-C6 alkoxy, substituted or unsubstituted C3-C12 cycloalkyl, cyano, nitro, carboxyl, sulfydryl, -NR₉R₁₀, -NCOR₉R₁₀, -SO₂R₉, -SO₂NR₉R₁₀, -OSO₂R₉, or -OCOR₉;

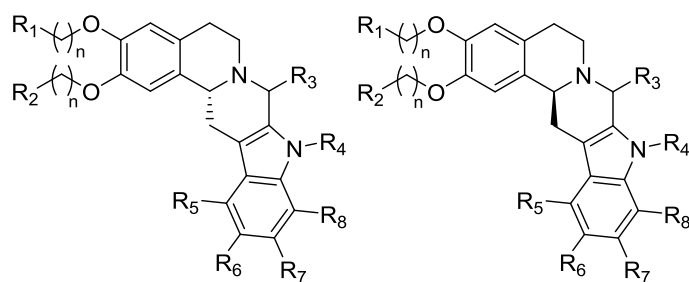
R₉ and R₁₀ are independently hydrogen, deuterium, tritium, halogen, an unsubstituted or 1-3 halogen substituted C1-C6 alkyl, or C3-C6 cycloalkane unsubstituted or substituted by 1-3 halogens, C6-C10 aryl unsubstituted or substituted by 1 to 3 halogens, C1-C3 alkyl-(C6-C10 aryl) unsubstituted or substituted by 1-3 halogens, 5-7 membered heteroaryl unsubstituted or substituted by 1-3 halogens;

And when both of R₃ and R₄ are hydrogen, at least one of R₁, R₂, R₆, R₇ is a group selected from the group consisting of a substituted C₆-C₁₀ aryl, substituted 5-7-membered heterocyclic ring, -OSO₂R₉;

wherein the "substituted" refers to one or more hydrogen atoms on the group are substituted with a substituent selected from the group consisting of halogen, a C₁-C₆ alkyl unsubstituted or substituted by halogen or C₃-C₆ (preferably C₁-C₄) cycloalkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl, C₁-C₄ linear or branched alkyl substituted amine group, hydroxy, cyano, nitro, oxygen atom (=O), hydroxy-C₁-C₆ alkyl, carboxyl, sulfydryl, C₆-C₁₀ aryl unsubstituted or substituted by 1 to 3 halogens or hydroxy groups, unsubstituted or halogenated 5-7 membered heterocyclic ring, unsubstituted or halogenated C₂-C₆ acyl, C₁-C₆ hydroxyalkyl, -NR₉R₁₀, -NCOR₉R₁₀, -SO₂R₉, -OSO₂R₉, -SO₂NR₉R₁₀, -COOR₉ and -OCOR₉;

n is 0 or 1.

2. The compound of claim 1, or the enantiomer, diastereomer, racemate, or mixture thereof, and the pharmaceutically acceptable salt, crystalline hydrate and solvate thereof, wherein the phenyl [a] fluorene [2,3-g] quinazine compound has the following formula R-(I) or the formula S-(I):



Formula R-(I)

Formula S-(I)

3. The compound of claim 1, or the enantiomer, diastereomer, racemate, or mixture thereof, and the pharmaceutically acceptable salt, crystalline hydrate and solvate thereof, wherein the R₃ is hydrogen or a substituted or unsubstituted C₁-C₆ alkyl, and the R₄ is selected from the group consisting of a substituted or unsubstituted C₁-C₆ alkyl, substituted or unsubstituted C₁-C₆ alkoxy, substituted or unsubstituted C₁-C₆ alkylphenyl, substituted or unsubstituted 5-7-membered heterocyclic ring, substituted or unsubstituted C₃-C₁₂ cycloalkyl, substituted or unsubstituted C₂-C₁₀ acyl, substituted or unsubstituted C₂-C₁₀ ester group, -OSO₂R₉.

4. The compound of claim 1, or the enantiomer, diastereomer, racemate, or mixture thereof, and the pharmaceutically acceptable salt, crystalline hydrate and solvate thereof, wherein the R₄ is hydrogen, and the R₃ is selected from the group consisting of a substituted or unsubstituted C₆-C₁₀ aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C₁-C₆ alkylphenyl, substituted or unsubstituted C₃-C₁₂ cycloalkyl.

5. The compound of claim 1, or the enantiomer, diastereomer, racemate, or mixture thereof, and the pharmaceutically acceptable salt, crystalline hydrate and solvate thereof, wherein R₃ and R₄ are hydrogen, and

at least one of R₁ and R₂ is a group selected from the group consisting of a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl group, substituted or unsubstituted C1-C6 alkyl-(5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, -SO₂R₉; or

at least one of R₅, R₆, R₇ and R₈ is a group selected from the group consisting of a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring, substituted or unsubstituted C1-C6 alkylphenyl, substituted or unsubstituted C1-C6 alkyl-(5-7 membered heteroaryl), substituted or unsubstituted C3-C12 cycloalkyl, -SO₂R₉.

6. The compound of claim 1, or the enantiomer, diastereomer, racemate, or mixture thereof, and the pharmaceutically acceptable salt, crystalline hydrate and solvate thereof, R₁ and R₂ are each independently selected from the group consisting of hydrogen, hydrazine, halogen, a substituted or unsubstituted C1-C6 alkyl, substituted or unsubstituted C6-C10 aryl;

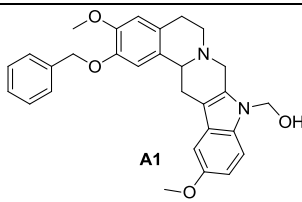
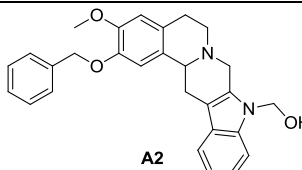
or the R₁ and R₂ together form a substituted or unsubstituted 5-7 membered heterocyclic ring, wherein the heterocyclic ring is fully saturated heterocyclic ring, partially unsaturated heterocyclic ring or aromatic heterocyclic ring;

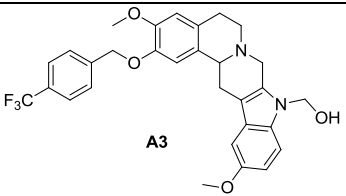
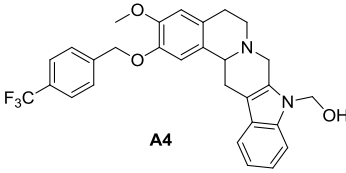
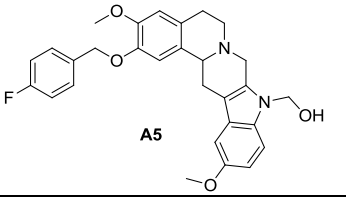
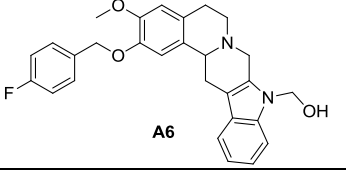
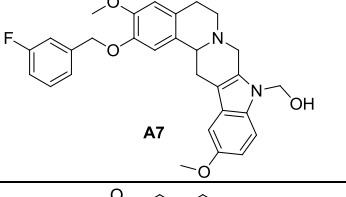
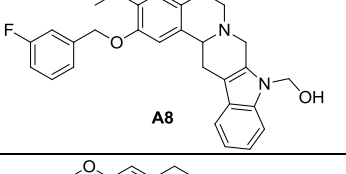
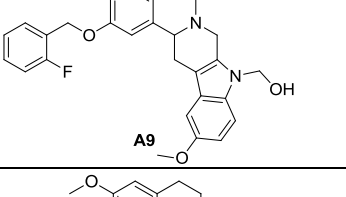
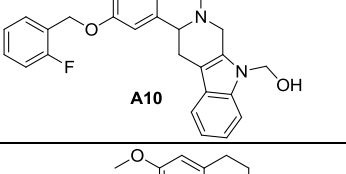
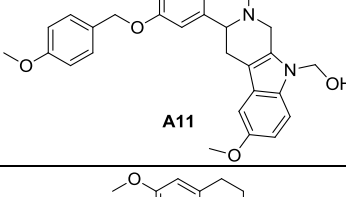
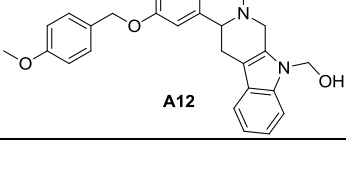
R₃ is selected from the group consisting of hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C6-C10 aryl, substituted or unsubstituted 5-7 membered heterocyclic ring;

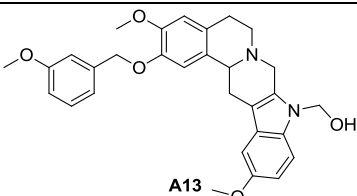
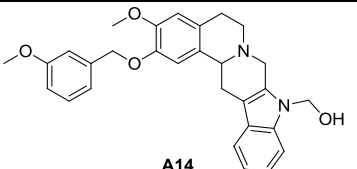
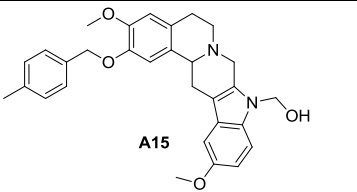
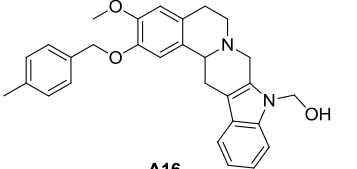
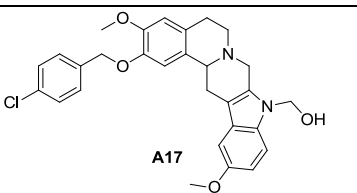
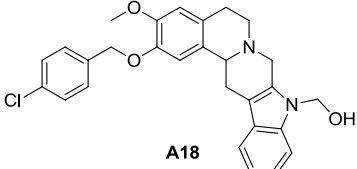
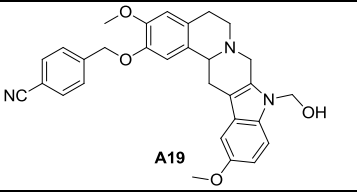
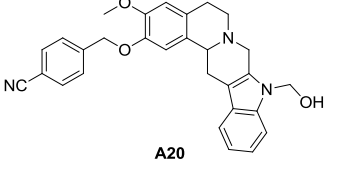
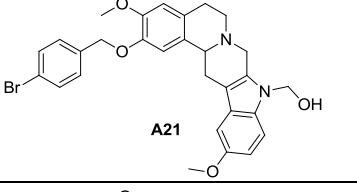
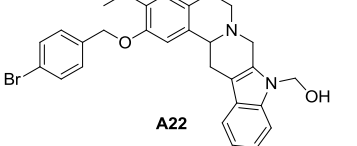
R₄ is hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted hydroxy-C1-C6 alkyl, substituted or unsubstituted C1-C6 alkylene-C2-C6 oxyacyl, substituted or unsubstituted C1-C6 alkylene-C2-C6 oxy (3-7 membered carbocyclic or heterocyclic sulfonyl);

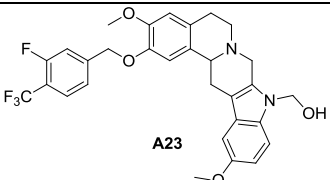
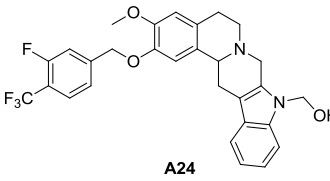
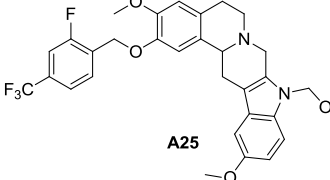
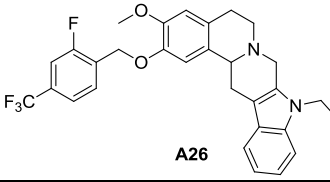
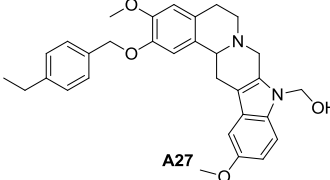
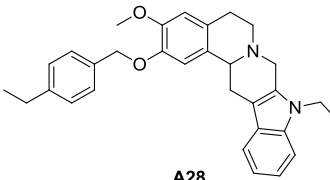
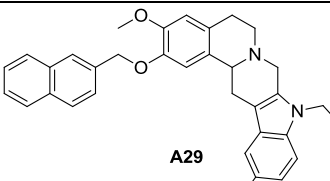
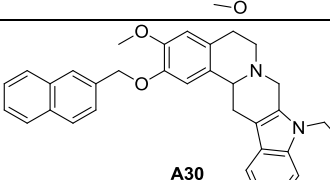
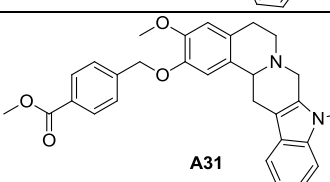
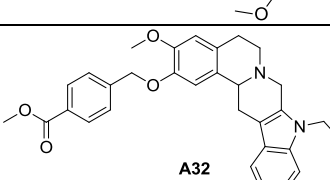
R₅, R₆, R₇ and R₈ are each independently hydrogen, deuterium, tritium, halogen, a substituted or unsubstituted C1-C12 alkyl, substituted or unsubstituted C1-C12 alkoxy, substituted or unsubstituted C3-C6 cycloalkyl, C1-C6 alkoxy substituted C1-C6 alkyl, C3-C6 cycloalkyl substituted C1-C6 alkyl, hydroxyl, cyano, nitro, C1-C6 straight or branched hydroxyalkyl, carboxyl, sulfydryl, -NR₉R₁₀, -NCOR₉R₁₀, -SO₂R₉, -SO₂NR₉R₁₀, or -OCOR₉.

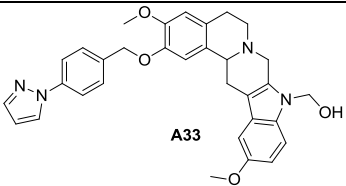
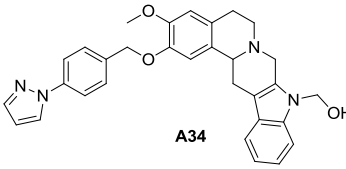
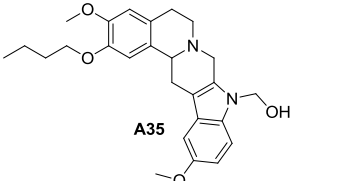
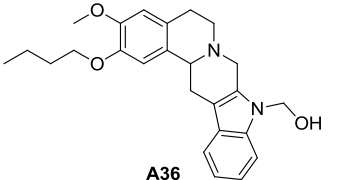
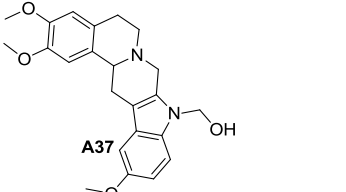
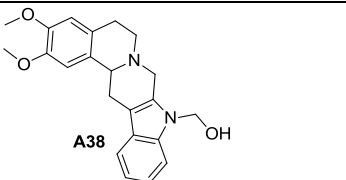
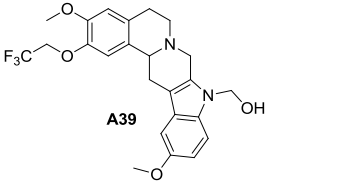
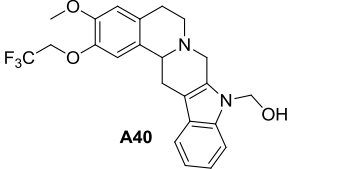
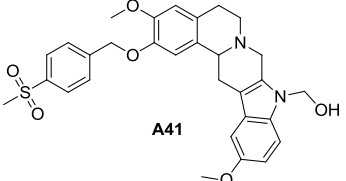
7. The compound of claim 1, wherein the compound is selected from the following group:

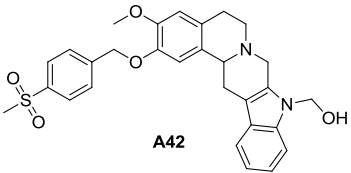
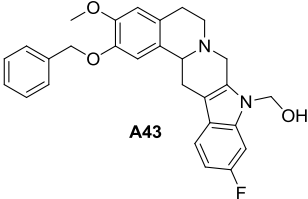
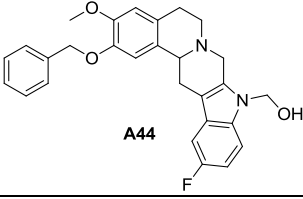
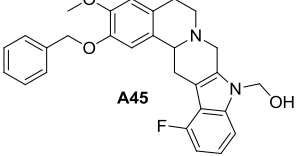
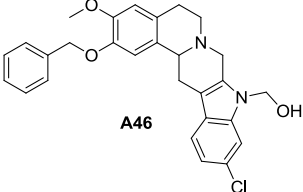
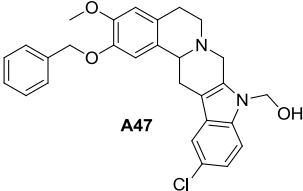
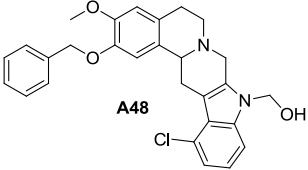
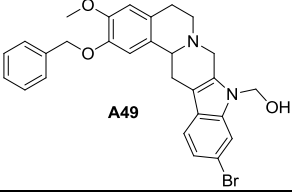
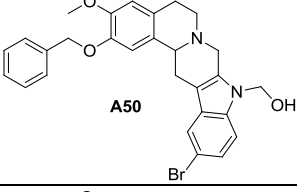
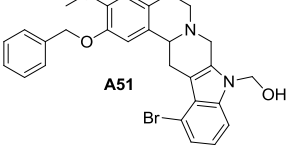
No.	Name	Structure
A1	(2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A2	(2-(benzyloxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

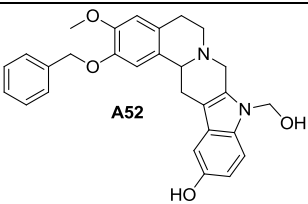
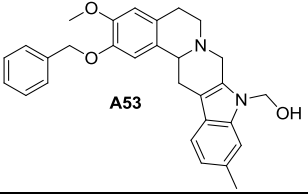
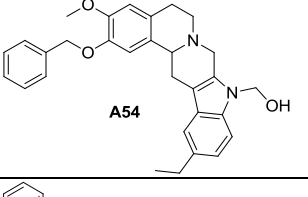
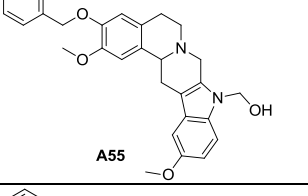
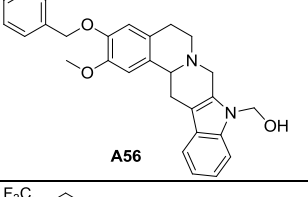
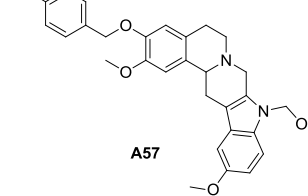
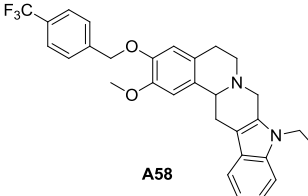
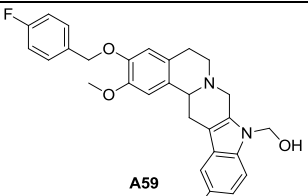
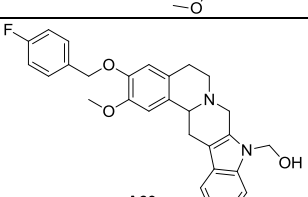
A3	(3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A4	(3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A5	(2-((4-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A6	(2-((4-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A7	(2-((3-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A8	(2-((3-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A9	(2-((2-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A10	(2-((2-fluorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A11	(3,12-dimethoxy-2-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A12	(3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

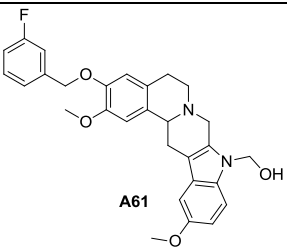
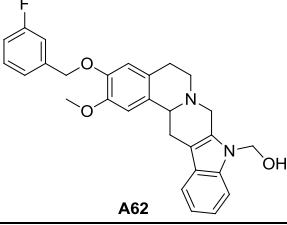
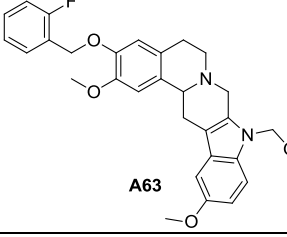
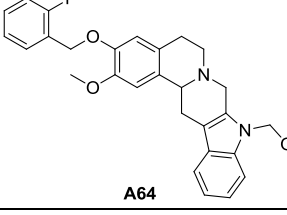
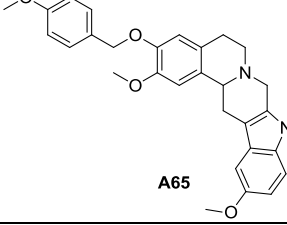
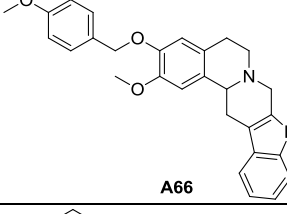
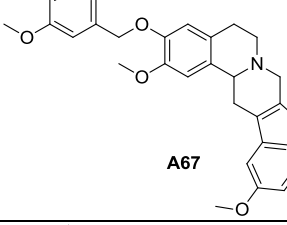
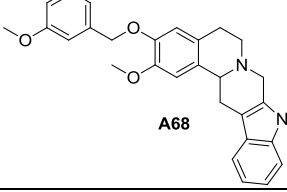
A13	(3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A14	(3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A15	(3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A16	(3-methoxy-2-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A17	(2-((4-chlorobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A18	(2-((4-chlorobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A19	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
A20	4-(((9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
A21	(2-((4-bromobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A22	(2-((4-bromobenzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

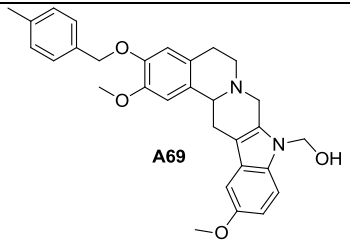
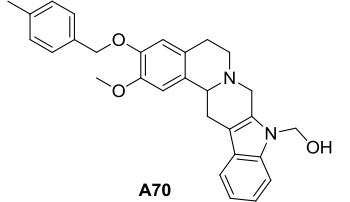
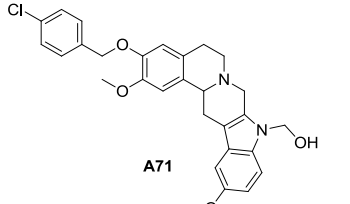
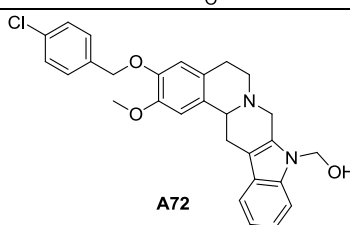
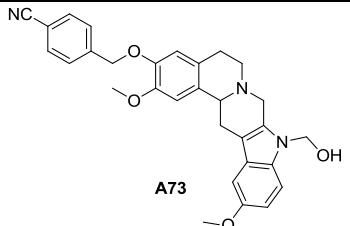
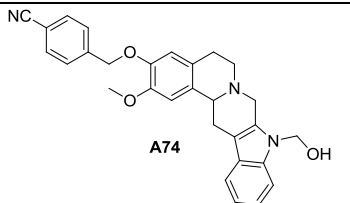
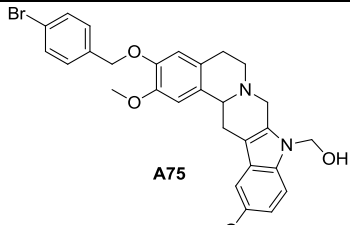
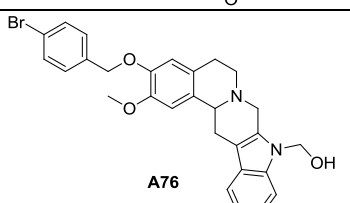
A23	(2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A24	(2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A25	(2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A26	(2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A27	(3,12-dimethoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A28	(3-methoxy-2-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A29	(3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A30	(3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A31	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
A32	4-(((9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	

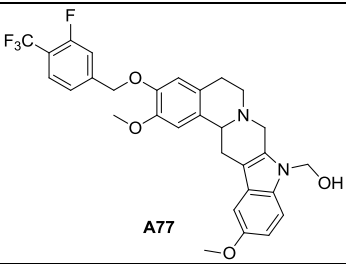
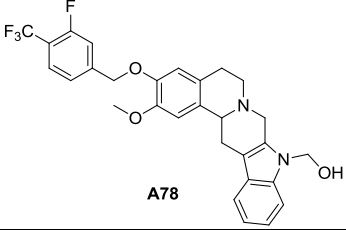
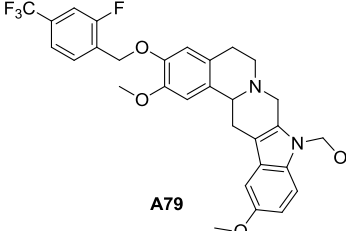
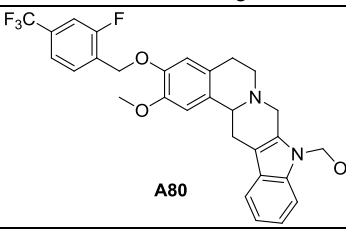
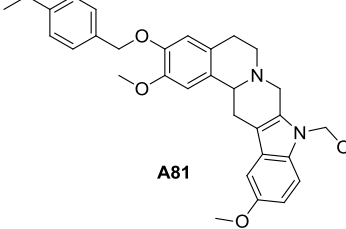
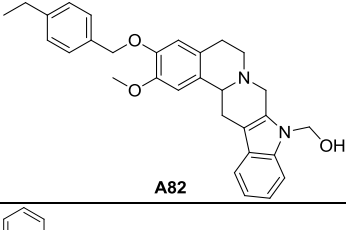
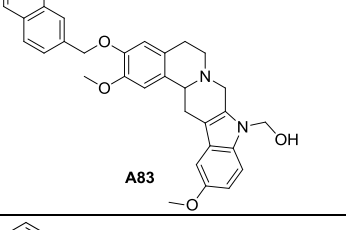
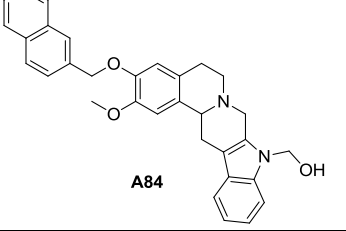
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A33	(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A34	(2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A35	(2-butoxy-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A36	(2-butoxy-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A37	(2,3,12-trimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A38	(2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A39	(3,12-dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A40	(3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A41	(3,12-dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

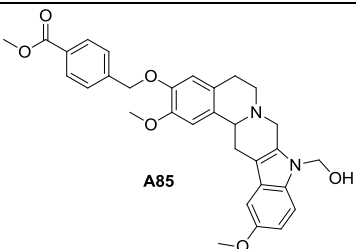
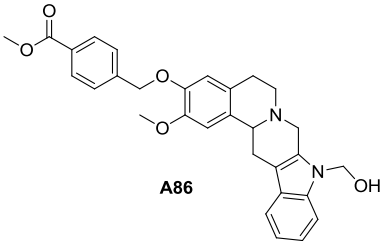
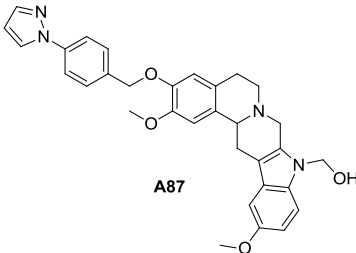
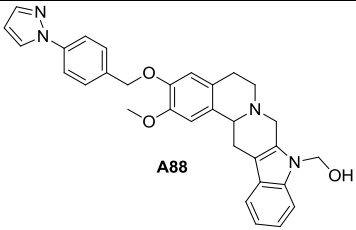
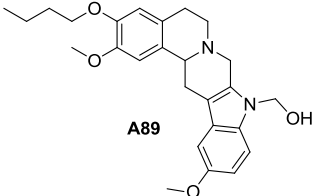
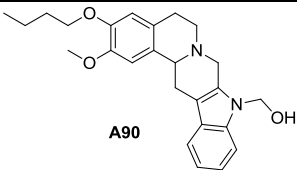
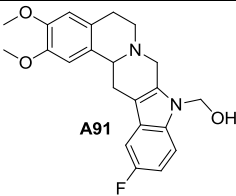
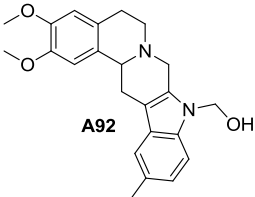
A42	(3-methoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A43	(2-(benzyloxy)-11-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A44	(2-(benzyloxy)-12-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A45	(2-(benzyloxy)-13-fluoro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A46	(2-(benzyloxy)-11-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A47	(2-(benzyloxy)-12-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A48	(2-(benzyloxy)-13-chloro-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A49	(2-(benzyloxy)-11-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A50	(2-(benzyloxy)-12-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A51	(2-(benzyloxy)-13-bromo-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

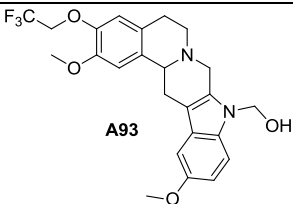
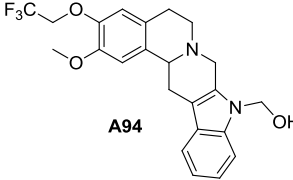
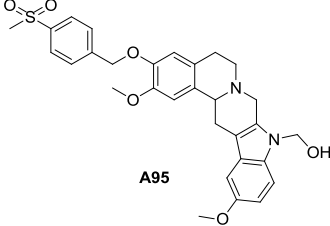
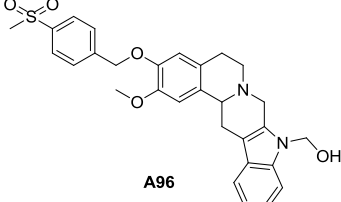
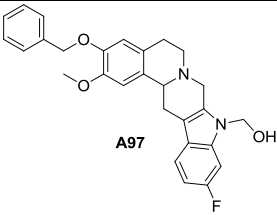
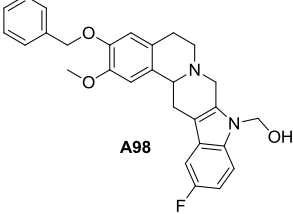
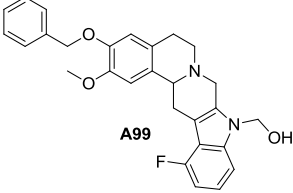
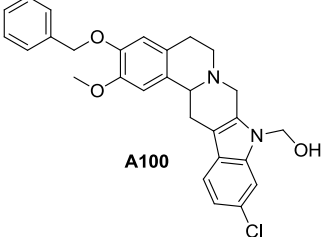
A52	2-(benzyloxy)-9-(hydroxymethyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
A53	(2-(benzyloxy)-3-methoxy-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A54	(2-(benzyloxy)-12-ethyl-3-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A55	(3-(benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A56	(3-(benzyloxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A57	(2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A58	(2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A59	(3-((4-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A60	(3-((4-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

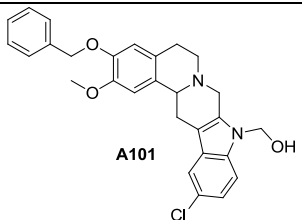
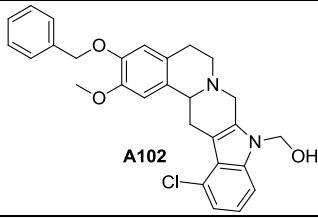
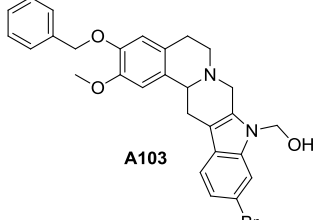
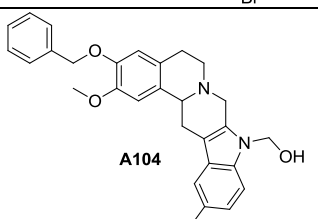
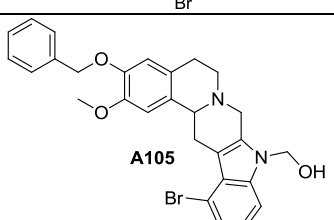
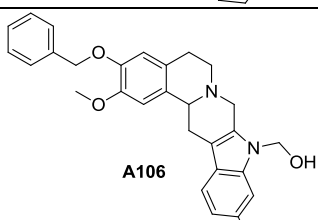
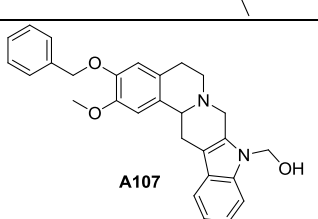
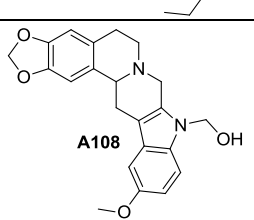
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A62	(3-((3-fluorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A63	(3-((2-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A64	(3-((2-fluorobenzyl)oxy)-2-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A65	(2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A66	(2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A67	(2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A68	(2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A69	(2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A70	(2-methoxy-3-((4-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A71	(3-((4-chlorobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A72	(3-((4-chlorobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A73	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
A74	4-(((9-(hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
A75	(3-((4-bromobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A76	(3-((4-iodobenzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A77	(3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A77
A78	(3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A78
A79	(3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A79
A80	(3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A80
A81	(2,12-dimethoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A81
A82	(2-methoxy-3-((4-ethylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A82
A83	(2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A83
A84	(2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A84

A85	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
A86	4-(((9-(hydroxymethyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
A87	(3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A88	(3-(((4-(1H-pyrazol-1-yl)benzyl)oxy)-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A89	(3-butoxy-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A90	(3-butoxy-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A91	(12-fluoro-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A92	(12-methyl-2,3-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

A93	(2,12-dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A94	(2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A95	(2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A96	(2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A97	(3-(benzyloxy)-11-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A98	(3-(benzyloxy)-12-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A99	(3-(benzyloxy)-13-fluoro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A100	(3-(benzyloxy)-11-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

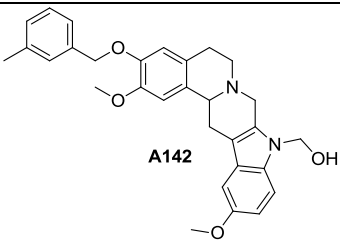
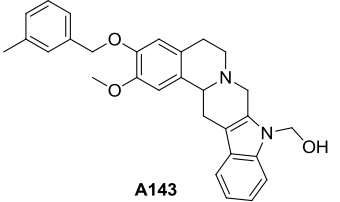
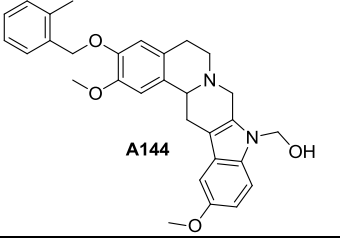
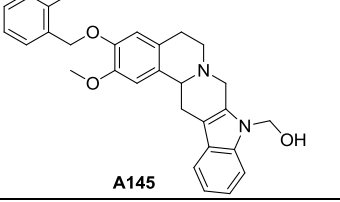
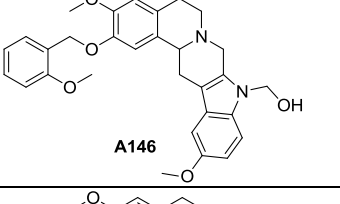
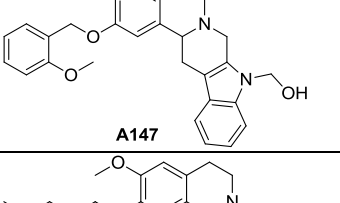
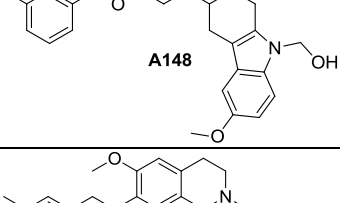
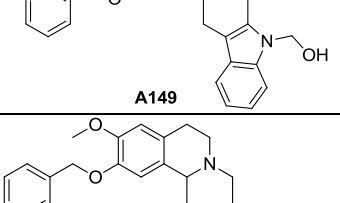
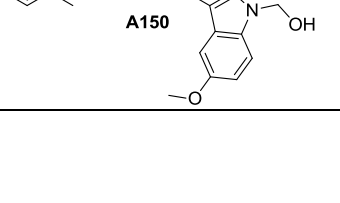
A101	(3-(benzyloxy)-12-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A102	(3-(benzyloxy)-13-chloro-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A103	(3-(benzyloxy)-11-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A104	(3-(benzyloxy)-12-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A105	(3-(benzyloxy)-13-bromo-2-methoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A106	(3-(benzyloxy)-11-methyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A107	(3-(benzyloxy)-12-ethyl-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A108	(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

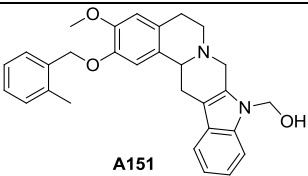
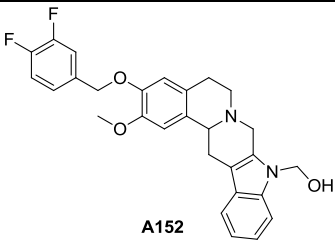
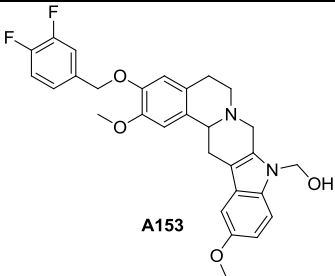
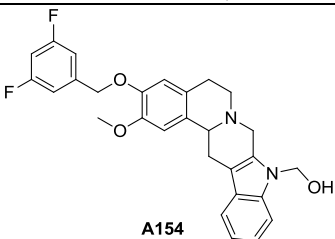
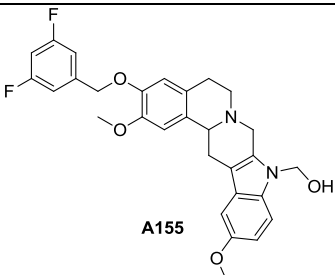
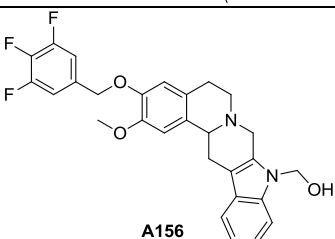
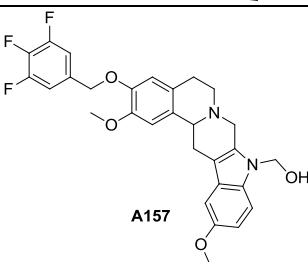
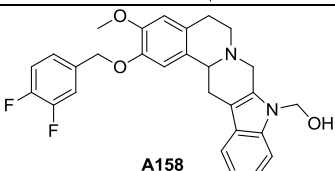
A109	(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A110	(12-methoxy-5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A111	(5,6,14,14a-tetrahydro-[1,3]dioxazo[4,5-g]indolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A112	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)acetate	
A113	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)cyclohexylsulfonate	
A114	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzenesulfonate	
A115	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzene sulfonate	
A116	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzene sulfonate	
A117	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)2-fluorobenzene sulfonate	

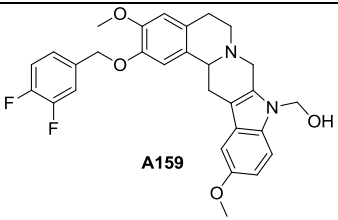
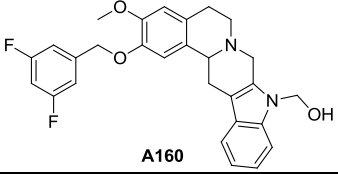
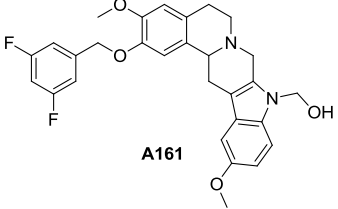
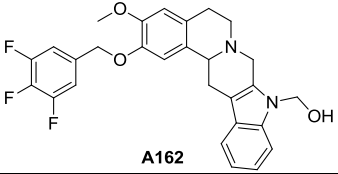
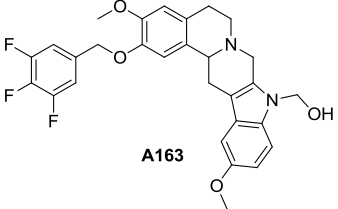
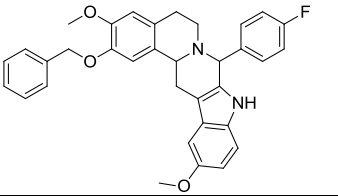
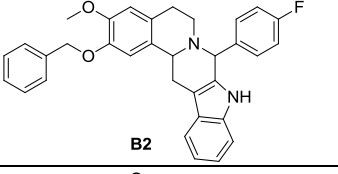
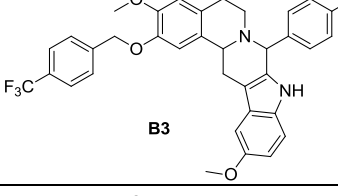
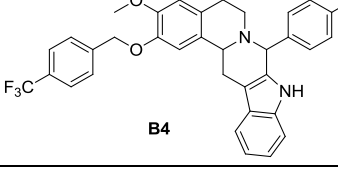
A118	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzylbenzenesulfonate	
A119	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)benzoate	
A120	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)N,N-dimethylformate	
A121	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)4-fluorobenzoate	
A122	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)3-fluorobenzoate	
A123	methyl (2-(benzyloxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)2-fluorobenzoate	
A124	9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	
A125	9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	

A130	(3-(benzyloxy)-8-isopropyl-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A131	(2-(benzyloxy)-8-isopropyl-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A132	2-(benzyloxy)-3,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
A133	3-(benzyloxy)-2,12-dimethoxy-9-(benzenesulfonyl)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
A134	(2-((4-aminobenzyl)oxy)-3,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A135	(3-((4-aminobenzyl)oxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A136	4-(((9-(hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)phenol	
A137	4-(((9-(hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)phenol	

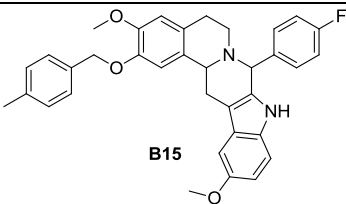
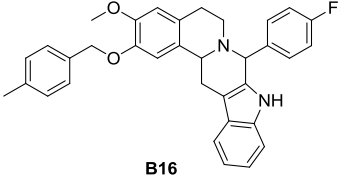
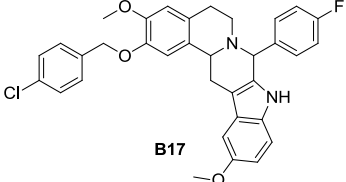
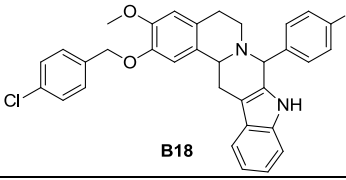
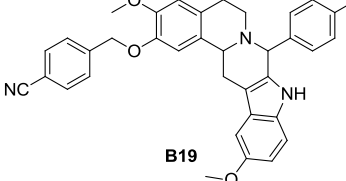
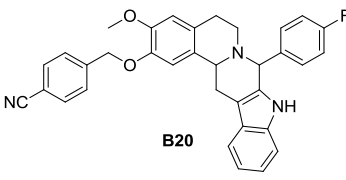
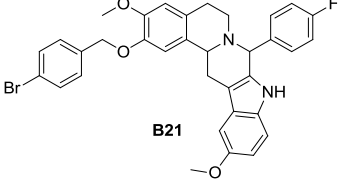
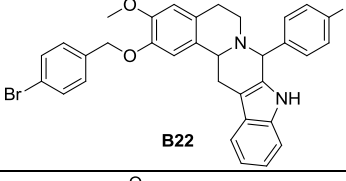
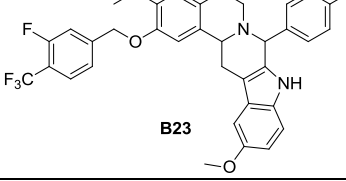
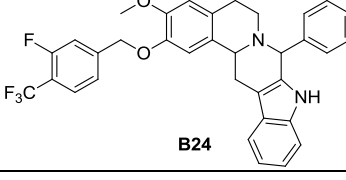
A138	4-(((9-(Hydroxymethyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-2-yl)oxo)methyl)benzoic acid	
A139	4-(((9-(Hydroxymethyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]isoquinolin-3-yl)oxo)methyl)benzoic acid	
(S)-A55	S)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
(R)-A55	R)-(3-(Benzyloxy)-2,12-dimethoxy-5,6,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
(S)-A1	S)-(2-(benzyloxy)-3,12-dimethoxy-5,8,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(6H)-yl)methanol	
(R)-A1	R)-(2-(benzyloxy)-3,12-dimethoxy-5,8,14,14a-tetrahydroindole[3',2':4,5]pyridine[2,1-a]isoquinoline-9(6H)-yl)methanol	
A140	(2,12-dimethoxy-3-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A141	(2-methoxy-3-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

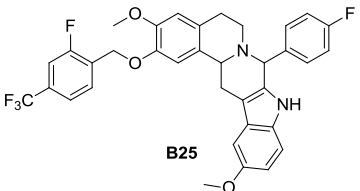
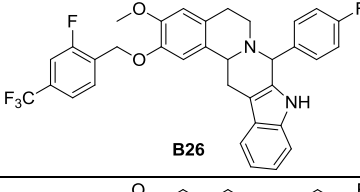
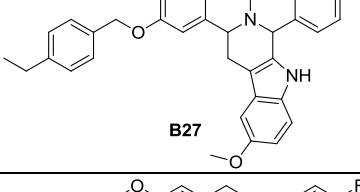
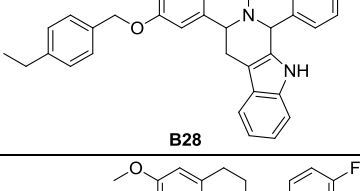
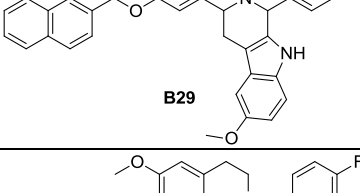
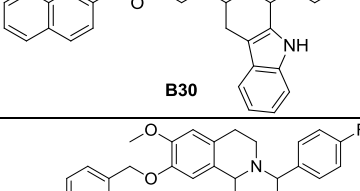
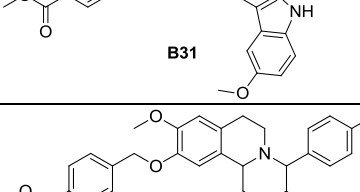
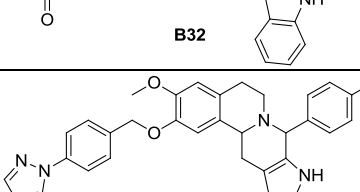
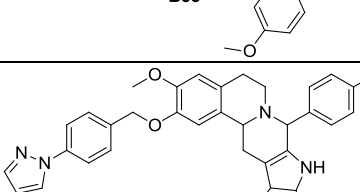
A142	(2,12-dimethoxy-3-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A143	(2-methoxy-3-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A144	(2,12-dimethoxy-3-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A145	(2-methoxy-3-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A146	(3,12-dimethoxy-2-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A147	(3-methoxy-2-((2-methoxybenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A148	(3,12-dimethoxy-2-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A149	(3-methoxy-2-((3-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A150	(3,12-dimethoxy-2-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	

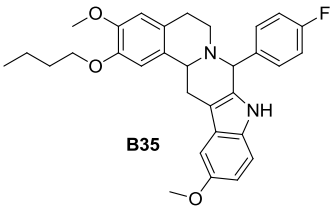
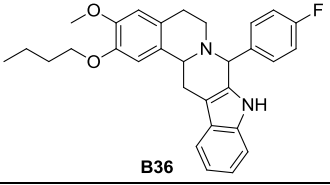
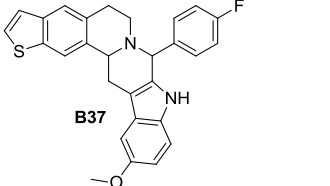
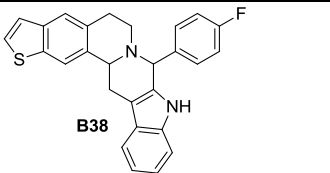
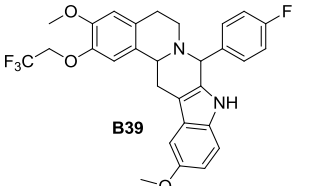
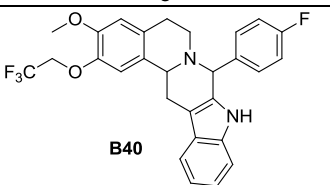
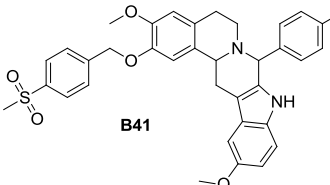
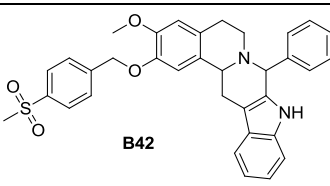
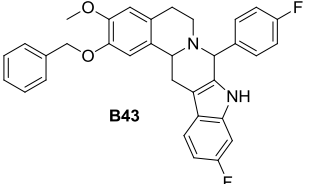
A151	(3-methoxy-2-((2-methylbenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A151
A152	(2-methoxy-3-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A152
A153	(2,12-dimethoxy-3-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A153
A154	(2-methoxy-3-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A154
A155	(2,12-dimethoxy-3-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A155
A156	(2-methoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A156
A157	(2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A157
A158	(3-methoxy-2-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	 A158

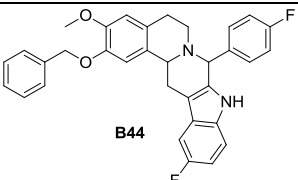
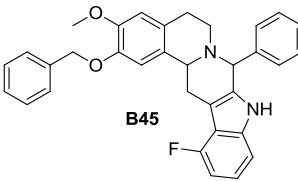
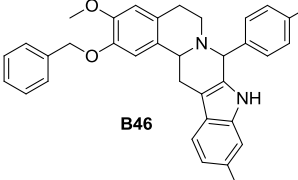
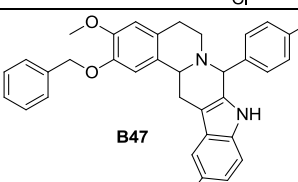
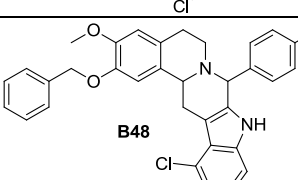
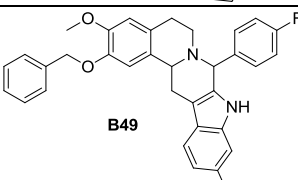
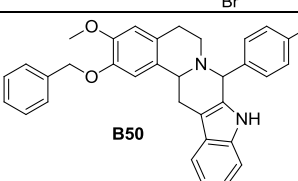
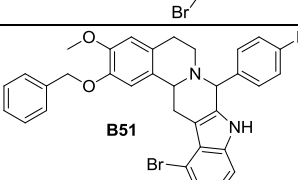
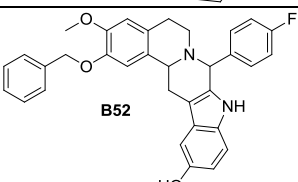
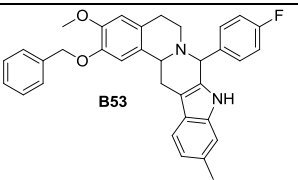
A159	(3,12-dimethoxy-2-((3,4-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A160	(3-methoxy-2-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A161	(3,12-dimethoxy-2-((3,5-difluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A162	(3-methoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
A163	(3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,14,14a-tetrahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-9(8H)-yl)methanol	
B1	2-(benzyloxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B2	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B3	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B4	8-(4-fluorophenyl)-3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

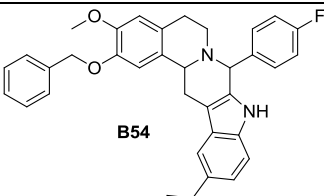
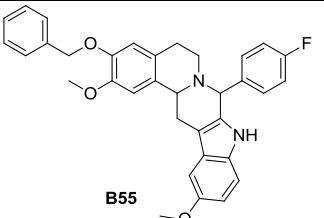
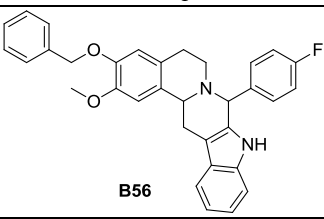
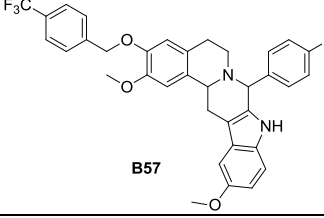
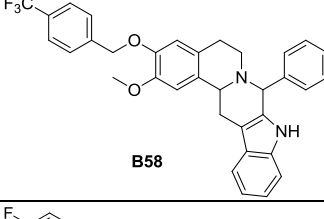
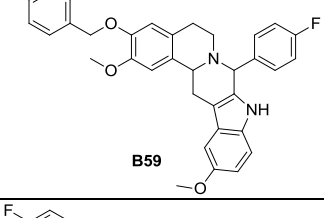
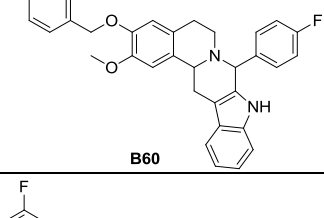
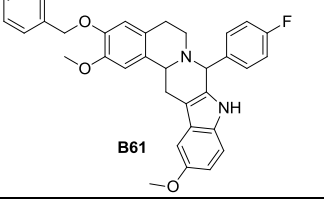
B5	2-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B6	2-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B7	2-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B8	2-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B9	2-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B10	2-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B11	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B12	8-(4-fluorophenyl)-3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B13	8-(4-fluorophenyl)-3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B14	8-(4-fluorophenyl)-3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

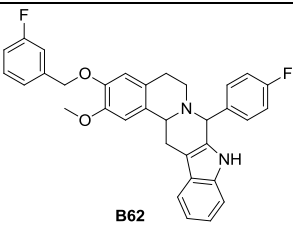
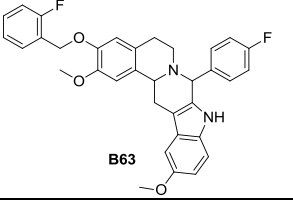
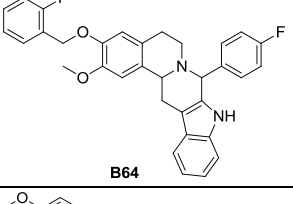
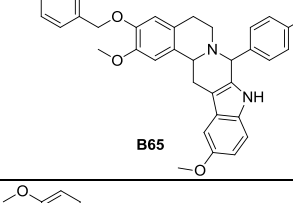
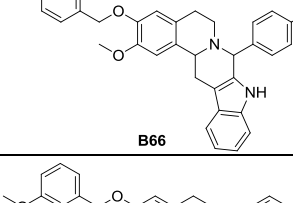
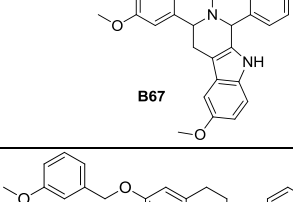
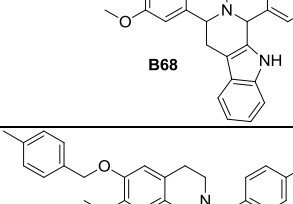
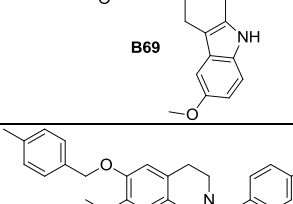
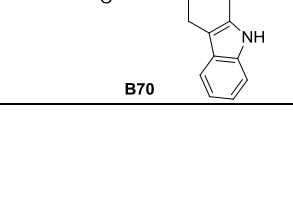
B15	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B16	8-(4-fluorophenyl)-3-methoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B17	2-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B18	2-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B19	4-(((8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
B20	4-(((8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
B21	2-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B22	2-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B23	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B24	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

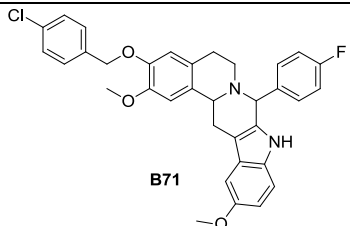
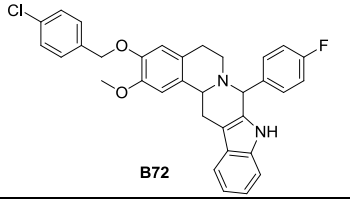
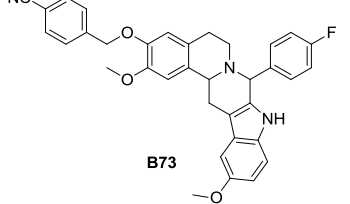
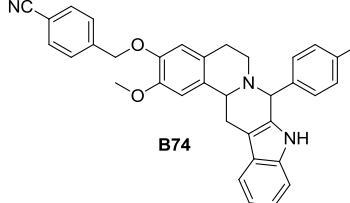
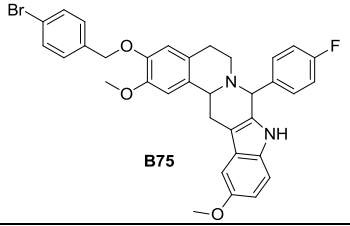
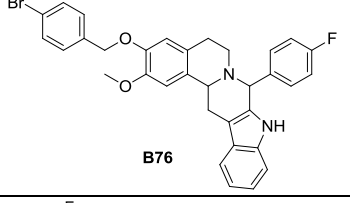
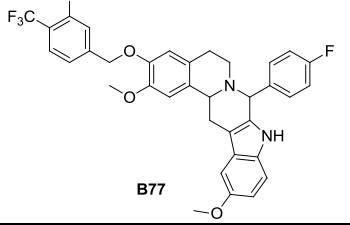
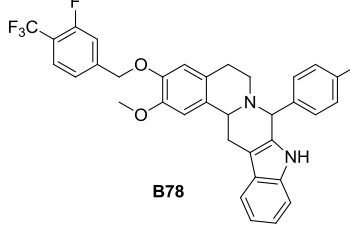
B25	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B26	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B27	2-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B28	2-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B29	8-(4-fluorophenyl)-3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B30	8-(4-fluorophenyl)-3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B31	4-(((8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
B32	4-(((8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
B33	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B34	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

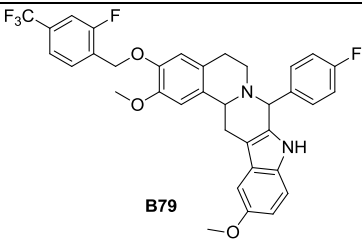
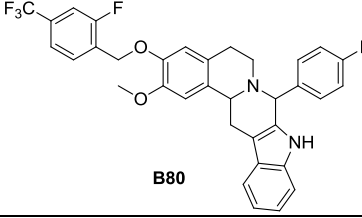
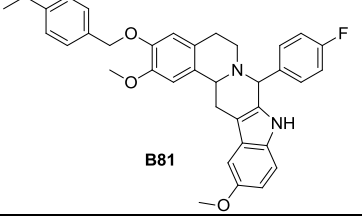
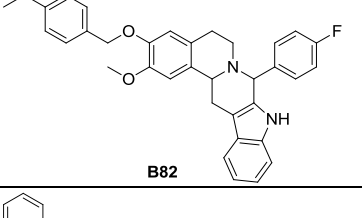
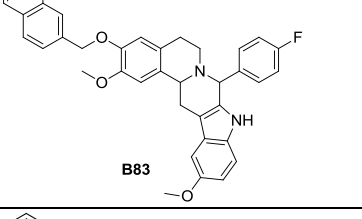
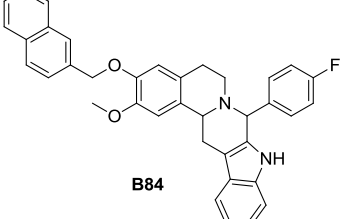
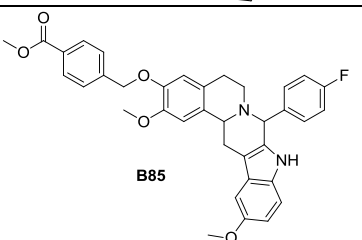
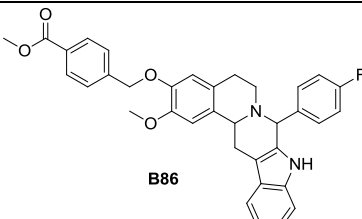
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B35	2-butoxy-8-(4-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B36	2-butoxy-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B37	8-(4-fluorophenyl)-12-methoxy-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline	
B38	8-(4-fluorophenyl)-5,6,8,9,14,14a-hexahydroindole[3',2':4,5]pyridine[2,1-a]thiophene[3,2-g]isoquinoline	
B39	8-(4-fluorophenyl)-3,12-dimethoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B40	8-(4-fluorophenyl)-3-methoxy-2-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B41	8-(4-fluorophenyl)-3,12-dimethoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B42	8-(4-fluorophenyl)-3-methoxy-2-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B43	2-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

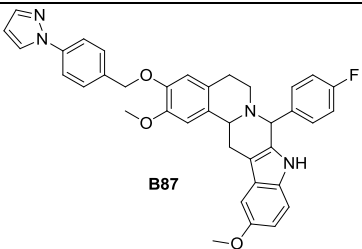
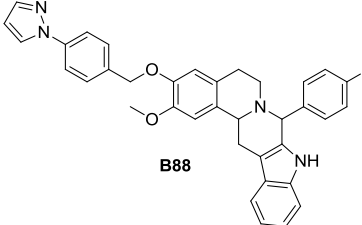
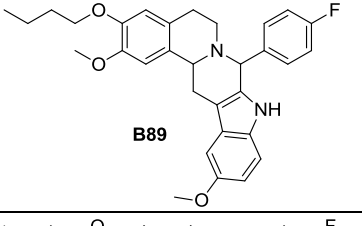
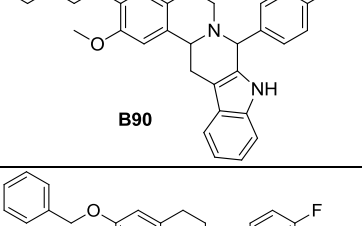
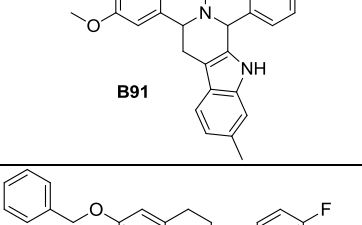
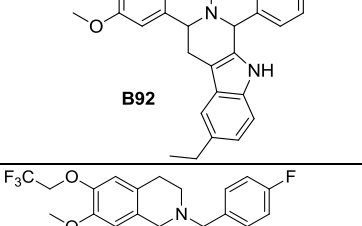
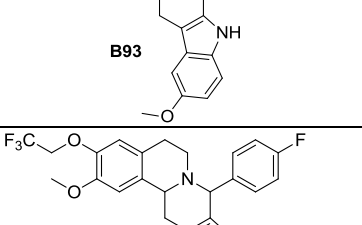
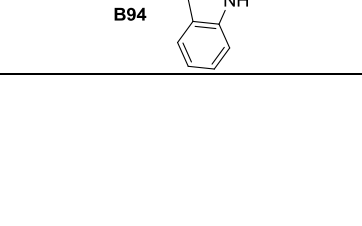
B44	2-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B45	2-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B46	2-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B47	2-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B48	2-(benzyloxy)-13-chloro-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B49	2-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B50	2-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B51	2-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B52	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
B53	2-(benzyloxy)-8-(4-fluorophenyl)-3-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

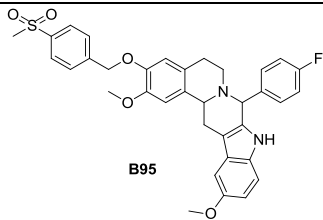
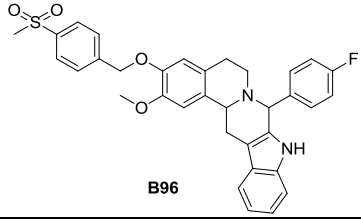
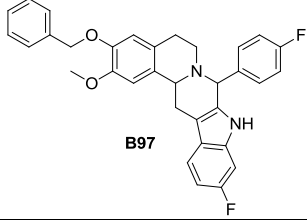
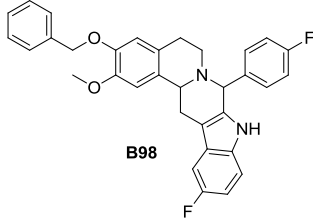
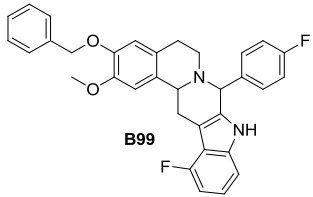
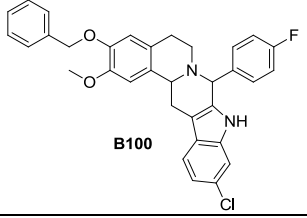
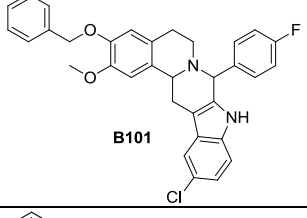
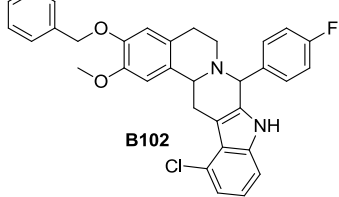
B54	2-(benzyloxy)-12-ethyl-8-(4-fluorophenyl)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B55	3-(benzyloxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B56	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B57	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B58	8-(4-fluorophenyl)-2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B59	3-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B60	3-((4-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B61	3-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

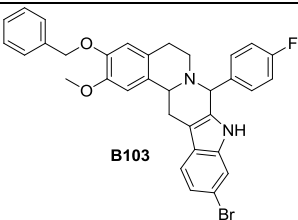
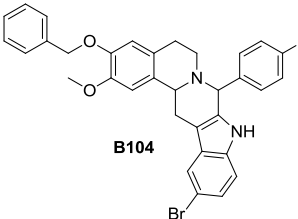
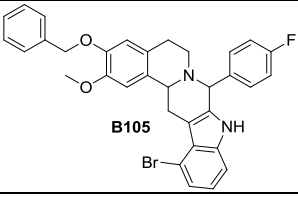
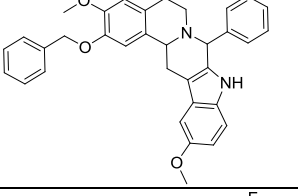
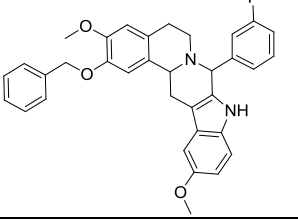
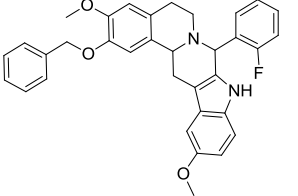
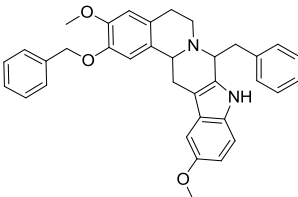
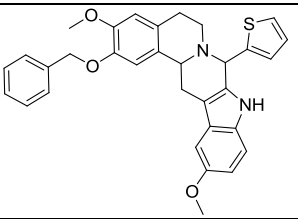
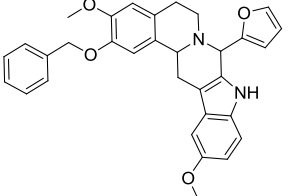
B62	3-((3-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B63	3-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B64	3-((2-fluorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B65	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B66	8-(4-fluorophenyl)-2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B67	8-(4-fluorophenyl)-2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B68	8-(4-fluorophenyl)-2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B69	8-(4-fluorophenyl)-2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B70	8-(4-fluorophenyl)-2-methoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

B71	3-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B72	3-((4-chlorobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B73	4-(((8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
B74	4-(((8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
B75	3-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B76	3-((4-bromobenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B77	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B78	3-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

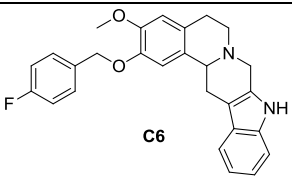
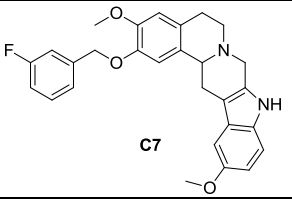
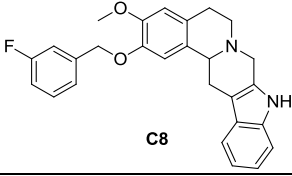
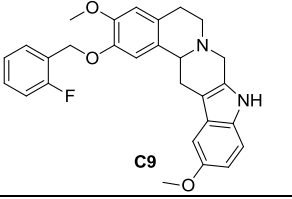
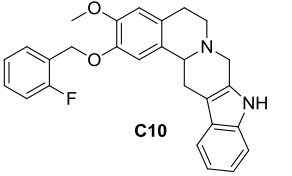
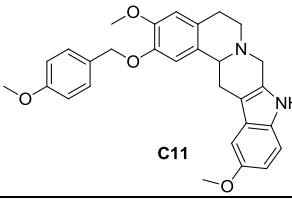
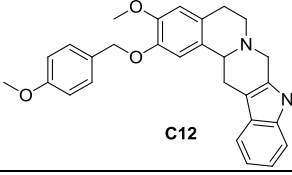
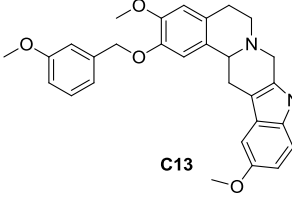
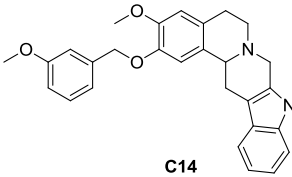
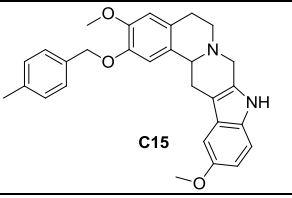
B79	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B80	3-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B81	3-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B82	3-((4-ethylbenzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B83	8-(4-fluorophenyl)-2,12-dimethoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B84	8-(4-fluorophenyl)-2-methoxy-3-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B85	4-(((8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
B86	4-(((8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	

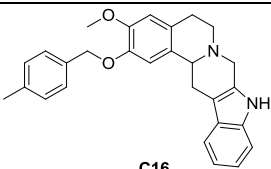
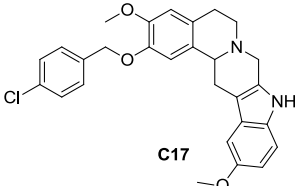
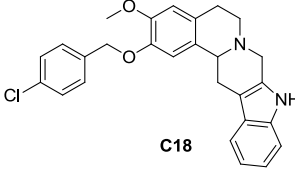
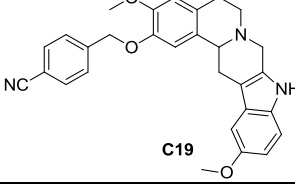
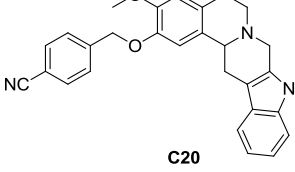
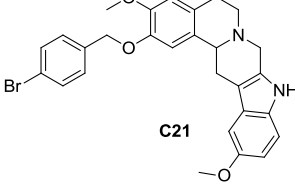
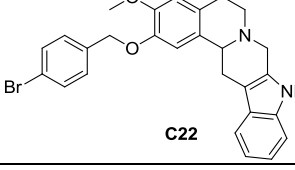
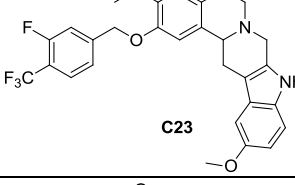
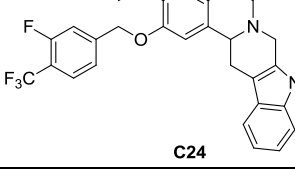
B87	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B88	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B89	3-butoxy-8-(4-fluorophenyl)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B90	3-butoxy-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B91	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B92	3-(benzyloxy)-8-(4-fluorophenyl)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B93	8-(4-fluorophenyl)-2,12-dimethoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B94	8-(4-fluorophenyl)-2-methoxy-3-(2,2,2-trifluoroethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

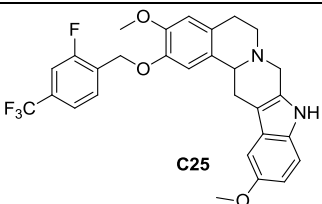
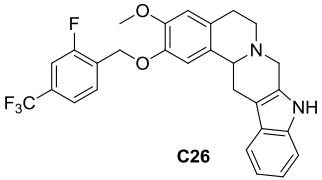
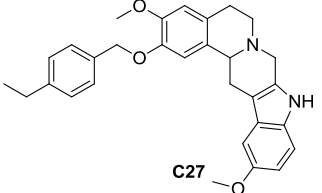
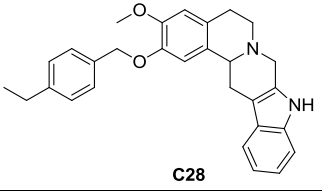
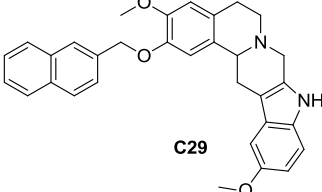
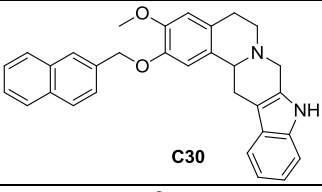
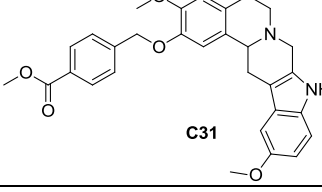
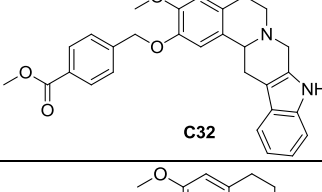
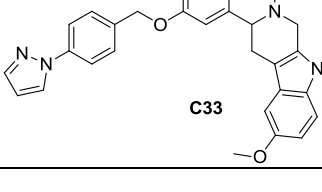
B95	8-fluoro-2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B96	8-fluoro-2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B97	3-(benzyloxy)-11-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B98	3-(benzyloxy)-12-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B99	3-(benzyloxy)-13-fluoro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B100	3-(benzyloxy)-11-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B101	3-(benzyloxy)-12-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B102	3-(benzyloxy)-13-chloro-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

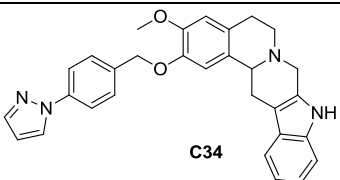
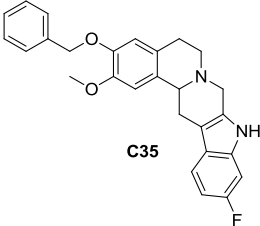
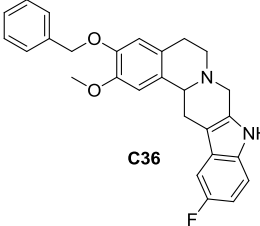
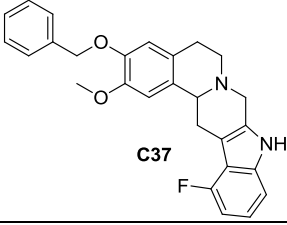
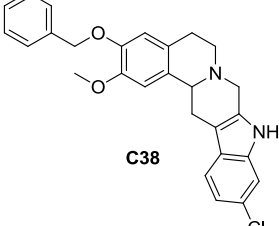
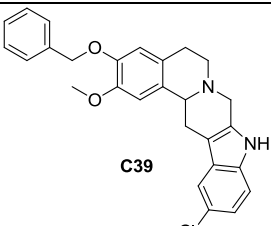
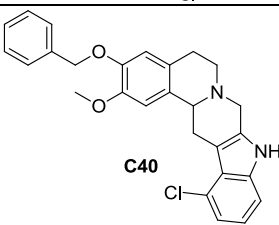
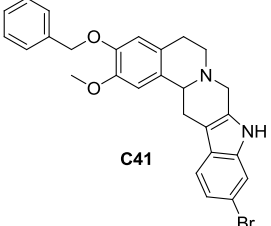
B103	3-(benzyloxy)-11-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B104	3-(benzyloxy)-12-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B105	3-(benzyloxy)-13-bromo-8-(4-fluorophenyl)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B106	2-(benzyloxy)-8-phenyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B107	2-(benzyloxy)-8-(3-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B108	2-(benzyloxy)-8-(2-fluorophenyl)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B109	2-(benzyloxy)-8-benzyl-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B110	2-(benzyloxy)-8-thiophene-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B111	2-(benzyloxy)-8-furan-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

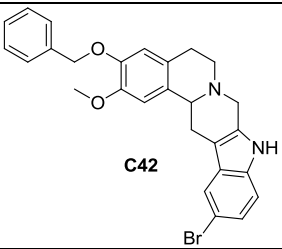
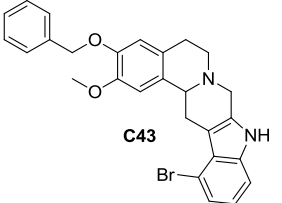
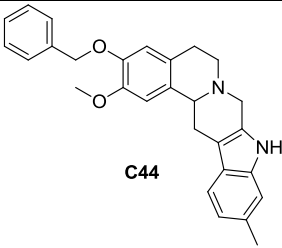
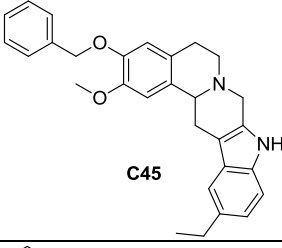
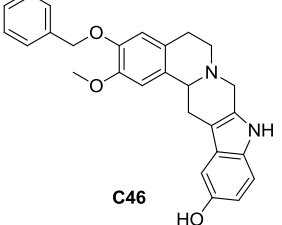
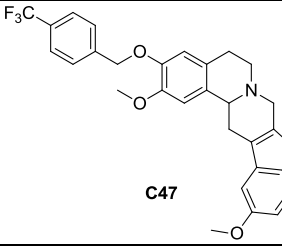
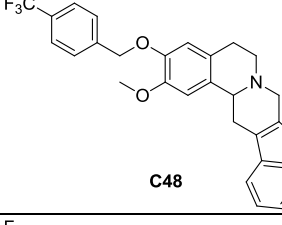
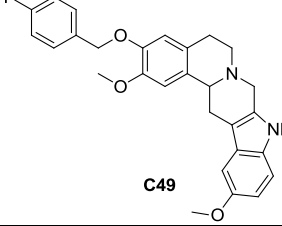
B112	2-(benzyloxy)-8-(3-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B113	2-(benzyloxy)-8-(5-methylfuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B114	2-(benzyloxy)-8-(5-cyanofuran)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
B115	2-(benzyloxy)-8-pyrrole-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C1	2-((2,4-di(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C2	2-((2,4-di(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C3	3,12-dimethoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C4	3-methoxy-2-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C5	2-((4-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C6	2-((4-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C7	2-((3-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C8	2-((3-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C9	2-((2-fluorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C10	2-((2-fluorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C11	3,12-dimethoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C12	3-methoxy-2-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C13	3,12-dimethoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C14	3-methoxy-2-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C15	3,12-dimethoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

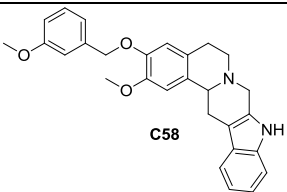
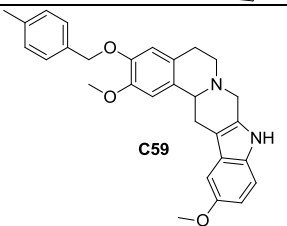
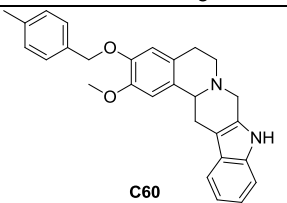
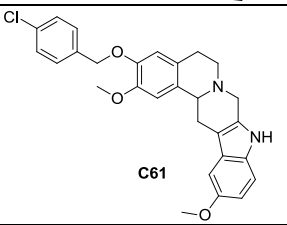
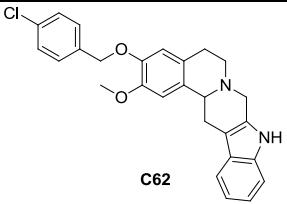
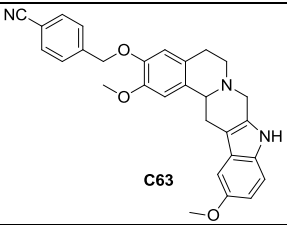
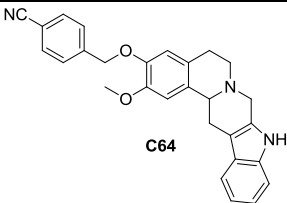
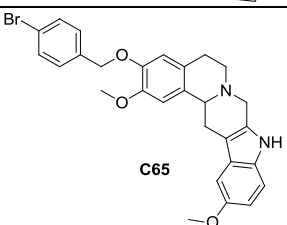
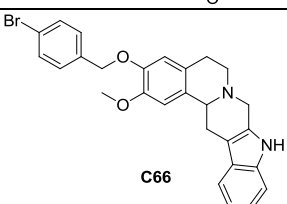
C16	3-methoxy-2-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine [2,1-a]isoquinoline	
C17	2-((4-chlorobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C18	2-((4-chlorobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C19	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
C20	4-(((3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzonitrile	
C21	2-((4-bromobenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C22	2-((4-bromobenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C23	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C24	2-((3-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

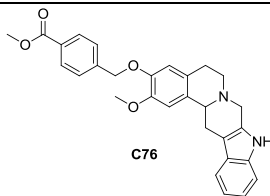
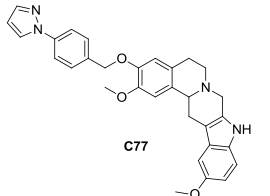
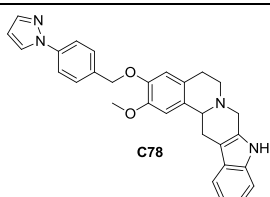
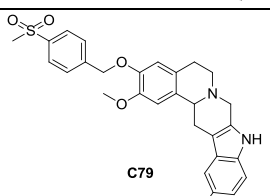
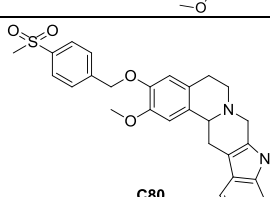
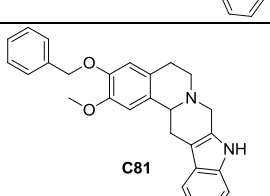
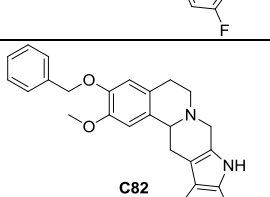
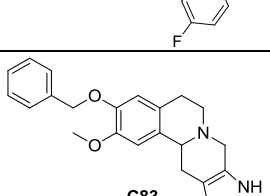
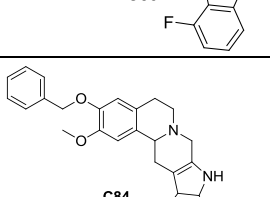
C25	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C26	2-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C27	2-((4-ethylbenzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C28	2-((4-ethylbenzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C29	3,12-dimethoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C30	3-methoxy-2-(naphthalen-2-ylmethoxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C31	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
C32	4-(((3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxo)methyl)benzoate	
C33	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

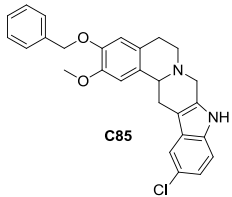
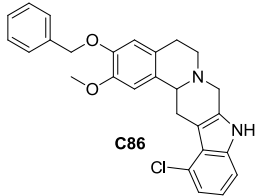
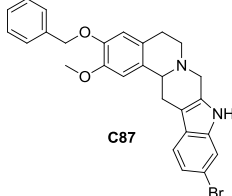
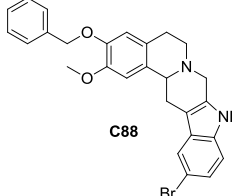
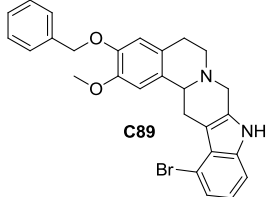
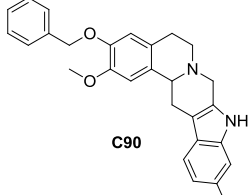
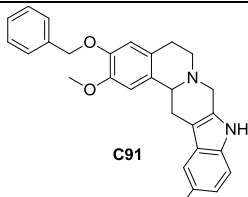
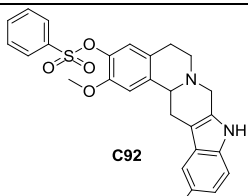
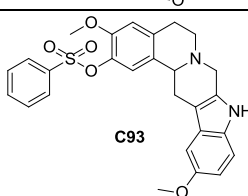
C34	2-((4-(1H-pyrazol-1-yl)benzyl)oxy)-3-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C35	3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C36	3-(benzyloxy)-12-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C37	3-(benzyloxy)-13-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C38	3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C39	3-(benzyloxy)-12-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C40	3-(benzyloxy)-13-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C41	3-(benzyloxy)-11-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

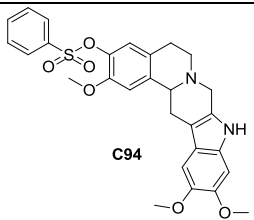
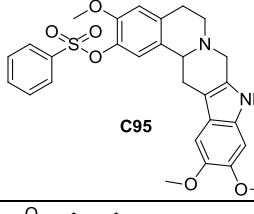
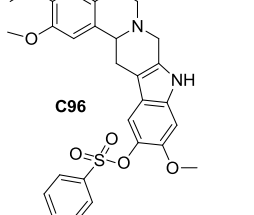
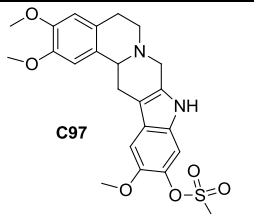
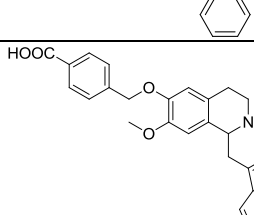
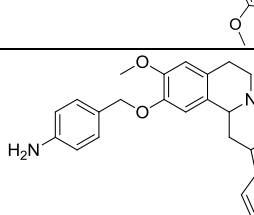
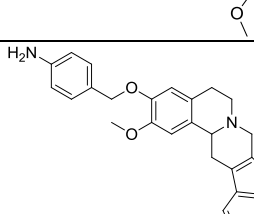
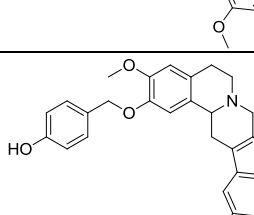
C42	3-(benzyloxy)-12-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C43	3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C44	3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C45	3-(benzyloxy)-12-ethyl-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C46	3-(benzyloxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-phenol	
C47	2,12-dimethoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C48	2-methoxy-3-((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C49	3-((4-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

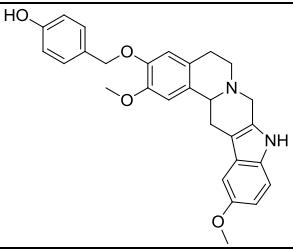
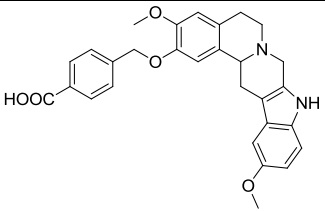
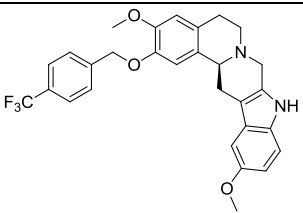
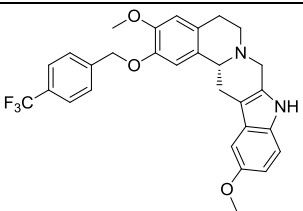
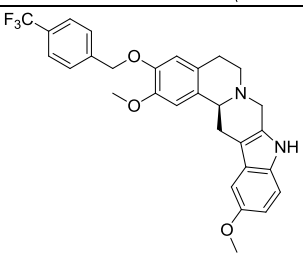
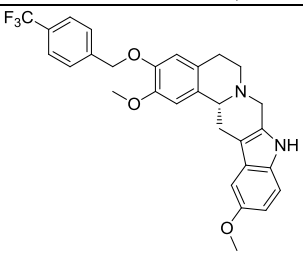
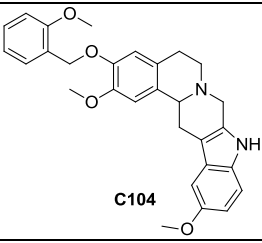
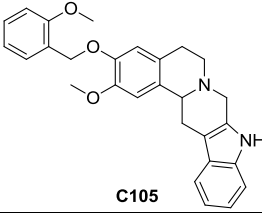
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C51	3-((3-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C52	3-((3-fluorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C53	3-((2-fluorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C54	3-((2-fluorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C55	2,12-dimethoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C56	2-methoxy-3-((4-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C57	2,12-dimethoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

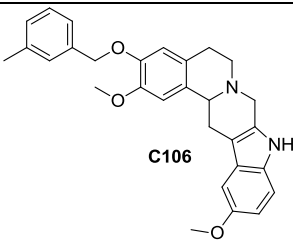
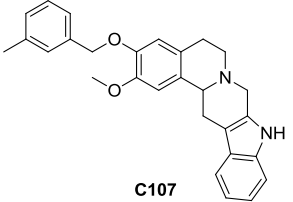
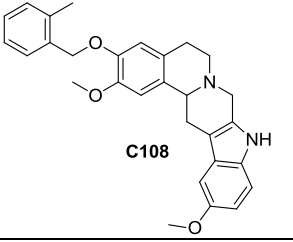
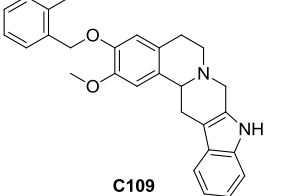
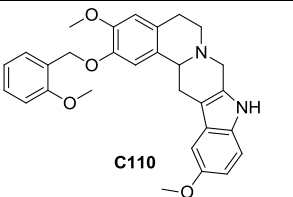
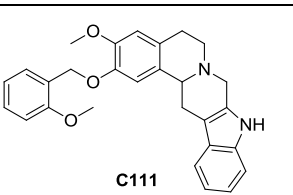
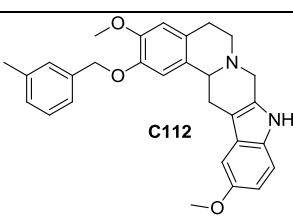
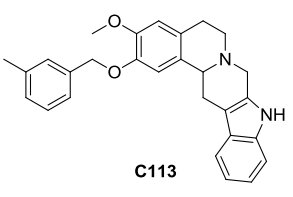
C58	2-methoxy-3-((3-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C59	2,12-dimethoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C60	2-methoxy-3-((4-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C61	3-((4-chlorobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C62	3-((4-chlorobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C63	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
C64	4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzonitrile	
C65	3-((4-bromobenzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C66	3-((4-bromobenzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

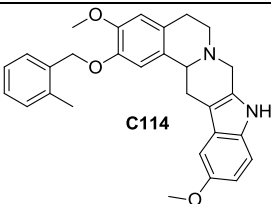
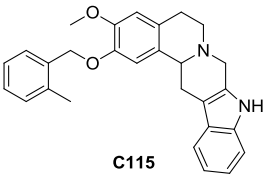
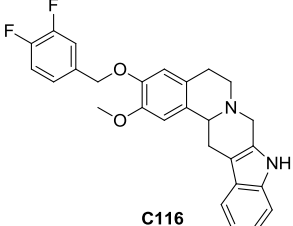
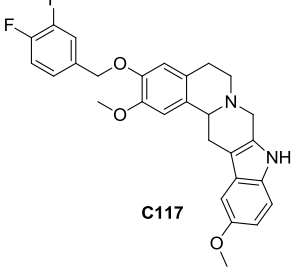
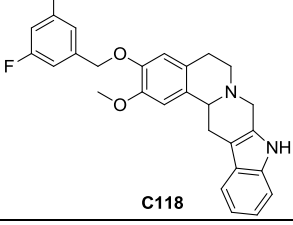
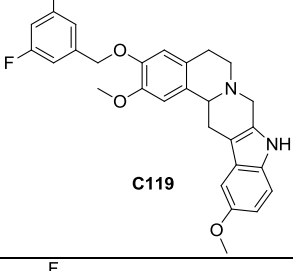
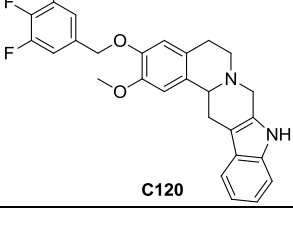
C76	4-(((2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)benzoate	
C77	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C78	3-((4-(1H-pyrazol-1-yl)benzyl)oxy)-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C79	2,12-dimethoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C80	2-methoxy-3-((4-(methylsulfonyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C81	3-(benzyloxy)-11-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C82	3-(benzyloxy)-12-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C83	3-(benzyloxy)-13-fluoro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C84	3-(benzyloxy)-11-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

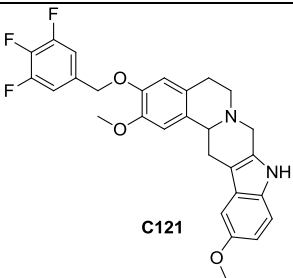
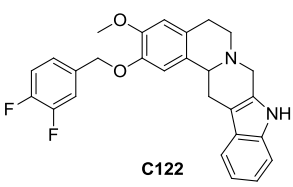
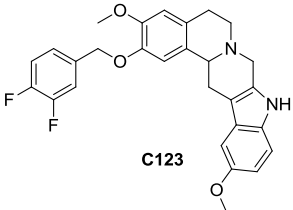
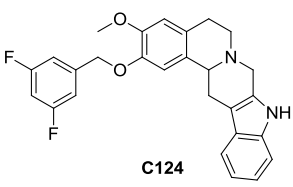
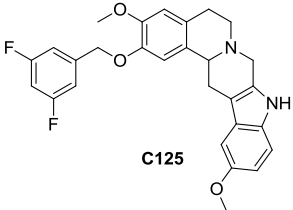
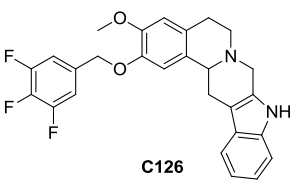
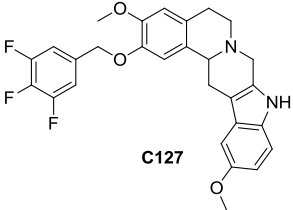
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C86	3-(benzyloxy)-13-chloro-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C87	3-(benzyloxy)-11-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C88	3-(benzyloxy)-12-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C89	3-(benzyloxy)-13-bromo-2-methoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C90	3-(benzyloxy)-2-methoxy-11-methyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C91	3-(benzyloxy)-2-methoxy-12-ethyl-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C92	2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	
C93	3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	

C94	2,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-ylbenzenesulfonate	
C95	3,11,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-ylbenzenesulfonate	
C96	2,3,11-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-12-ylbenzenesulfonate	
C97	2,3,12-trimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-11-ylbenzenesulfonate	
C98	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)benzoic acid	
C99	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)aniline	
C100	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxy)methyl)aniline	
C101	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)phenol	

C102	4-(((2,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-3-yl)oxo)methyl)phenol	
C103	4-(((3,12-dimethoxy-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline-2-yl)oxy)methyl)benzoic acid	
(S)-C3	S)-3,12-dimethoxy-2-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(R)-C3	R)-3,12-dimethoxy-2-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(S)-C47	S)-2,12-dimethoxy-3-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
(R)-C47	R)-2,12-dimethoxy-3-(((4-(trifluoromethyl)benzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyrido[2,1-a]isoquinoline	
C104	2,12-dimethoxy-3-(((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C105	2-methoxy-3-(((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

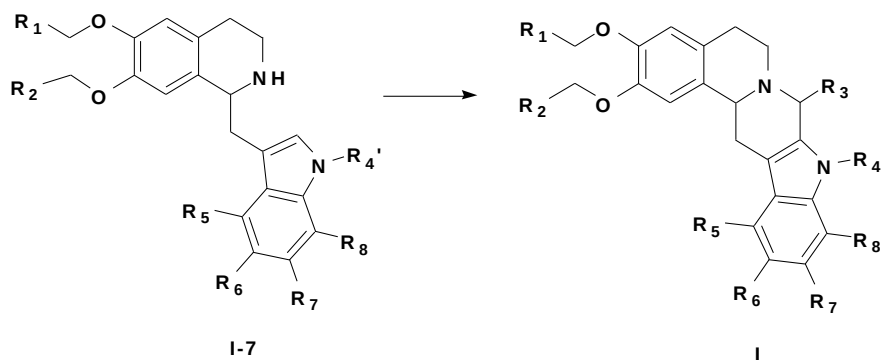
C106	2,12-dimethoxy-3-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C107	2-methoxy-3-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C108	2,12-dimethoxy-3-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C109	2-methoxy-3-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C110	3,12-dimethoxy-2-((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C111	3-methoxy-2-((2-methoxybenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C112	3,12-dimethoxy-2-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C113	3-methoxy-2-((3-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C114	3,12-dimethoxy-2-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C115	3-methoxy-2-((2-methylbenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C116	2-methoxy-3-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C117	2,12-dimethoxy-3-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C118	2-methoxy-3-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C119	2,12-dimethoxy-3-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C120	2-methoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

C121	2,12-dimethoxy-3-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C122	3-methoxy-2-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C123	3,12-dimethoxy-2-((3,4-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C124	3-methoxy-2-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C125	3,12-dimethoxy-2-((3,5-difluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C126	3-methoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	
C127	3,12-dimethoxy-2-((3,4,5-trifluorobenzyl)oxy)-5,6,8,9,14,14a-hexahydroindolo[3',2':4,5]pyridine[2,1-a]isoquinoline	

8. A PCSK9 inhibitor, which comprises a compound according to any of claims 1-6, or a enantiomer, diastereomer, racemate, or mixture thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof.

5 9. A preparation method of formula I compound of claim 1, wherein comprises the following steps:



in an inert solvent, with the existence of methanoic acid, reacting R_3 -CHO reacts with a compound of formula I-7 to obtain a compound of formula I in the presence of formic acid; wherein R_4' is of the same definition of R_4 , while they may be the same or different;

5 While the remaining groups are defined as in claim 1.

10. A pharmaceutical composition, which comprises (A) therapeutically efficient amount of one or more of a compound of claim 1, a enantiomer, diastereomer, racemate, or mixture thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof; and (B) a pharmaceutically acceptable carrier.

10 11. Use of a compound of claim 1, or a enantiomer, diastereomer, racemate, or a mixture thereof, and a pharmaceutically acceptable salt, crystalline hydrate and solvate thereof in the preparation of:

(i) a medicament for treating a disease associated with a preprotein convertase subtilisin Kexin-9 (PCSK9), wherein the PCSK9-related diseases include prevention and treatment of

15 metabolic diseases such as hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, fatty liver deformation, atherosclerosis, and obesity;

(ii) a medicament that reduces total cholesterol, LDL-cholesterol, and/or triglycerides;

(iii) a medicament that increases liver LDL receptor expression, inhibits PCSK9 expression, and/or activates AMP-activated protein kinase.