SPECIFICATION

Agent for theRemedy of Neural Damage Having a Nitrogen-Containing Compound as the Active Ingredient

Technical field

The present invention relates to an agent for the remedy of neural damage wherein the active ingredient is a nitrogen-containing compound having a prostacyclin analog structure and an amido group or an amino group at the extremity of the α-chain, as well as pharmaceutical compositions thereof. In addition, the invention relates to a nitrogen-containing compound having a prostacyclin analog structure and an amino group at the extremity of the α-chain, as well as salts thereof.

Technical background

In the nervous system, neurons perform their function once they have formed a network through synapses between neurons by extending neurites (either axon or dendrite). In addition, such intercellular communication allows the cells to maintain their own existence through a mutual exchange of transmitters and nutritional factors. Therefore, even if the neurons themselves do not suffer fatal damage, if the neural network is damaged, neural functions decrease and, further, may lead to the death of the neurons themselves. Such neural network damage is thought to be what takes place first, not only in cases such as in external injuries where axons are disrupted, but also in many disorders causing neural damage, or in the surroundings of the damaged site. Therefore, a drug agent having a capability such as restoring neural network damage is thought to be both a drug agent capable of controlling the cellular death of neurons and an extremely active drug agent for the remedy of many disorders due to neural damage as well as lesion of nerves due to external injuries.

The following may be cited as disorders caused by neural damage: 1) Neuro-degenerative disorders such as Alzheimer's disease, Pick's disease, Lewy body disease, Parkinson's disease, Huntington's chorea, spinocerebellar degeneration and amyotrophic lateral sclerosis, 2) demyelinating disorders such as acute disseminated encephalomyelitis and multiple sclerosis, 3) metabolic disorders such as brain lipidosis and Wilson's Disease, 4) infectious disorders such as meningitis and Creutzfeld-Jacob disease, 5) peripheral neural disorders such as polyneuritis and Guillain-Barre Syndrome, 6) cerebrovascular disorder such as cerebral infarction and transient ischemia, 7) nervous disorders (neuropathies) associated with diabetes and renal diseases and 8)

brain tumors.

Among the previously mentioned disorders which cause neural damage, Alzheimer's disease is the most representative, and constitutes a serious social issue together with the increase in the population of the elderly. In the past, the drug agents used for treating Alzheimer's disease could be roughly divided into those classified as activators of brain circulation and metabolism, and those classified as cholinergic nervous system activators. However, the activities of these drug agents are not sufficient.

In other words, activators of brain circulation and metabolism are drugs that are used to treat cerebrovascular damage and their after-effects, do not aid recovery directly from neural damage and therefore have a low efficacy against dementia which is the core disorder in Alzheimer's disease. In addition, activators of the cholinergic nervous system were developed based on the pathological findings that Alzheimer's disease patients had notable damage in the cholinergic nervous system. However, in Alzheimer's disease, cholinergic nervous systems are actually not the only ones that are damaged, therefore, the effects of such drugs are thought to be limited.

Given the situation, development of drugs based on novel drug effects for the treatment of Alzheimer's disease are strongly in demand. Among others, drug agents having an activity such as restoring neural network damage, as mentioned above, are anticipated to display extremely high efficacy for the treatment of Alzheimer's disease, if put into practical application.

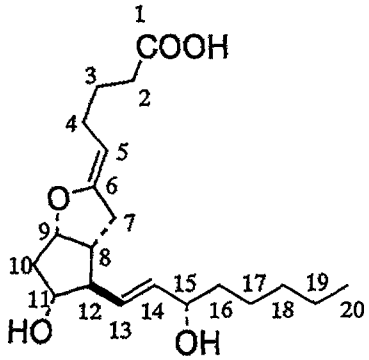
In the past, for the development of drugs for the treatment of Alzheimer's disease, the models used for evaluating the drug's efficacy at the animal level were mainly models where the cholinergic nervous system was specifically damaged by methods such as administration of scoporamine or electric destruction, or models where damage was produced by cerebral ischemia or hypoxic stress due to carbon dioxide. Although many of these evaluation systems are reasonable as evaluation systems for the activators of the cholinergic nervous system or activators of brain circulation and metabolism, they are pathogenetically and pathologically distant from actual Alzheimer's disease, and are therefore not suited to the evaluation of novel drugs for the treatment of Alzheimer disease.

One important characteristic of Alzheimer's disease is the formation of senile plaques in the brain. β-amyloid proteins, which are the main constituents of these senile plaques, agglutinate in the brain to form amyloids and while being deposited in the brain tissue, exhibit their neurotoxicity, which is thought to be the main cause for Alzheimer's disease. Based on this, an animal model of Alzheimer's disease was made, wherein a mini-osmotic pump is implanted under the dorsal skin of a rat, for a continuous intracerebroventricular administration of

β-amyloid proteins to lower the ability of learning and memory (Neuroscience Letters, vol. 170, pp.63-66, 1994). In this model, deposition of the β-amyloid proteins could be recognized in the periphery of the cerebral ventricle. However, no clear neural cell death could be observed, therefore, there is a high possibility that the disorder of learning and memory observed in this model are due to damage in the neural network. Therefore, this model is an extremely rational system for screening and evaluating novel drugs for the treatment of Alzheimer's disease, and at the same time, is an adequate system for screening and evaluating novel drugs for the treatment of neural lesion due to a whole range of diseases causing neural damage, or due to injuries.

On the other hand, prostaglandin (PG) compounds are known to have multiple physiological activities such as strong platelet aggregation inhibition activity, vasodilatation and the associated hypotension activities, gastric acid secretion inhibition activity, smooth muscle contraction activity, cell protection activity, and diuretic activity. Based on such physiological activities, a number of attempts have been made to develop medicine from natural PG present *in vivo*, or from PG derivatives synthesized to serve as its agonists, and some of these attempts actually reached the market.

Prostacyclin, which is a PG, has the structure represented by the formula below (PGI2),

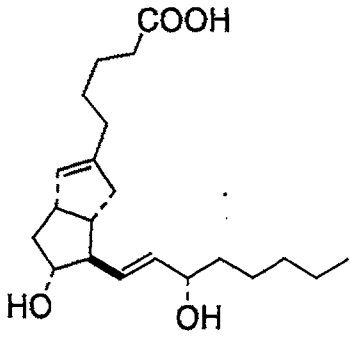


(PGI2)

(in the formula, the numbers are identification numbers for the carbon atoms in prostacyclin) which is a substance containing a structure called α-chain comprising the carbon chain from 1 to 7, and a structure called ω-chain from carbon 13 to 20. *In vivo* it is known as a local hormone, mainly made in the vascular endothelium, and attempts were made to use its strong physiological activities, for example, platelet aggregation inhibition, smooth muscle contraction, hypotension, gastric acid secretion inhibition, peripheral vasodilatation and bronchodilatation, to provide it directly as a medicine (P. J. Lewis, J. O. Grady, Clinical Pharmacology of Prostaglandin).

However, because a prostacyclin molecule has a highly hydrolizable enol-ether bond,

it is easily inactivated under neutral or acidic conditions, which makes it problematic in compounds to be used as medicines. Therefore, synthetic research was carried out on a compound having a prostacyclin analog structure, displaying the same activity as prostacyclin and being chemically stable (Synthesis, 1984, p. 449). In other words, this objective was achieved mainly by modifying the bicyclo[3.3.0]octane ring structure of from carbon 5 to 12 in prostacyclin. For example, the oxygen atoms bridging position 6 to 9 may be substituted with a methene group (-CH=) to synthesize the compound 9(O)-methano-$\Delta^{6(9\alpha)}$-prostaglandin I_1 (Isocarbacyclin) indicated by the formula below (Isocarbacyclin),



(Isocarbacyclin)

which is a compound having a prostacyclin analog structure fully satisfying the chemical stability (Japanese patent publication Sho. 59-210044). This compound displayed biological activities comparable to those of prostacyclin such as strong platelet aggregation inhibitory activity and vasodilatory-hypotensive activities (Japanese patent publication Sho. 59-210044 and Japanese patent publication Sho. 61-197518).

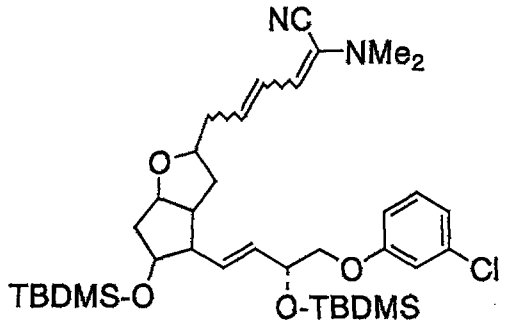
In the past, development of PG compounds to be used as medicine was mainly carried out in the field of obstetrics and gynecology, circulation or digestion. In the nerve field, there are no examples of these compounds commercialized as medicine, although there have been reports on the possibility of using PG compounds in nervous systems.

The following are known examples describing in particular the effect of compounds having a prostacyclin analog structure and which remedy neural damage: 1) in Japanese patent publication Sho. 61-129146, a compound having an isocarbacyclin analog structure was used for the prevention of or the treatment of the brain for disorders such as cerebral oxygen deficiency, 2) in Japanese patent publication Hei. 2-167227, a compound having an isocarbacyclin analog structure was used for the treatment of diabetic neuropathy, 3) in Japanese patent publication Hei. 8-245498, Japanese patent publication Hei. 10-101610, Japanese patent publication Hei. 11-5764 and patent No. EP-911314, a compound having an isocarbacyclin analog structure was used as a drug for the treatment of central nervous system

disease, via the prostacyclin receptor of the central nervous system 4) in patent No. WO89/03387, 2,5,6,7-tetranor-4,8-inter-m-phenylene PGI_2 derivative was used as a drug for the treatment of cerebral ischemia 5) in Japanese patent publication Hei. 2-262519, beraprost was used for the treatment of diabetic neuropathy, 6) in Japanese patent publication Sho. 63-141927, treatment and prevention of cerebral thrombosis and cerebral infarction.

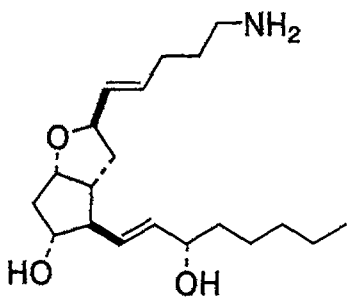
In the previously mentioned examples, however, the efficacy is described for compounds with a carboxyl group at position 1 of the prostacyclin or an ester thereof. Only in the compounds having a prostacyclin analog structure described in the above mentioned 6), a compound having a prostacyclin analog structure wherein the carboxyl group at position 1 is substituted by an amide group is described. However, there is no concrete description related to its pharmacological activity. Therefore, the usability of a compound having a prostacyclin analog structure wherein the carboxyl group at position 1 is substituted with an amide group, as a drug for the remedy of neural damage, was not known.

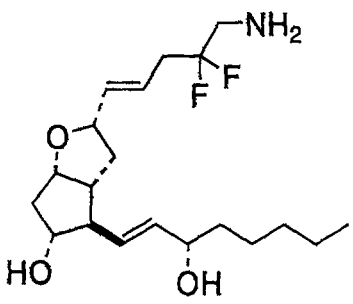
On the other hand, most of the compounds of the past known to have a prostaglandin analog activity, are compounds having a prostacyclin analog structure with, at position 1, a carboxyl group which is thought to be important for expressing the activity, or a chemical structure that can be easily substituted with a carboxyl group *in vivo*. Therefore, there are only few publicly known substances having a prostacyclin analog structure with an amino group at the extremity of the α-chain. For example, the compound below, described in the (East) German patent No. DD266102,



(in the formula, the symbol ∿∿ indicates the E or the Z configuration with respect to the attached double-bond and TBDMS represents a t-butyl-dimethylsilyl group).
However, it is positioned as a synthetic intermediate, and a description of its activity is not available.

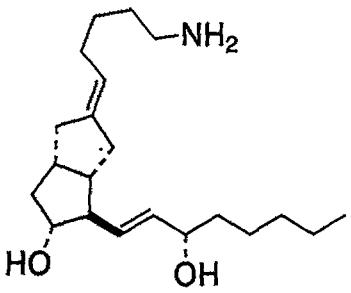
In addition, in the U.S. patent publication No. US4226984, the compounds having the structure indicated below





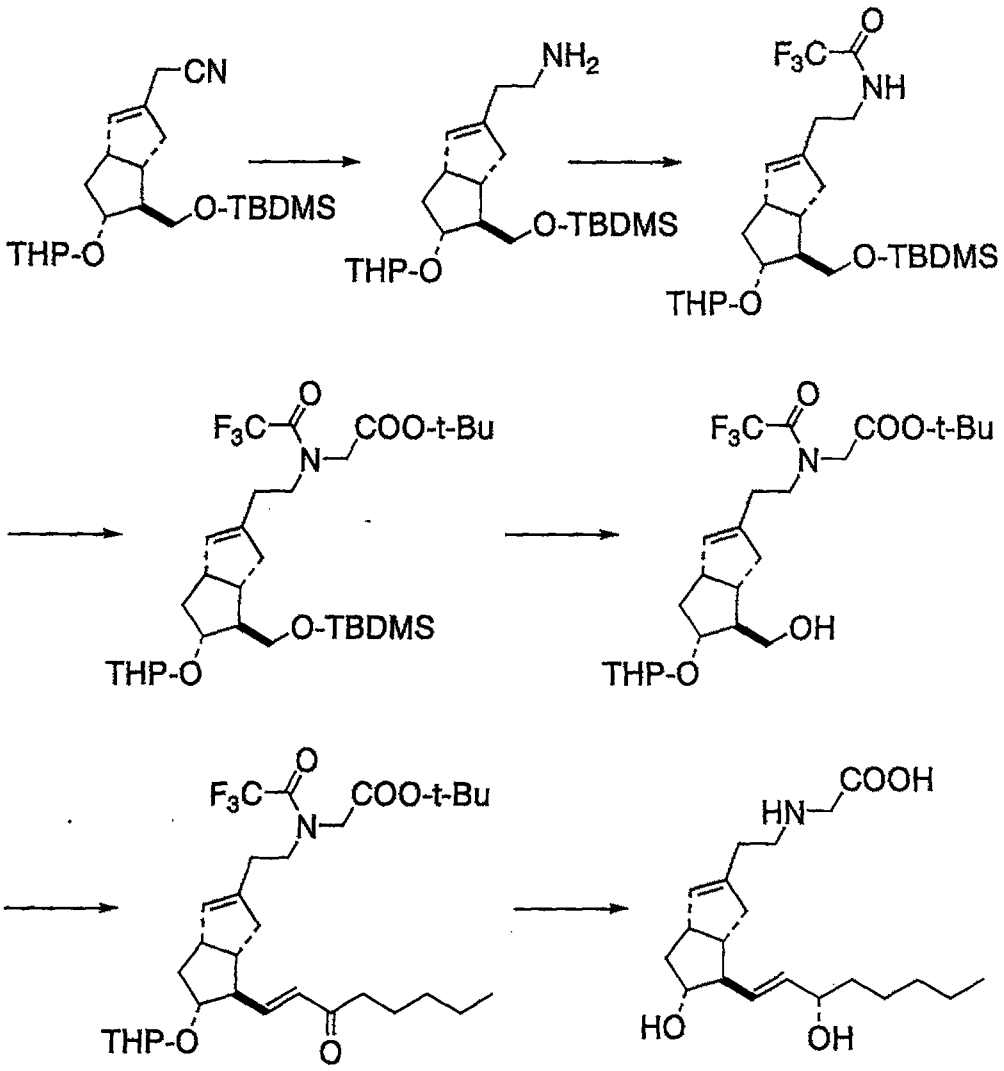
and their substituted versions on the ω-chain are described as having a stimulatory effect on smooth muscles. However, no concrete example is given.

In addition, in the Japanese patent publication Sho. 54-117450, a synthesis of the compound having the structure below



is described. However, no description on its activity is given.

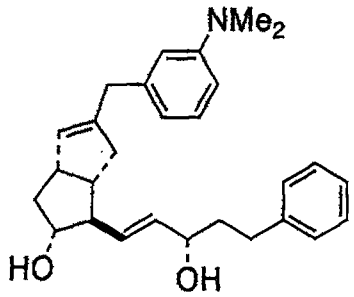
In addition, in the Japanese patent publication Sho. 62-67046, the compounds of the scheme below

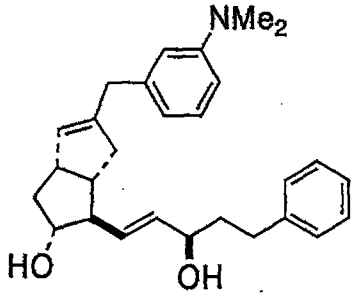


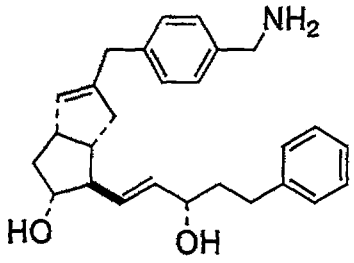
(in the scheme, THP represents tetrahydropyrane-2-yl group and TBDMS represents a t-butyl-dimethylsilyl group.)

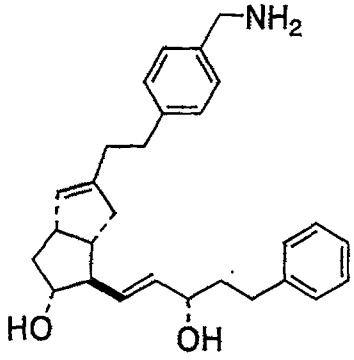
and their substituted versions on the ω-chain are described. However, no description of their activity is given

In addition, in the Japanese patent publication Hei. 9-67285, the 4 compounds below



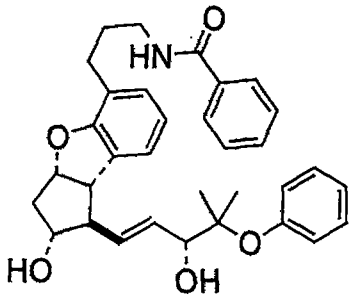






are described. However, no description of their activity is given.

In addition, in the detailed description of WO00/24727, only a description of the anti-helicobacter activity is given, of a derivative of the compound having an amino group at the extremity of the α-chain, comprising the compound indicated by the formula below,



and being a compound with a prostacyclin analog structure.

Therefore, most of the compounds having a prostacyclin analog structure with an amino group at the extremity of the α-chain were novel substances with no known usability.

Disclosure of the invention

The problem to be solved by the present invention is to provide a novel agent for the remedy of neural damage which can act against disorders due to neural damage, or against neural lesions due to external injuries. Here, disorders caused by neural damage, or disorders

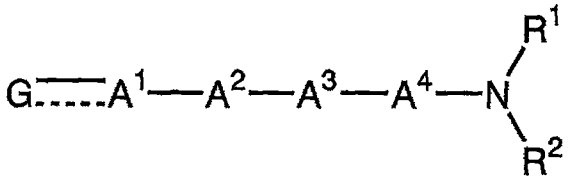
caused by neural lesions due to external injuries may be cited as disorders in which the agent for the remedy of neural damage of the present invention can be used. Concretely, the following may be cited as disorders caused by neural damage: 1) Neuro-degenerative disorders such as Alzheimer's disease, Pick's disease, Lewy body disease, Parkinson's disease, Huntington's chorea, spinocerebellar degeneration and amyotrophic lateral sclerosis, 2) demyelinating disorders such as acute disseminated encephalomyelitis and multiple sclerosis, 3) metabolic disorders such as brain lipidosis and Wilson's Disease, 4) infectious disorders such as meningitis and Creutzfeld-Jacob disease, 5) peripheral neuropathies such as polyneuritis and Guillain-Barre Syndrome, 6) cerebrovascular disorder such as cerebral infarction and transient ischemia, 7) nervous disorders (neuropathies) associated with diabetes and renal diseases and 8) brain tumors.

In addition, when attempting to develop PG compounds to serve as a medicine in the cerebral nerve field, two problems have to be considered. The first problem is that the diversity of activities that PG compound has may cause adverse events. In order to solve this problem, it is necessary to use compounds that are active as specifically on the cerebral nervous system as possible, with low influences on other parts such as circulatory organs. The second problem is that, in contrast to the vascular system in peripheral organs, in the vascular system of the brain, the vascular endothelial cells are associated by tight junctions, which results in a limitation of the delivery of substances from the circulating blood to the parenchymal tissue of the brain, that is, a so-called blood brain barrier exists. Therefore, in order to develop drug agents for the cerebral nervous system, it is necessary to obtain drugs with a high permeability across the blood brain barrier.

After performing extensive research on the above-mentioned problems employing neuroid cells to evaluate the promotion activity on the neurite outgrowth, an evaluation system using an animal model for Alzheimer type dementia wherein β-amyloid protein is continuously injected, and a system to evaluate the decrease of blood pressure, the inventors of the present application found that the nitrogen-containing compound in the formula (1) shown below, having a prostacyclin analog structure and an amido group or an amino group at the extremity of the α-chain, had the activity of promoting the neurite outgrowth, as well as the activity of remedying disorders of learning and memory provoked by the β-amyloid protein. In addition, the above-mentioned compounds showed that they have only a low influence on the peripheral circulatory system, that their activity displays a high specificity for the brain, and that the above mentioned compound has a high permeability across blood brain barriers, allowing the present invention to be completed.

In other words, the present invention is an agent for the remedy of nerve disorders

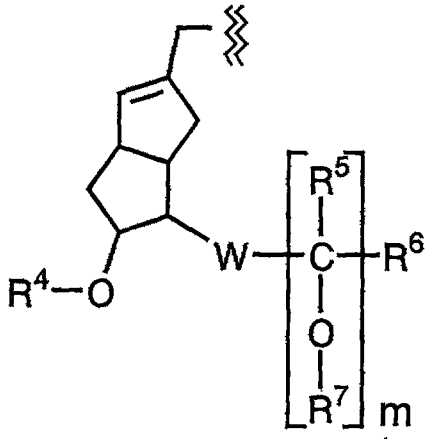
having as the active ingredient the compound represented by the formula (1) shown below.



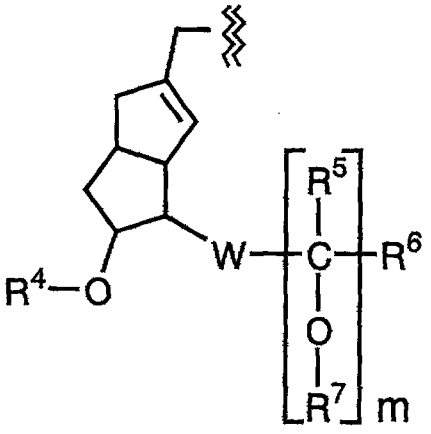
(1)

[In Formula (1), the symbol ----- represents a single bond or a double bond.

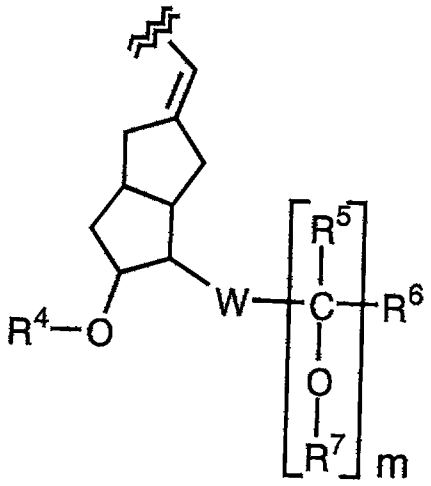
G represents one functional group chosen from the group consisting of the Formulae (G1), (G2), (G3), (G4), (G5), (G6), (G7), (G8), (G9), (G10), (G11) and (G12) shown below.



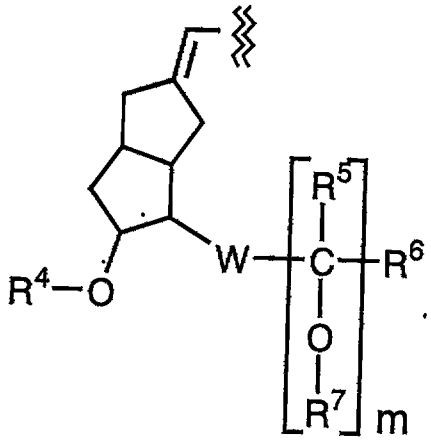
(G1)



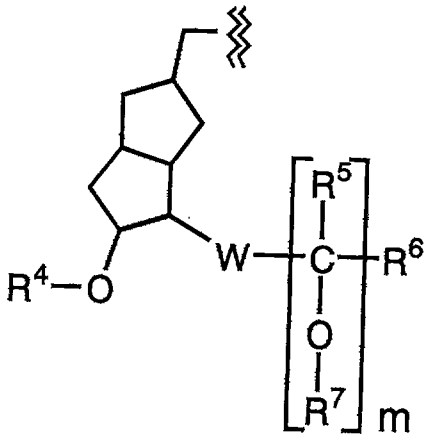
(G2)



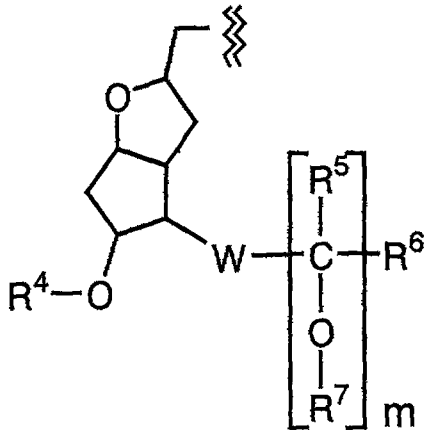
(G3)



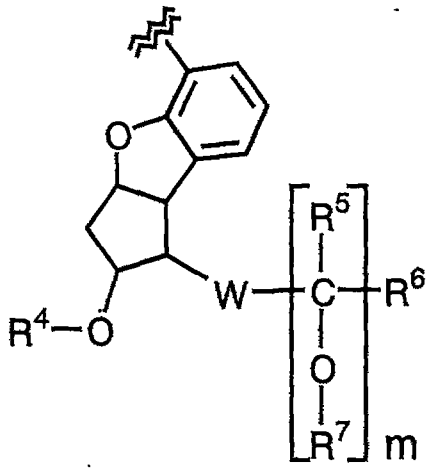
(G4)



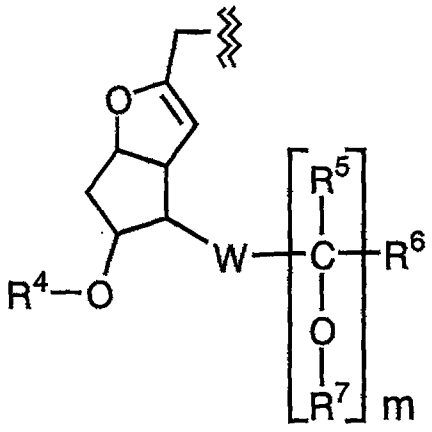
(G5)



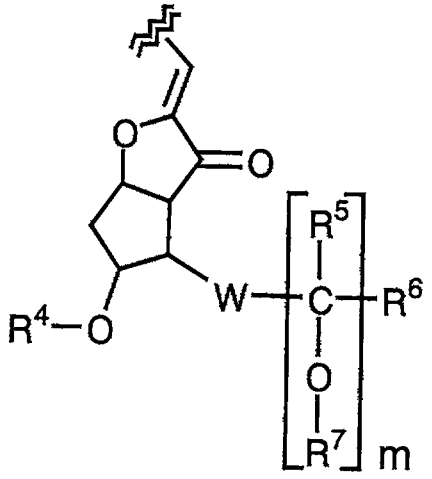
(G6)



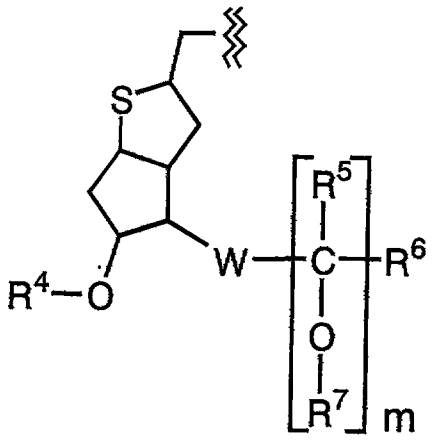
(G7)



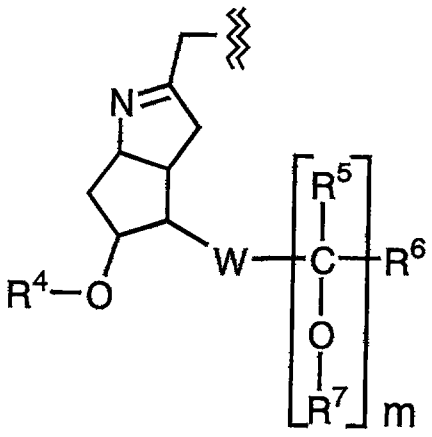
(G8)



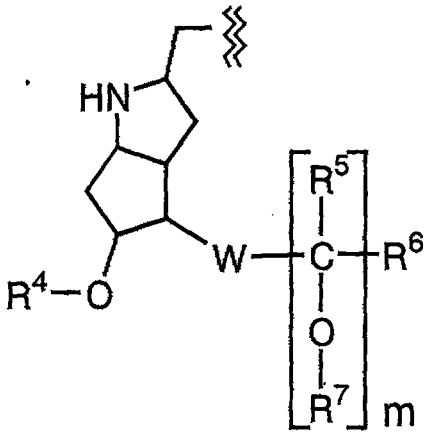
(G9)



(G10)



(G11)



(G12)

(In Formula (G1), Formula (G2), Formula (G3), Formula (G4), Formula (G5), Formula (G6), Formula (G7), Formula (G8), Formula (G9), Formula (G10), Formula (G11) and Formula (G12),

the symbol ≋ represents the site of linkage with A^1.

R^4 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group or a functional group forming the acetal bond together with the oxygen atom bonded to R^4.

W represents a single bond, $-CH_2-$, $-(CH_2)_2-$, $-(CH_2)_3-$, -CH=CH-, $-CH=CHCH_2-$, $-C\equiv C-$ or $-C\equiv CCH_2-$.

m may be either 0 or 1. However, when W is a single bond, m is equal to 1.

R^5 and R^6 are either identical or different and, either represents one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms,

fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10

carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

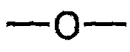
5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

or, when R^5 and R^6 are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, an acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms,

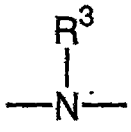
sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

R^7 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms, a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^7, or, when R^7 and R^5 are bonded to each other, it represents one portion of the bond forming the carbonyl group together with the carbon atom bonded to R^5 and the oxygen atom bonded to R^7.

A^2 represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

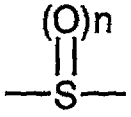


(A2A)



(A2B)

(In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.)



(A2C)

(In the formula, n represents 0, 1, or 2.)

A^1 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^2 through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^3 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^2 and A^4 through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an

alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^4 represents either of the items 1) to 4) below

1) a single bond

2) a carbonyl group

3) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^1 and R^2, and A^3 through an identical atom or through different atoms.

4) when A^4 and R^1 are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^4 or R^1 and the nitrogen atom they are bonded to are bonded through a double bond, R^2 represents the bond between A^4 or R^1 and the nitrogen atom.)

However, in the combination of A^1, A^2, A^3 and A^4, A^1, A^2, A^3 and A^4 may not simultaneously represent bonds. In addition, when A^2 represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^2 and the nitrogen atom bonded to R^1 and R^2 must be bonded with more than two carbon atoms in between.

R^1 and R^2 are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group

having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

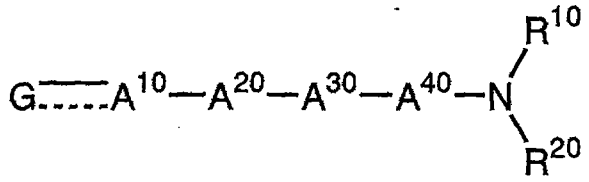
6) an acyl group having 1 to 10 carbon atoms when A^4 is not a carbonyl group,

7) a sulfonyl group having 1 to 8 carbon atoms when A^4 is not a carbonyl group (however, when either R^1 or R^2 represents a sulfonyl group having 1 to 8 carbon atoms, the other may be neither an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

or, when R^1 and R^2 are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9

carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)]

In addition, the present invention is a nitrogen-containing compound represented by Fromula (2) below or a salt thereof.



(2)

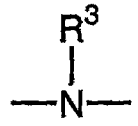
[In Formula (2), the symbol ----- represents a single bond or a double bond.
G represents one functional group chosen from the group consisting of the Formulae (G1), (G2), (G3), (G4), (G5), (G6), (G7), (G8), (G9), (G10), (G11) and (G12) shown above.
(In Formula (G1), Formula (G2), Formula (G3), Formula (G4), Formula (G5), Formula (G6), Formula (G7), Formula (G8), Formula (G9), Formula (G10), Formula (G11) and Formula (G12), the symbol ≋ represents the site of linkage with A^{10}.

R^4, W, m, R^5, R^6 and R^7 have the same definitions as above.

A^{20} represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.



(A2A)



(A2B)

(In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.)

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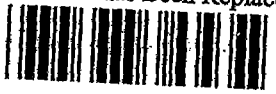
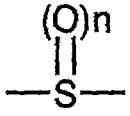




(A2C)

(In the formula, n represents 0, 1, or 2.)

A^{10} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^{20} through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{30} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^{20} and A^{40} through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{40} represents any of the items 1) to 3) below

1) a single bond

2) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^{10} and R^{20}, and A^{30} through an identical atom or through different atoms.

3) when A^{40} and R^{10} are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^{40} or R^{10} and the nitrogen atom they are bonded to are bonded through a double bond, R^{20} represents the bond between A^{40} or R^{10} and the nitrogen atom.)

However, in the combination of G, A^{10}, A^{20}, A^{30}, and A^{40}, when G represents the Formula (G1), and either of A^{10} or A^{30} is a phenylene group, A^{20} may not be a single bond. In addition, when A^{20} represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^{20} and the nitrogen atom bonded to R^{10} and R^{20} must be bonded with more than two carbon atoms in between.

R^{10} and R^{20} are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom (however, when R^{10} and R^{20} both represent a hydrogen atom, only in the case where G is equal to Formula (G1)),

2) when G is not equal to Formula (G7), a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group,

alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) when G is not equal to Formula (G7), a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) when G is not equal to Formula (G7), a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms,

acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

6) when G is not equal to Formula (G7), an acyl group having 1 to 10 carbon atoms

7) when G is not equal to Formula (G7), a sulfonyl group having 1 to 8 carbon atoms (however, when either R^{10} or R^{20} represents a sulfonyl group having 1 to 8 carbon atoms, the other may neither be an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

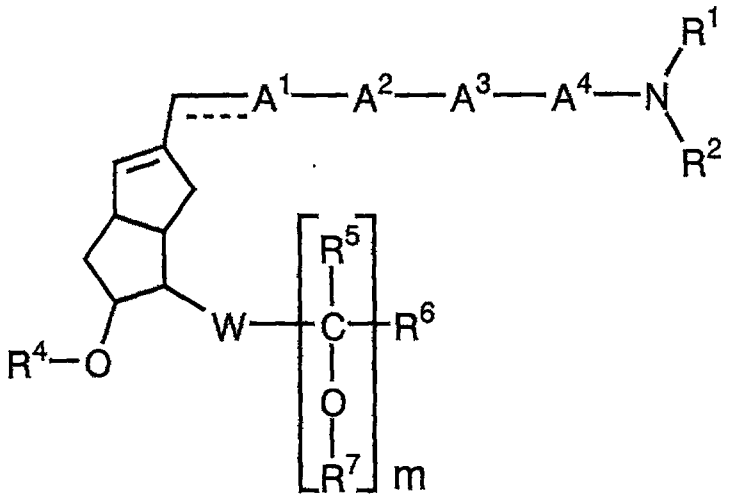
or, when R^{10} and R^{20} are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)]

Preferred embodiments

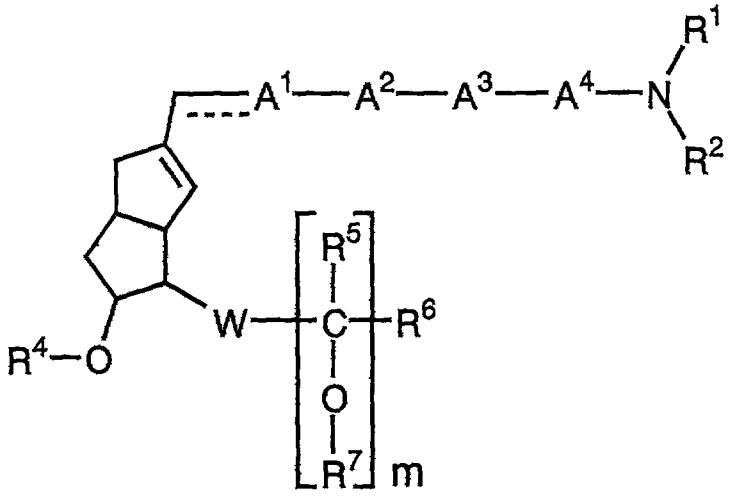
In the following, the present invention will be explained in detail.

In Formula (1) above, the symbol ⎓ represents a single bond or a double bond. G1, G2, G5, G6, G8, G10, G11 and G12 may be cited as acceptable G for forming a double bond with such a bonding site.

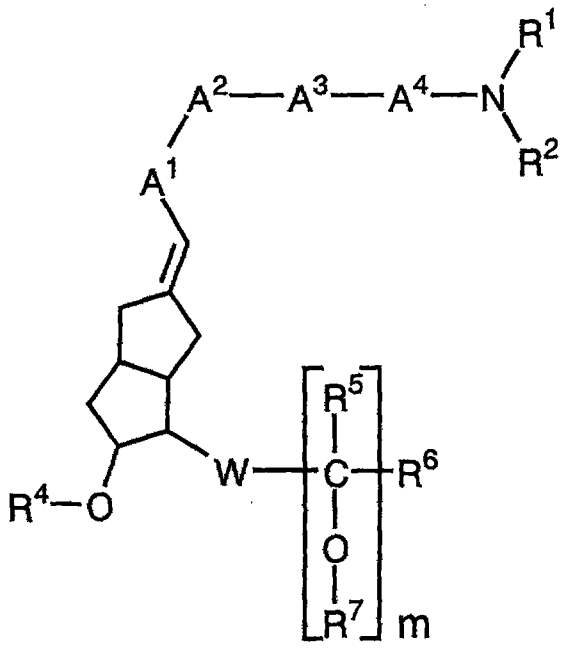
In other words, Formula (1) above, in combination with G, forms one of the Formulae (1-G1), (1-G2), (1-G3), (1-G4), (1-G5), (1-G6), (1-G7), (1-G8), (1-G9), (1-G10), (1-G11) or (1-G12), below.



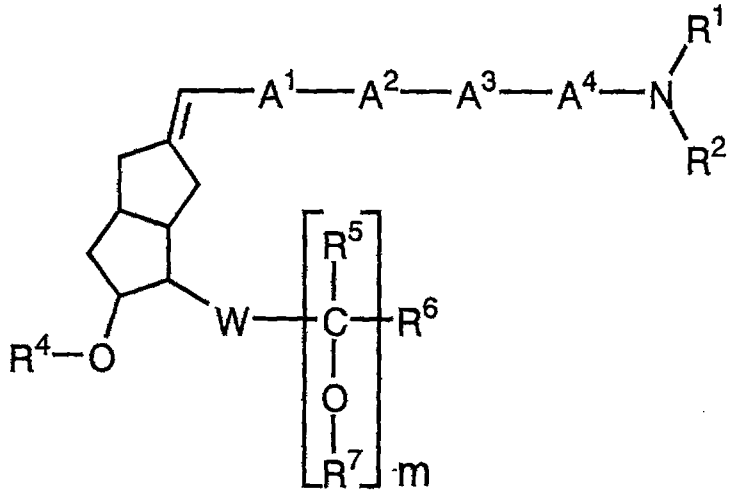
(1-G1)



(1-G2)



(1-G3)



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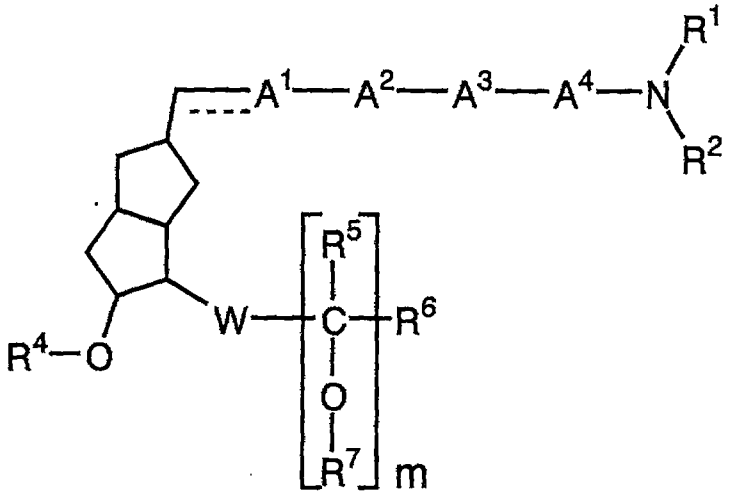
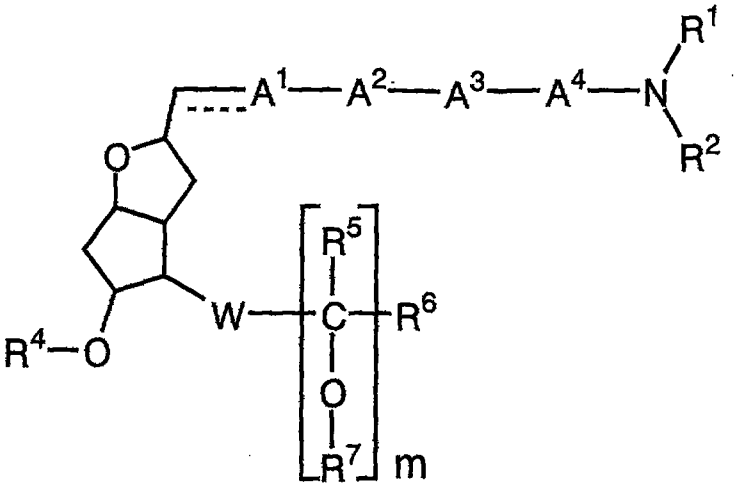


(1-G5)



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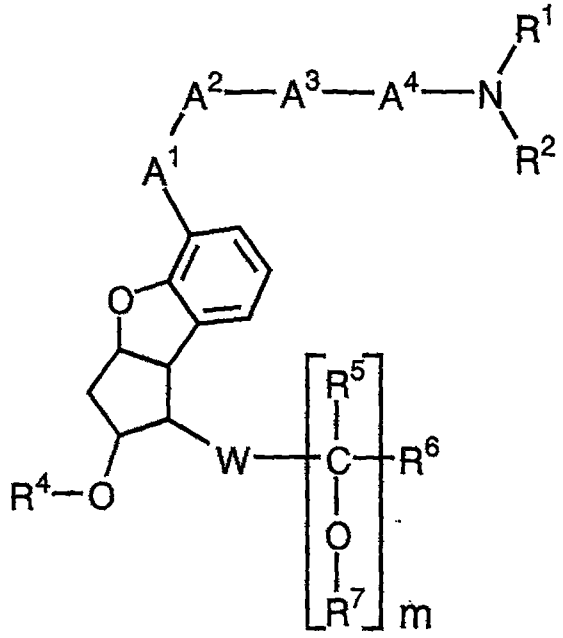
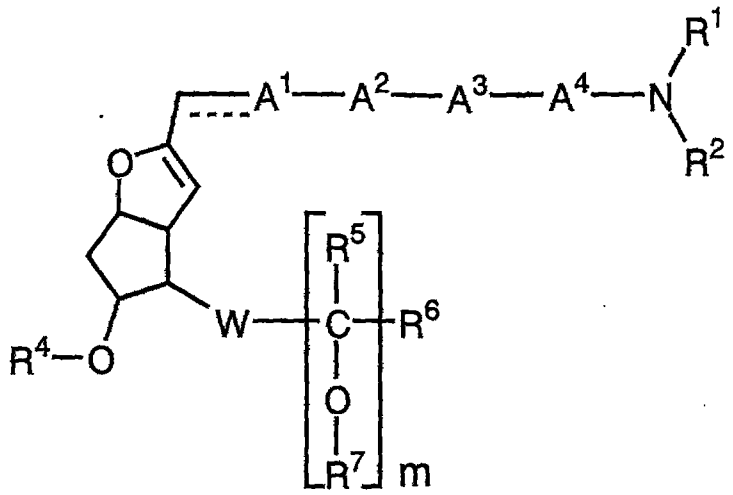
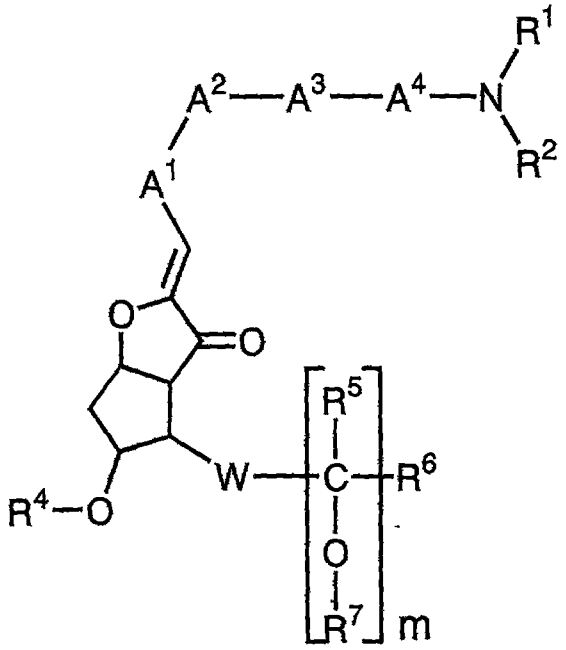


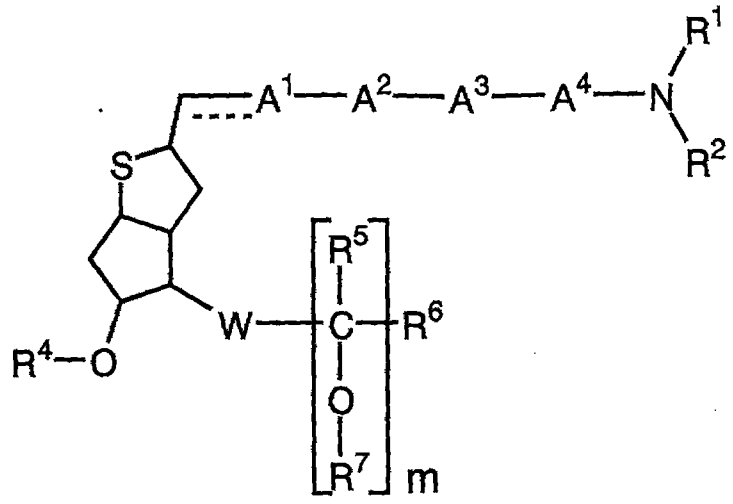
(1-G7)



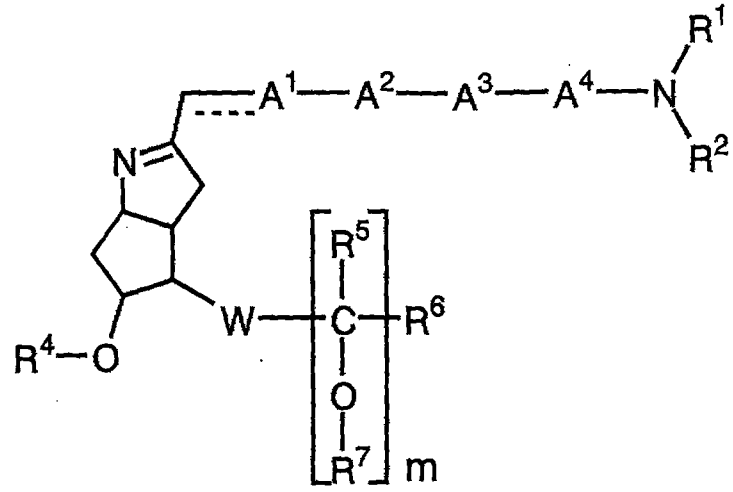
(1-G8)



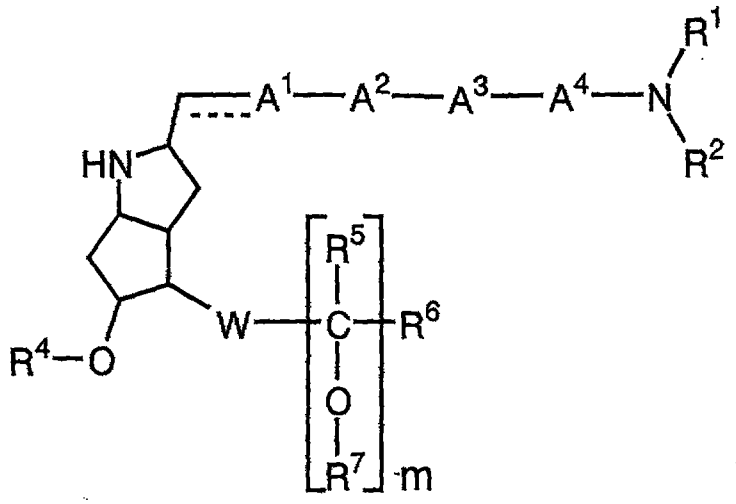
(1-G9)



(1-G10)



(1-G11)

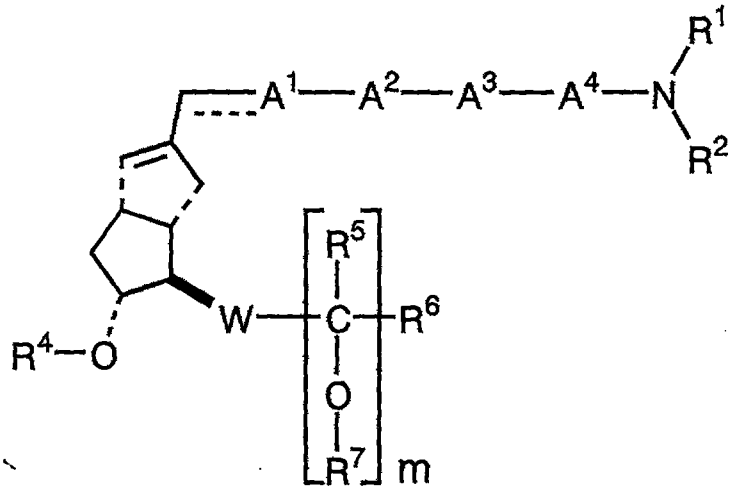


(1-G12)

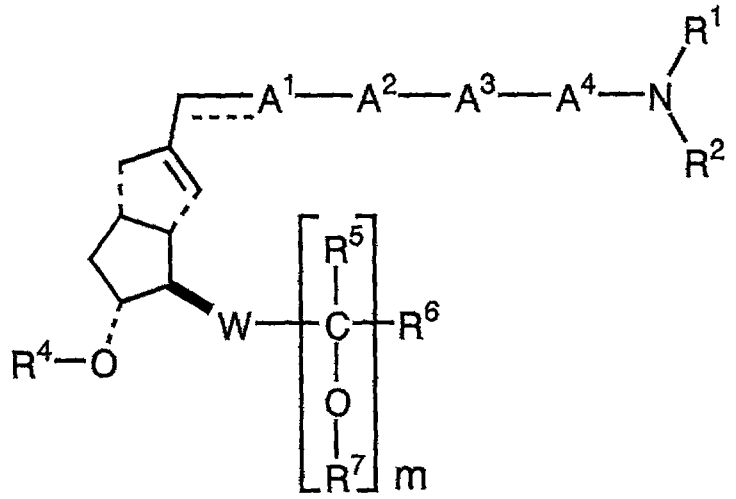
[In Formula (1-G1), Formula (1-G2), Formula (1-G3), Formula (1-G4), Formula (1-G5), Formula (1-G6), Formula (1-G7), Formula (1-G8), Formula (1-G9), Formula (1-G10), Formula (1-G11) and Formula (1-G12), the symbol ----- , A^1, A^2, A^3, A^4, R^1, R^2, R^4, R^5, R^6, R^7, m and W, have the same definitions as above.]

G1, G2, G3, G4, G5, G6 and G7 may be cited as such a preferred functional group for G. Among them G1, G3 and G7 are more preferred and G1 is especially preferred.

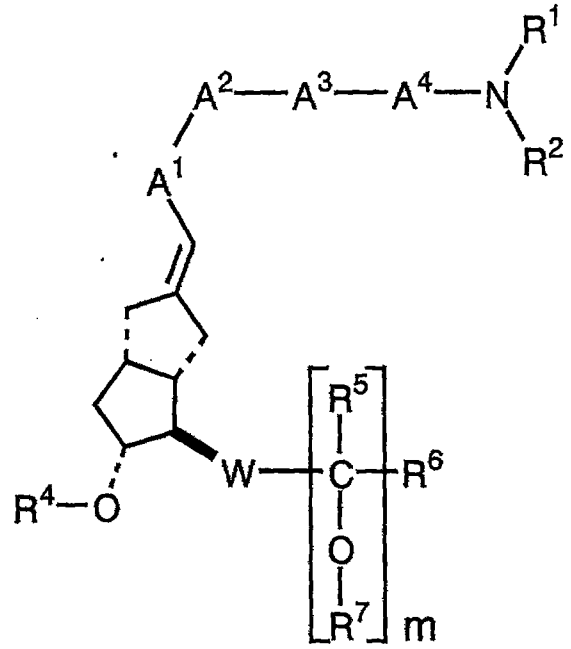
Each of the above Formulae (1-G1), (1-G2), (1-G3), (1-G4), (1-G5), (1-G6), (1-G7), (1-G8), (1-G9), (1-G10), (1-G11) and (1-G12) have a preferred spatial configuration and the ones represented by the Formulae (1-G1E), (1-G2E), (1-G3E), (1-G4E), (1-G5E), (1-G6E), (1-G7E), (1-G8E), (1-G9E), (1-G10E), (1-G11E) and (1-G12E) below may be cited.



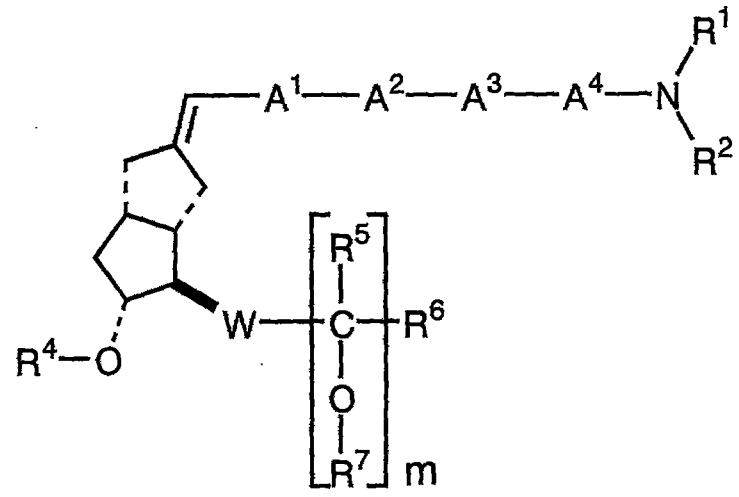
(1-G1E)



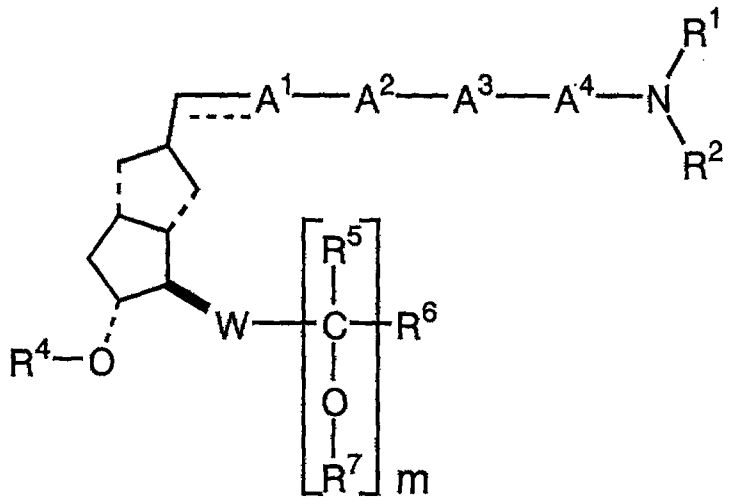
(1-G2E)



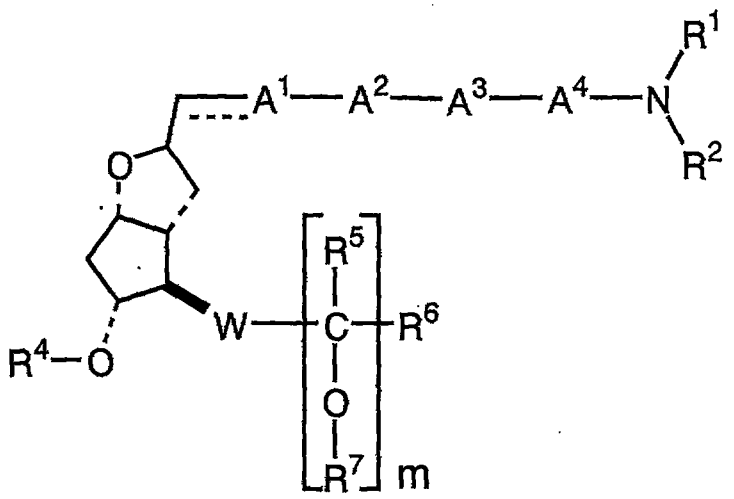
(1-G3E)



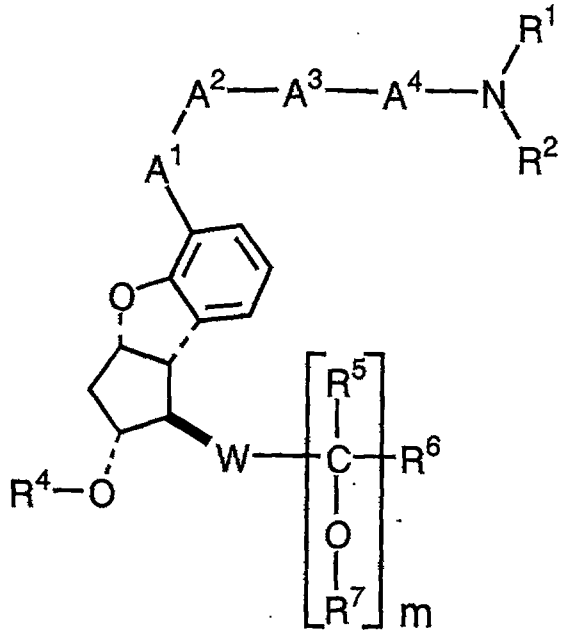
(1-G4E)



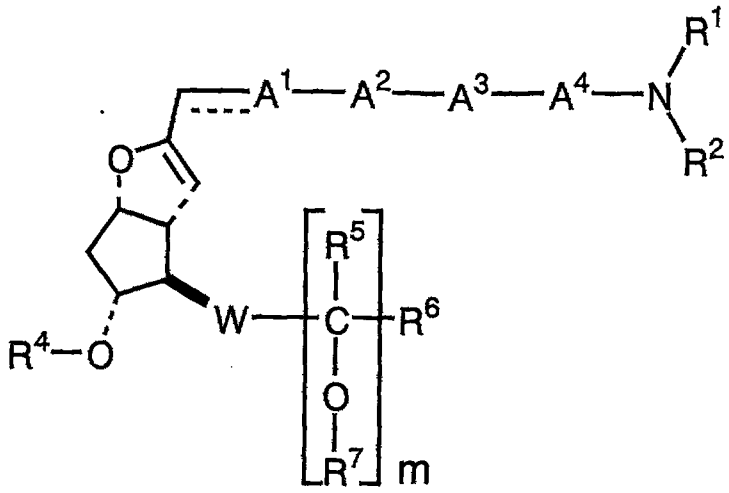
(1-G5E)



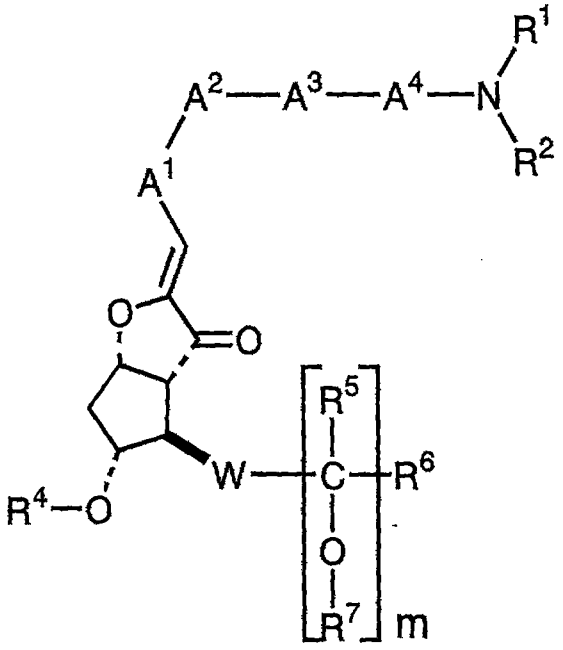
(1-G6E)



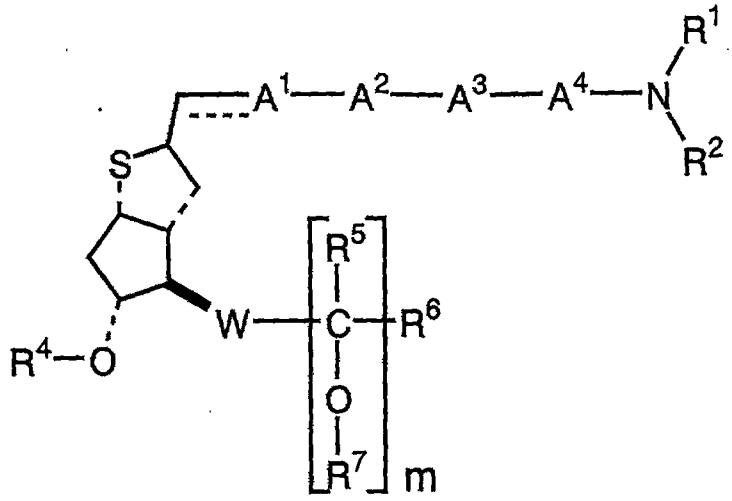
(1-G7E)



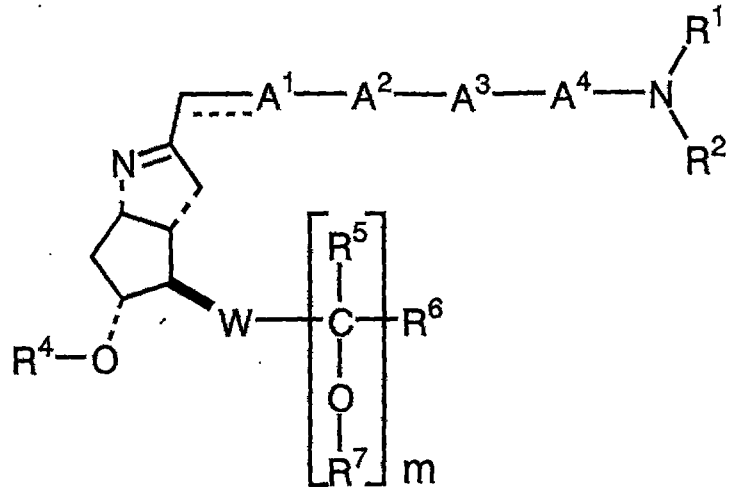
(1-G8E)



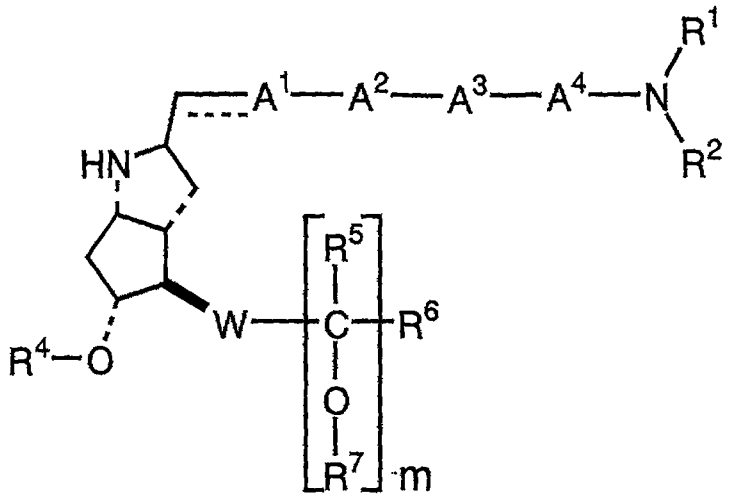
(1-G9E)



(1-G10E)



(1-G11E)



(1-G12E)

[In Formula (1-G1E), Formula (1-G2E), Formula (1-G3E), Formula (1-G4E), Formula (1-G5E), Formula (1-G6E), Formula (1-G7E), Formula (1-G8E), Formula (1-G9E), Formula (1-G10E), Formula (1-G11E) and Formula (1-G12E), the symbol ----- , A^1, A^2, A^3, A^4, R^1, R^2, R^4, R^5, R^6, R^7, m, and W have the same definitions as above. The symbol ▬ indicates that the bond is in the β position with respect to the carbon atom forming the cyclic structure it is bonded to. The symbol ----- indicates that the bonds are in the α position with respect to the carbon atoms forming the cyclic structure they are bonded to.]

In the above Formula (1), R^4 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group or a functional group forming the acetal bond together with the oxygen atom bonded to R^4.

As examples of such R^4 which are acyl groups having 2 to 10 carbon atoms, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group, and a cinnamoyl group may be cited. However, an acetyl group and a benzoyl group may be cited as preferred examples.

In addition, as examples of a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, a trimethylsilyl group, a triethylsilyl group, a dimethylisopropylsilyl group, a dimethylhexylsilyl group, a t-butyldimethylsilyl group, a triisopropylsilyl group, a t-butyldiphenylsilyl group, and a tribenzylsilyl group may be cited. However, a trimethylsilyl group, a triethylsilyl group, and a t-butyldimethylsilyl group may be cited as preferred examples.

In addition, as examples of functional groups forming the acetal bond together with the oxygen atom bonded to R^4, a methoxymethyl group, a 1-ethoxyethyl group, a

1-methoxy-1-methylethyl group, a 2-ethoxy-1-methylethyl group, a 2-methoxyethoxymethyl group, a tetrahydropyrane-2-yl group and a 6,6-dimethyl-3-oxa-2-oxo-bicyclo[3.1.0]hexane-4-yl group may be cited. However, a methoxymethyl group, a 2-methoxyethoxymethyl group, and a tetrahydropyran-2-yl group may be cited as preferred examples.

As particularly preferred examples of such R^4, a hydrogen atom, an acetyl group, a t-butyldimethylsilyl group and a tetrahydropyran-2-yl group may be cited.

In the above formula (1), W represents one of: a single bond, $-CH_2-$, $-(CH_2)_2-$, $-(CH_2)_3-$, $-CH=CH-$, $-CH=CHCH_2-$, $-C\equiv C-$ or $-C\equiv CCH_2-$. For said W, $-CH=CH-$ or $-CH=CHCH_2-$ may be cited as preferred examples.

R^5 and R^6 are either identical or different and, either represents one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon

atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1

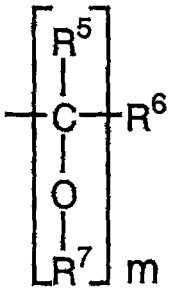
to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

or, when R^5 and R^6 are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

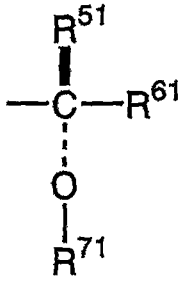
R^7 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms, a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^7, or, when R^7 and R^5 are bonded to each other, R^7 represents one portion of the bond forming the carbonyl group together with the carbon atom bonded to R^5 and the oxygen atom bonded to R^7.

In the partial structure represented by the Formula (W1) below, of the above Formula (1),



(W1)

m may be either 0 or 1. However, when W is a single bond, m is equal to 1. When m equals 1, the above Formula (1) represents Formula (W1A) below,



(W1A)

[In the formula, the symbol ▌ indicates that R^{51} is in the β position with respect to the carbon atom it is bonded to. The symbol ⋮ indicates that the oxygen atom is in the α position with respect to the carbon atom it is bonded to.

R^{51} and R^{61} are either identical or different and, either represents one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms,

fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10

carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

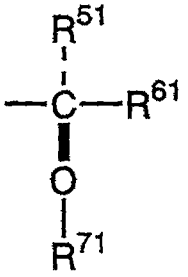
5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

or, when R^{51} and R^{61} are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms,

sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

R^{71} represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms, a sulfonyl group having 1 to 8 carbon atoms, and a functional group forming the acetal bond together with the oxygen atom bound to R^{71}.]

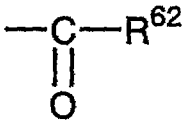
Formula (W1B) below,



(W1B)

[In the formula, R^{51}, R^{61} and R^{71} have the same definitions as above. The symbol ▮ indicates that the oxygen is in the β position with respect to the carbon atom it is bonded to. The symbol ⋮ indicates that R^{51} is in the α position with respect to the carbon atom it is bonded to.]

or Formula (W1C) below,



(W1C)

[In the formula, R^{62} represents a functional group chosen from the following items 1] to 5], i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms,

imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

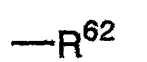
3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms

(alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)].

If m equals to 0 the above Formula (W1) represents the Formula (W1D) below



(W1D)

[In the formula, R^{62} has the same definition as above.]

When the above Formula (W1) represents the above Formula (W1A) or (W1B), these may be combined in any proportion.

In the above formulae(W1A), (W1B), (W1C) or (W1D),

R^{51}, R^{61} and R^{62} represent one of the items 1) to 5):

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and,

sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom,

chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

As examples of such R^{51}, R^{61} or R^{62} which are unsubstituted aliphatic hydrocarbon groups having 1 to 10 carbon atoms, alkyl groups such as a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl group, a t-butyl group, a pentyl group, an isopentyl group, a neopentyl group, a 4-methylpentyl group, a hexyl group, a heptyl group, a 2-methylhexyl group, a 1,1-dimethylpentyl group, an octyl group, a 3,7-dimethyloctyl group, a nonyl group, and a decyl group, alkenyl groups such as a vinyl group, a 1-methylvinyl group, a 1-ethylvinyl group, a 1-propenyl group, a 2-propenyl group, a 2-methyl-1-propenyl group, a 1-butenyl group, a 2-butenyl group, a 2-methyl-1-butenyl group, a 1,3-butadienyl group, a 1-pentenyl group, a 2-pentenyl group, a 4-methyl-1-pentenyl group, a 1-hexenyl group, a 2-hexenyl group, a 3-hexenyl group, a 4-hexenyl group, a 5-hexenyl group, a 1,5-hexadienyl group, a 2-heptenyl group, a 2-octenyl group, a 2-nonenyl group, and a 2-decenyl group, and alkynyl groups such as an ethynyl group, a 1-propynyl group, a 2-propynyl group, a 1-butynyl group, a 2-methyl-1-butynyl group, a 3,3-dimethyl-1-butynyl group, a 1-pentynyl group, a 2-pentynyl group, a 3-pentynyl group, a 1-hexynyl group, a 2-hexynyl group, a 3-hexynyl group, a 4-hexynyl group, a 1-methyl-3-pentynyl group, a 1-methyl-3-hexynyl group, a 2-heptynyl group, a 2-octynyl group, a 2-nonynyl group and a 2-decynyl group may be cited. As preferred examples, a methyl group, an ethyl group, a propyl group, a butyl group, a pentyl group, a hexyl group, a heptyl group, a 2-methylhexyl group, a 1,1-dimethylpentyl group, a 1-propenyl group, a 1-butenyl group, a 2-pentenyl group, a 1-octenyl group and a 1-methyl-3-pentynyl group may be cited.

As examples of such R^{51}, R^{61} or R^{62} which are unsubstituted alicyclic hydrocarbon groups having 3 to 8 carbon atoms, a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a 1-cyclopentenyl group, a cyclohexyl group, a 1-cyclohexenyl group, a 3-cyclohexenyl group, a 4-cyclohexenyl group, a cycloheptyl group, a 1-cycloheptenyl group, and a cyclooctyl group may be cited. As preferred examples, the cyclopentyl group and the cyclohexyl group may be cited.

As examples of such R^{51}, R^{61} or R^{62} which are unsubstituted aromatic hydrocarbon groups having 6 to 10 carbon atoms, a phenyl group, a 1-naphthyl group and a 2-naphthyl group may be cited. As a preferred example, a phenyl group may be cited.

As examples of such R^{51}, R^{61} or R^{62} which are unsubstituted heterocyclic groups having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle, monocyclic or bicyclic groups such as a furyl group, a thiophenyl group, a pyrrolyl group, an oxazolyl group, an isooxazolyl group, a thiazolyl group, an isothiazolyl group, an imidazolyl group, a pyrazolyl group, a triazolyl group, a tetrazolyl group, a pyranyl group, a pyridyl group, a pyrazinyl group, a pyrimidinyl group, a pyridazinyl group, a benzofuranyl group, an indolyl group, a benzimidazolyl group, a benzothiazolyl group, a benzoxazolyl group, a quinolyl group, an isoquinolyl group, a quinazolyl group, a purinyl group, a pteridinyl group, an azetidinyl group, a pyrrolidinyl group, a morpholino group, a piperidino group and a piperazinyl group may be cited. As a preferred example, a pyridyl group may be cited.

As examples of substitution groups when R^{51}, R^{61} or R^{62} is a substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms, a fluorine atom, a chlorine atom, a bromine atom, an iodine atom, a hydroxyl group, alkoxy groups having 1 to 4 carbon atoms which are a methoxy group, an ethoxy group, a propoxy group, an isopropoxy group, a butoxy group, an s-butoxy group and a t-butoxy group, aryloxy groups having 6 to 10 carbon atoms which are a phenoxy group, a 1-naphthoxy group and a 2-naphthoxy group, aralkoxy groups having 7 to 9 carbon atoms such as a benzyloxy group, an α-phenethyloxy group, a β-phenethyloxy group, a phenylpropyloxy group and a cinnamyloxy group, acyloxy groups having 2 to 10 carbon atoms such as an acetoxy group, a trifluoroacetoxy group, a propionyloxy group, an isopropionyloxy group, a butyryloxy group, an isobutyryloxy group, an s-butyryloxy group, a valeryloxy group, an isovaleryloxy group, a hexanoyloxy group, a heptanoyloxy group, an octanoyloxy group, a nonanoyloxy group, a decanoyloxy group, a benzoyloxy group, a phenylacetyloxy group, a cinnamoyloxy group, a cyclopentylcarboxy group, a cyclohexylcarboxy group and a cycloheptylcarboxy group, sulfonyloxy groups having 1 to 8 carbon atoms such as a methanesulfonyloxy group, a trifluoromethanesulfonyloxy group, an ethanesulfonyloxy group, a butanesulfonyloxy group, a t-butanesulfonyloxy group, a nonafluorobutanesulfonyloxy group, a benzenesulfonyloxy group, a p-bromobenzenesulfonyloxy group, a p-toluenesulfonyloxy group, a benzylsulfonyloxy group, an α-phenethylsulfonyloxy group and a β-phenethylsulfonyloxy group, an oxo group, a carboxyl group, alkoxycarbonyl groups having 2 to 10 carbon atoms such as a methoxycarbonyl group, an ethoxycarbonyl group, a propoxycarbonyl group, an isopropoxycarbonyl group, a butoxycarbonyl group, an isobutoxycarbonyl group, an s-butoxycarbonyl group, a t-butoxycarbonyl group, a phenoxycarbonyl group, a

1-naphthoxycarbonyl group, a 2-naphthoxycarbonyl group, a benzyloxycarbonyl group, an α-phenethyloxycarbonyl group, a β-phenethyloxycarbonyl group, carbamoyl groups having 1 to 15 carbon atoms such as a carbamoyl group, an N-methylcarbamoyl group, an N-ethylcarbamoyl group, an N-propylcarbamoyl group, an N-isopropylcarbamoyl group, an N-butylcarbamoyl group, an N-isobutylcarbamoyl group, an N-s-butylcarbamoyl group, an N-t-butylcarbamoyl group, an N-pentylcarbamoyl group, an N-hexylcarbamoyl group, an N-phenylcarbamoyl group, an N-benzylcarbamoyl group, an N-phenethylcarbamoyl group, an N-cyclopropylcarbamoyl group, an N-cyclobutylcarbamoyl group, an N-cyclopentylcarbamoyl group, an N-cyclohexylcarbamoyl group, an N-cycloheptylcarbamoyl group, an N-cyclopropanemethylcarbamoyl group, an N,N-dimethylcarbamoyl group, an N,N-ethylmethylcarbamoyl group, an N,N-diethylcarbamoyl group, an N,N-dipropylcarbamoyl group, an N,N-dibutylcarbamoyl group, an N,N-dicyclohexylcarbamoyl group, an N,N-diphenylcarbamoyl group, and an N,N-dibenzylcarbamoyl group, amino groups having 0 to 14 carbon atoms such as an amino group, a methylamino group, an ethylamino group, a propylamino group, an isopropylamino group, a butylamino group, an isobutylamino group, an s-butylamino group, a t-butylamino group, a pentylamino group, an hexylamino group, an heptylamino group, an octylamino group, a nonylamino group, a decylamino group, a phenylamino group, a benzylamino group, a phenethylamino group, a cyclopropylamino group, a cyclobutylamino group, a cyclopentylamino group, a cyclohexylamino group, a cycloheptylamino group, a cyclooctylamino group, a cyclopropanemethylamino group, a dimethylamino group, an N-methylamino group, a diethylamino group, an N-methylpropylamino group, an N-methylisopropylamino group, an N-methylbutylamino group, an N-methyl-t-butylamino group, an N-ethylisopropylamino group, a dipropylamino group, a diisopropylamino group, an ethylbutylamino group, an N-methylhexylamino group, a dibutylamino group, a dipentylamino group, a dicyclohexylamino group, a diphenylamino group, a dibenzylamino group a piperidino group and a morpholino group, acylamino groups having 1 to 10 carbon atoms such as a formylamino group, an acetylamino group, a trifluoroacetylamino group, a propionylamino group, a butyrylamino group, an isobutyrylamino group, a valerylamino group, an hexanoylamino group, a benzoylamino group, a phenylacetylamino group, a phenylpropionylamino group, and a cinnamoylamino group, sulfonylamino groups having 1 to 8 carbon atoms such as a methanesulfonylamino group, a trifluoromethanesulfonylamino group, an ethanesulfonylamino group, a butanesulfonylamino group, a t-butanesulfonylamino group, a nonafluorobutanesulfonylamino group, a benzenesulfonylamino group, a p-bromobenzenesulfonylamino group, a p-toluenesulfonylamino group, a benzylsulfonylamino group, an α-phenethylsulfonylamino

group and a β-phenethylsulfonylamino group, imino groups having 1 to 10 carbon atoms such as a methylimino group, an ethylimino group, a propylimino group, an isopropylimino group, a butylimino group, an isobutylimino group, a pentylimino group, an hexylimino group, an heptylimino group, an octylimino group, a nonylimino group, a decylimino group, a phenylimino group, a benzylimino group, a phenethylimino group, a cyclopropylimino group, a cyclobutylimino group, a cyclopentylimino group, a cyclohexylimino group, and a cycloheptylimino group, a cyano group, a nitro group, sulfide groups having 1 to 6 carbon atoms such as a methylthio group, an ethylthio group, a propylthio group, an isopropylthio group, a butylthio group, an isobutylthio group, an s-butylthio group, a t-butylthio group, a pentylthio group, an hexylthio group, a phenylthio group, a cyclopentylthio group and a cyclohexylthio group, sulfinyl groups having 1 to 6 carbon atoms such as a methylsulfinyl group, an ethylsulfinyl group, a propylsulfinyl group, an isopropylsulfinyl group, a butylsulfinyl group, an isobutylsulfinyl group, an s-butylsulfinyl group, a t-butylsulfinyl group, a pentylsulfinyl group, a hexylsulfinyl group, a phenylsulfinyl group, a cyclopentylsulfinyl group, and a cyclohexylsulfinyl group, sulfonyl groups having 1 to 6 carbon atoms such as a methylsulfonyl group, an ethylsulfonyl group, a propylsulfonyl group, an isopropylsulfonyl group, a butylsulfonyl group, an isobutylsulfonyl group, an s-butylsulfonyl group, a t-butylsulfonyl group, a pentylsulfonyl group, a hexylsulfonyl group, a phenylsulfonyl group, a cyclopentylsulfonyl group and a cyclohexylsulfonyl group, a substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (in addition to the same examples as the examples chosen among the examples indicated as examples of substitution group in the case of the previously-mentioned aliphatic hydrocarbon group having 1 to 10 carbon atoms, aliphatic hydrocarbon groups having 1 to 6 carbon atoms which are a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl group, an t-butyl group, a pentyl group, a hexyl group, a 2-propenyl group, a 1-butenyl group, a 2-butenyl group, a 2-pentenyl group, a 3-pentenyl group, a 2-hexenyl group, a 3-hexenyl group, a 4-hexenyl group, a 2-butynyl group, a 2-pentynyl group, a 3-pentynyl group, a 2-hexynyl group and a 3-hexynyl group, acyl groups having 1 to 10 carbon atoms such as a formyl group, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group and a cinnamoyl group may be cited as examples of substitution groups for such an alicyclic hydrocarbon group having 3 to 8 carbon atoms), a substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms(in addition to the same examples as the examples chosen among the examples indicated as examples of substitution groups in the case of the previously-mentioned aliphatic hydrocarbon group having 1 to 10 carbon atoms, and

in the case of the previously-mentioned alicyclic hydrocarbon group having 3 to 8 carbon atoms, alkyl groups having 1 to 4 carbon atoms which are a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl group and a t-butyl group may be cited as substitution examples for such aromatic hydrocarbon groups having 6 to 10 carbon atoms), a substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (the same examples as the examples chosen among the examples indicated as examples of substitution groups in the case of the previously-mentioned aliphatic hydrocarbon group having 1 to 10 carbon atoms, and in the case of the previously-mentioned alicyclic hydrocarbon group having 3 to 8 carbon atoms may be cited as substitution examples of such a heteocyclic group) may be cited. As preferred examples of such substitution groups for aliphatic hydrocarbon groups having 1 to 10 carbon atoms, a fluorine atom, a hydroxyl group, a phenyl group, a tolyl group, a 4-methoxyphenyl group, a 4-dimethylaminophenyl group, a phenoxy group, a 3,5-dichlorophenoxy group, a cyclopentyl group, a cyclohexyl group, a 3-ethylcyclopentyl group and a phenylsulfonyl group may be cited.

As examples of substitution groups when R^{51}, R^{61} or R^{62} are substituted alicyclic hydrocarbon groups having 3 to 8 carbon atoms, the same example as the examples chosen among the examples given for the above-mentioned substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms may be cited. As preferred examples of substitution groups for such alicyclic hydrocarbon groups having 3 to 8 carbon atoms, a methyl group, an ethyl group, a propyl group, a hydroxyl group, a methoxy group and an ethoxy group may be cited.

As examples of substitution groups when R^{51}, R^{61} or R^{62} are substituted aromatic hydrocarbon groups having 6 to 10 carbon atoms, the same example as the examples chosen among the examples given for the above-mentioned substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms may be cited. As preferred examples of substitution groups for aromatic hydrocarbon groups having 6 to 10 carbon atoms, a methyl group, an ethyl group, a propyl group, a hydroxyl group, a methoxy group, an ethoxy group, a fluorine atom, a chlorine atom, a bromine atom and an iodine atom may be cited.

As examples of substitution groups when R^{51}, R^{61} or R^{62} are substituted heterocyclic groups having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle, the same examples as the examples chosen among the examples given for the above-mentioned substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms may be cited. As preferred examples of substitution groups for such heterocyclic groups having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle, a methyl group, an ethyl group, a propyl group, a hydroxyl group, a methoxy group and an ethoxy group may be cited.

In addition, in the above Formula (W1A) or Formula (W1B), R^{51} and R^{61} are bonded

to each other, and represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

As examples of such unsubstituted alicyclic hydrocarbon chains having 4 to 7 carbon atoms, tetramethylene group, pentamethylene group, hexamethylene group and heptamethylene group may be cited. As preferred examples the tetramethylene group and the pentamethylene group may be cited.

As examples of substitution groups wherein R^{51} and R^{61} are bonded to each other and form a substituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms, the same examples as the examples chosen among the examples given for the above-mentioned substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms may be cited. As preferred examples of substitution groups for such groups forming an alicyclic hydrocarbon chain having 4 to 7 carbon atoms, a methyl group, an ethyl group, a propyl group, a hydroxyl group, a methoxy group and an ethoxy may be cited.

In the above Formula (W1A) or Formula (W1B), R^{71} represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms, a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^{71}.

As examples of such acyl groups having 2 to 10 carbon atoms, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group and a cinnamoly group may be cited. As preferred examples an acetyl group and a benzoyl group may be cited. As examples of tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, a trimethylsilyl group, a triethylsilyl group, a dimethylisopropyls group, a dimethylhexylsilyl group, a t-butyldimethylsilyl group, a triisopropylsilyl group, a t-butyldiphenylsilyl group and a tribenzylsilyl group may be cited. As preferred examples, a trimethylsilyl group, a triethylsilyl

group and a t-butyldimethylsilyl group may be cited.

As examples of alkoxycarbonyl groups having 2 to 5 carbon atoms, a methoxycarbonyl group, an ethoxycarbonyl group, a propoxycarbonyl group, an isopropoxycarbonyl group, a butoxycarbonyl group, a s-butoxycarbonyl group and a t-butoxycarbonyl group may be cited. As preferred examples, a methoxycarbonyl group and an ethoxycarbonyl group may be cited.

As examples of sulfonyl groups having 1 to 8 carbon atoms, a methanesulfonyl group, a trifluoromethanesulfonyl group, an ethanesulfonyl group, a butanesulfonyl group, a t-butanesulfonyl group, a nonafluorobutanesulfonyl group, a benzenesulfonyl group, a p-bromobenzenesulfonyl group, a p-toluenesulfonyl group, a benzylsulfonyl group, an α-phenethylsulfonylamino group, and a β-phenethylsulfonylamino group may be cited. As preferred examples a methanesulfonyl group and a trifluoromethanesulfonyl group may be cited.

As examples of functional groups forming the acetal bond together with the oxygen atom bound to R^{71} a methoxymethyl group, a 1-ethoxyethyl group, a 1-methoxy-1-methylethyl group, a 2-ethoxy-1-methylethyl group, a 2-methoxyethoxymethyl group, a tetrahydropyrane-2-yl group, a 6,6-dimethyl-3-oxa-2-oxo-bicyclo[3.1.0]hexane-4-yl group may be cited. As preferred examples, a methoxymethyl group, a 2-methoxyethoxymethyl group and a tetrahydropyran-2-yl group may be cited. As particularly preferred such functional groups for R^{71}, a hydrogen atom, an acetyl group, a trimethylsilyl group, a t-butyldimethylsilyl group and a tetrahydropyran-2-yl may be cited.

As such preferred examples of the above Formula (W1), the items 1) to 6) shown below may be cited.

1) a hydrogen atom,

2) a hydroxymethy group, a formyl group, a methanesulfonyloxymehyl group, a methoxycarbonyloxymethyl group, a methyl group, an ethyl group, a propyl group, a butyl group, a pentyl group, a hexyl group, a heptyl group, an octyl group, a cyclopentyl group, a cyclohexyl group, a cycloheptyl group, a phenyl group, an o-tolyl group, an m-tolyl group, a p-tolyl group, a 4-methoxyphenyl group, an 4-N,N-dimethylaminophenyl group, a 3-chlorophenyl group, a 4-chlorophenyl group, a 4-fluorophenyl group, a 4-bromophenyl group, 3,5-dichlorophenyl group, a benzyl group, an α-phenethyl group, a β-phenethyl group, an o-tolylmethyl group, an m-tolylmethyl group, a p-tolylmethyl group, a 3-ethylphenyl group, a 4-ethylphenyl group, a 3-propylphenyl group, a 2-(o-tolyl)ethyl group, a 2-(m-tolyl)ethyl group, a 2-(p-tolyl)ethyl group, a 3-(o-tolyl)propyl group, a 3-(m-tolyl)propyl group, a 3-(p-tolyl)propyl group, a 1,1-bis(phenylsulfonyl)-2-(o-tolyl)ethyl group, a

1,1-bis(phenylsulfonyl)-2-(m-tolyl)ethyl group, a 1,1-bis(phenylsulfonyl)-2-(p-tolyl)ethyl group, a 1,1-bis(phenylsulfonyl)-2-(o-tolyl)propyl group, a 1,1-bis(phenylsulfonyl)-2-(m-tolyl)propyl group, a 1,1-bis(phenylsulfonyl)-2-(p-tolyl)propyl group,

3) a 1-hydroxypentyl group, a 1-hydroxyhexyl group, a 1-hydroxyheptyl group, a 1-hydroxyoctyl group, a 1-hydroxy-1-methylpentyl group, a 1-hydroxy-1-ethylpentyl group, a 1-hydroxy-1-vinylpentyl group, a 1-hydroxy-1-methylhexyl group, a 1-hydroxy-1-ethylhexyl group, a 1-hydroxy-3-methylhexyl group, 1-hydroxy-2-butyl-2-propene group, a 1-hydroxy-2-methylhexyl group, a 1-hydroxy-2-fluorohexyl group, a 1-hydroxy-2,2-dimethylhexyl group, a 1 hydroxy-3-ethoxy-2,2-dimethylpropane group, a 1-hydroxy-2,2-difluorohexyl group, a 1-hydroxy-2,2,6-trimethylheptyl group, a 1-hydroxy-2-fluoro-1-methyloctyl group, a 1-hydroxyhexa-3-enyl group, a 1-hydroxy-5-methylhexa-4-enyl group, a 1-hydroxy-2,5-dimethylhexa-4-enyl group, a 1-hydroxy-3,7-dimethylhexa-4-enyl group, a 1-hydroxy-2,2,5-trimethylhexa-4-enyl group, 1-hydroxy-2,2-dimethylpenta-3-ynyl group, a 1-hydroxy-2,2-dimethylpenta-3-ynyl group, a 1-hydroxyhexa-4-ynyl group, a 1-hydroxy-2-methylhexa-4-ynyl group, a 1-hydroxy-2,2-dimethylhexa-4-ynyl group, a 1-hydroxy-2-methylhepta-4-ynyl group, a 1-hydroxy-4-cyclopropyl-2-methylbutyl group, a 1-hydroxy-2-cyclopentylethyl group, a 1-hydroxy-2-cyclohexylethyl group, a 1-hydroxy-2-phenylethyl group, a 1-hydroxy-2-phenylpropy group, a 1-hydroxy-1-(o-tolyl)methyl group, a 1-hydroxy-1-(m-tolyl)methyl group, a 1-hydroxy-1-(p-tolyl)methyl group, a 1-hydroxy-1-(3-ethylphenyl)methyl group, a 1-hydroxy-1-(4-ethylphenyl)methyl group, a 1-hydroxy-1-(3-propylphenyl)methyl group, a 1-hydroxy-2-(o-tolyl)ethyl group, a 1-hydroxy-2-(m-tolyl)ethyl group, a 1-hydroxy-2-(p-tolyl)ethyl group, a 1-hydroxy-3-(o-tolyl)propyl group, a 1-hydroxy-3-(m-tolyl)propyl group, a 1-hydroxy-3-(p-tolyl)propyl group, a 1-hydroxy-4-(o-tolyl)butyl group, a 1-hydroxy-4-(m-tolyl)butyl group, a 1-hydroxy-4-(p-tolyl)butyl group, a 1-hydroxy-2-(3-chlorophenyl)ethyl group, a 1-hydroxy-2-phenoxylethyl group, a 1-hydroxy-2-(4-fluorophenoxy)ethyl group, a 1-hydroxy-2-(3-chloropheoxyl)ethyl group, a 1-hydroxy-1-cyclopentylmethyl group, a 1-hydroxy-1-cyclohexylmethyl group, a 1-hydroxy-1-cyclopentylethyl group, a 1-hydroxy-1-(4-cyclohexenyl)methyl group, a 1-hydroxy-1-(3-ethylcyclopentyl)methyl group, a 1-hydroxy-1-(2-methylcyclopentyl)methyl group, a 1-hydroxy-1-(2-methylcyclohexyl)methyl group, a 1-hydroxy-1-(3-methylcyclohexyl)methyl group, a 1-hydroxy-1-(4-methylcyclohexyl)methyl group, a 1-hydroxy-1-(2,2,4-trimethylcyclohexyl)methyl group, a 1-hydroxy-1-(1-(2-butynyl) cyclobutyl)methyl group, a 1-hydroxy-1-(1-(2-pentynyl)cyclobutyl)methyl group, a 1-hydroxy-1-phenylmethyl group, a 1-hydroxy-1-(4-chlorophenyl)methyl group, a 1-hydroxy-1-(4-bromophenyl)methyl group, a 1-hydroxy-1-(3-chlorophenyl)methyl group, a 1-hydroxy-1-(4-methoxyphenyl)methyl group, a 1-hydroxy-1-(4-N,N-dimetylaminophenyl)methyl group, a

1-hydroxy-1-(1-naphthyl)methyl group, a 1-hydroxy-1-(2-naphthyl)methyl group,

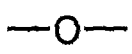
4) a functional group described in 3) above, wherein the hydroxy group has been substituted for an acetyloxy group, a benzoyloxy group, a trimethylsilyloxy group, a t-butyldimethylsilyloxy group, a tetrahydropyrane-2-yloxy group or a methanesulfonyloxy group,

5) a pentanoyl group, a hexanoyl group, a heptanoyl group, an octanoyl group, a 3-methylhexanoyl group, a 2-methylhexanoyl group, a 2,2-dimethylhexanoyl group, a 2,2,6-trimethylheptanoyl group, a 3-hexenoyl group, a 5-methyl-4-hexenoyl group, a 2,5-dimethyl-4-hexenoyl group, a 3,7-dimethyl-6-octenoyl group, a 2,2,5-trimethyl-4-hexenoyl group, a 3-pentynoyl group, a 2,2-dimethyl-3-pentynoyl group, a 4-hexynoyl group, a 2-methyl-4-hexynoyl group, a 2,2-dimethyl-4-hexynoyl group, a 2-methyl-4-heptynoyl group, a 4-cyclopropyl-2-methylbutanoyl group, a cyclopentylacetyl group, a cyclohexylacetyl group, a 2-phenylacetyl group, a 3-phenylpropanoyl group, a 2-methylbenzoyl group, a 3-methylbenzoyl group, a 4-methylbenzoyl group, a 3-ethylbenzoyl group, a 4-ethylbenzoyl group, a 3-propylbenzoyl group, an (o-tolyl)acetyl group, an (m-tolyl)acetyl group, a (p-tolyl)acetyl group, a 3-(o-tolyl)propanoyl group, a 3-(m-tolyl)propanoyl group, a 3-(p-tolyl)propanoyl group, a 4-(o-tolyl)butanoyl group, a 4-(m-tolyl)butanoyl group, a 4-(p-tolyl)butanoyl group, a (3-chlorophenyl)acetyl group, a cyclopentylcarbonyl group, a cyclohexylcarbonyl group, a 3-ethylcyclopentylcarbonyl group, a 2-methylcyclopentylcarbonyl group, a 2-methylcyclohexylcarbonyl group, a 3-methylcyclohexylcarbonyl group, a 4-methylcyclohexylcarbonyl group, a benzoyl group, a 4-chlorobenzoyl group, a 4-bromobenzoyl group, a 3-chlorobenzoyl group, a 4-methoxybenzoyl group, a 4-N,N-dimethylaminobenzoyl group, a 1-naphthylcarbonyl group, a 2-naphthylcarbonyl group,

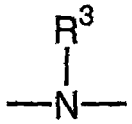
6) a 1-pentenyl group, a 1-hexenyl group, a 1-heptenyl group, a 1-octenyl group, a 2-methylhexene-1-yl group, a 2-ethylhexene-1-yl group, a 2-methylheptene-1-yl group, a 2-ethylheptene-1-yl group, a 1-methylhexene-1-yl group, a 1-ethylhexene-1-yl group, a 3-methylhexene-1-yl group, a 1,3-hexadiene-1-yl group, a 5-methyl-1,4-hexadiene-1-yl group, a 2,5-dimethyl-1,4-hexadiene-1-yl group, a 3,7-dimethyl-1,6-octadiene-1-yl group, a penta-3-yn-1-en-1-yl group, a hexa-4-yn-1-en-1-yl group, a 2-methylhexa-4-yn-1-en-1-yl group, a 2-methylhepta-4-yn-1-en-1-yl group, a 4-cyclopropyl-2-methyl-1-butene-1-yl group, a 2-cyclopentylvinyl group, a 2-cyclohexylvinyl group, a 2-phenylvinyl, a 3-phenyl-1-propene-1-yl group, a 2-(o-tolyl)vinyl group, a 2-(m-tolyl)vinyl group, a 2-(p-tolyl)vinyl group, a 3-(o-tolyl)-1-propene-1-yl group, a 3-(m-tolyl)-1-propene-1-yl group, a 3-(p-tolyl)-1-propene-1-yl group, a 4-(o-tolyl)-1-butene-1-yl group, a 4-(m-tolyl)-1-butene-1-yl group, a 4-(p-tolyl)-1-butene-1-yl group, a 2-(3-ethylphenyl)vinyl group, a 2-(4-ethylphenyl)vinyl group, a 2-(3-propylphenyl)vinyl group, a 2-(3-chlorophenyl)vinyl group,

a 2-(4-chlorophenyl)vinyl group, a 2-(4-methoxyphenyl)vinyl group, a 2-(4-N,N-dimethylaminophenyl)vinyl group.

In the above Formula (1) A^2 represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

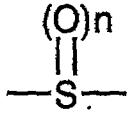


(A2A)



(A2B)

[In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.]



(A2C)

[In the formula, n represents 0, 1, or 2.]

In the above Formula (A2B), R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.

As examples of R^3 which are alkyl groups having 1 to 4 carbon atoms, a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl group and a t-butyl group may be cited. As examples of R^3 which are acyl groups having 1 to 10 carbon atoms, a formyl group, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group and a cinnamoly group may be cited. As preferred examples of such an R^3, a hydrogen atom, a methyl group, a formyl group and an acetyl group may be cited.

In the above Formula (A2C), n represents 0, 1, or 2. However, 0 may be cited as the preferred value for n.

A single bond, -O-, -NH-, -N(CH_3)- and -S- may be cited as such preferred functional groups for A^2.

In the above Formula (1), A^1 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^2 through an identical atom or through different

atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

Examples of such A^1 which are aliphatic hydrocarbon groups having 1 to 3 carbon atoms, are functional groups derived by removing hydrogen atoms from the same carbon atom or two different carbon atoms of a methane, an ethene, a propane, an ethene, a propene, an acetylene or a propyne: when G and A^1 are bonded through a single bond, A^1 is a bivalent functional group derived by removing one hydrogen atom for each bond; when G and A^1 are bonded through a double bond, A^1 is a trivalent functional group derived by removing one hydrogen atom for one bond and two hydrogens for the other bond. As preferred examples of such bivalent functional groups, $-CH_2-$, $-(CH_2)_2-$, $-CH(CH_3)-$, $-(CH_2)_3-$, $-C(CH_3)_2-$, $-CH=CH-$, $-CH=CHCH_2-$, $-CH=C(CH_3)-$, $-C\equiv C-$ and $-C\equiv CCH_2-$ may be cited, and as preferred examples of such trivalent functional groups, $=CH-$, $=CHCH_2-$, $=C(CH_3)-$, $=CH(CH_2)_2-$, $=CHCH=CH-$ and $=CH-CH(CH_3)-$ may be cited.

As examples of A^1 which are alicyclic hydrocarbon groups having 3 to 8 carbon atoms, are functional groups derived from a cyclopropane, a cyclobutane, a cyclopentane, a cyclopentene, a cyclohexane, a cyclohexene, a cycloheptane and a cyclooctane by removing hydrogen atoms on the same carbon atom or two different carbon atoms: when G and A^1 are bonded through a single bond, A^1 is a bivalent functional group derived by removing one hydrogen atom for each bond; when G and A^1 are bonded through a double bond, A^1 is a trivalent functional group derived by removing one hydrogen atom for one bond and two hydrogens for the other bond. As preferred examples of such bivalent functional groups, a 1,2-cyclopropylene group, a cyclopropylydene group, a 1,2-cyclopentylene group, a 1,3-cyclopentylene group, a 1,2-cyclohexylene group, a 1,3-cyclohexylene group, a 1,4-cyclohexylene may be cited, and as a preferred example of such a trivalent functional group, a 1-cyclohexyl-4-ylidedene group may be cited.

As examples of A^1 which are heterocyclic groups having between 1 and 2 oxygen atoms, nitrogen atoms, or sulfur atoms, bivalent functional groups derived by removing one hydrogen atom from each of two different carbon atoms such as a furan cycle, a thiofuran cycle, a pyrrole cycle, an oxazole cycle, an isooxazole cycle, a thiazole cycle, an isothioazole cycle, an imidazole cycle, a pyrazole cycle, a pyran group, a pyridine cycle, a pyrazine cycle, a pyrimidine cycle, a pyridazine cycle, an azetidine cycle, a pyrrolidine cycle, a piperidine cycle, a piperazine cycle and a morpholine cycle may be cited. As preferred functional group for such an A^1, the bond representing a single bond, $-CH_2-$, $-(CH_2)_2-$, $=CH-$ and $=CHCH_2-$ may be cited.

In the above Formula (1), A^3 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^2 and A^4 through an identical atom or through different atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

As examples of such A^3 which are aliphatic hydrocarbon groups having 1 to 3 carbon atoms, alicyclic hydrocarbon groups having 3 to 8 carbon atoms, or heterocycles and which have heterocyclic groups having between 1 and 2 oxygen atoms, nitrogen atoms, or sulfur atoms, among the examples given in the above-mentioned A^1, the examples given as bivalent functional groups may be may be cited. As particularly preferred functional groups for such A^3, the bond representing a single bond; $-CH_2-$, $-(CH_2)_2-$, -CH=CH- and a phenylene group may be cited.

In the above Formula (1), A^4 represents either of the items 1) to 4) below

1) a single bond

2) a carbonyl group

3) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^1 and R^2, and A^3 through an identical atom or through different atoms.

4) when A^4 and R^1 are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^4 or R^1 and the nitrogen atom they are bonded to are bonded through a double bond, R^2 represents the bond between A^4 or R^1 and the nitrogen atom.)

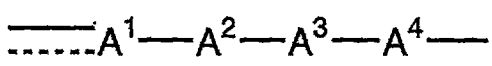
When A^4 represents an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^1 and R^2, and A^3 through an identical atom or through different atoms, such as an aliphatic hydrocarbon group having 1 to 3 carbon atoms is a bivalent functional group derived by removing one hydrogen atom for each bond, from the same carbon atom or two different carbon atoms of a methane, a methene, a propane or a propene. As preferred examples of such A^4 which are aliphatic hydrocarbon groups having 1 to 3 carbon atoms, $-CH_2-$, $-(CH_2)_2-$, $-CH(CH_3)-$, $-(CH_2)_3-$, $-C(CH_3)_2-$ and $-CH=CHCH_2-$ may be cited.

When A^4 represents a functional group wherein A^4 and R^1 are bonded to each other forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to, as examples of such functional groups forming 5 to 8 membered rings, monovalent functional groups derived by removing one hydrogen atom from one carbone atom of a pyrrole cycle, an oxazole cycle, an isooxazole cycle, a thiazole cycle, an isothioazole cycle, a pyrazole cycle, a pyridine cycle, a pyrazine cycle, a pyrimidine cycle, a pyridazine cycle, an azetidine cycle, a pyrrolidine cycle, a piperidine cycle, a piperazine cycle and a morpholine cycle may be cited.

When A^4 or R^1 and the nitrogen atom they are bonded to are bonded through a double bond, in other words, when forming a cycle, for example, such as an oxazole cycle, an isooxazole cycle, a thiazole cycle, an isothioazole cycle, an imidazole cycle, a pyrazole cycle, a pyridine cycle, a pyrazine cycle, a pyrimidine cycle and a pyridazine cycle with A^4, R^1 and the nitrogen atom they are bonded to, R^2 represents a bond between A^4 or R^1, and the nitrogen atom. As preferred examples of such functional groups forming 5 to 8 membered rings, a 2-pyrrolidinyl group, a 2-piperidinyl group, a 3-piperidinyl group, a 4-piperidinyl group, a 2-piperazinyl group, a 2-morpholinyl group, a 2-pyridyl group, a 3-pyridyl group and a 4-pyridyl group may be cited.

As particularly preferred examples of such a functional group for A^4, the bond representing a single bond, a carbonyl group, $-CH_2-$ and $-(CH_2)_2-$ may be cited. In addition, when representing a functional group wherein A^4 and R^1 are bonded to each other forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to, as particularli preferred examples, a 2-pyridyl group, a 4-pyridyl group and a 4-piperidinyl group may be cited.

In the above Formula (1), the combination of functional groups A^1, A^2, A^3 and A^4, represented by Formula (A) below,



(A)

[In Formula (A), A^1, A^2, A^3, A^4, and the symbol ⎓ have the same definition as above.] A^1, A^2, A^3 and A^4 may not simultaneously represent bonds. In addition, when A^2 represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^2 and the nitrogen atom bonded to R^1 and R^2 must be bonded with more than two carbon atoms in between. As preferred examples of such functional groups, $-(CH_2)_3-$, $-(CH_2)_4-$, $-(CH_2)_5-$, $=CH(CH_2)_2-$, $=CH(CH_2)_3-$, $=CH(CH_2)_4-$, $-CH_2CH=CHCH_2-$, $-NH(CH_2)_2-$, $-NH(CH_2)_3-$, $-NH(CH_2)_4-$, $-N(CH_3)(CH_2)_3-$, $-CH_2NH(CH_2)_2-$, $-O(CH_2)_3-$, $-CH_2O(CH_2)_2-$, $-S(CH_2)_3-$, $-CH_2S(CH_2)_2-$, -(o-phenylene)-, -(m-phenylene)-, -(p-phenylene)-, $-CH_2$-(o-phenylene)-, $-CH_2$-(m-phenylene)-, $-CH_2$-(p-phenylene)-, $-(CH_2)_2$-(o-phenylene)-, $-(CH_2)_2$-(m-phenylene)-, $-(CH_2)_2$-(p-phenylene)-, -(o-phenylene)-CH_2-, -(m-phenylene)-CH_2-, -(p-phenylene)-CH_2-, -(o-phenylene)-$(CH_2)_2-$, -(m-phenylene)-$(CH_2)_2-$, -(p-phenylene)-$(CH_2)_2-$, $-CH_2$-(o-phenylene)-CH_2-, $-CH_2$-(m-phenylene)-CH_2-, $-CH_2$-(p-phenylene)-CH_2-, $-(CH_2)_2CO-$, $-(CH_2)_3CO-$, $-(CH_2)_4CO-$, $=CHCH_2CO-$, $=CH(CH_2)_2CO-$, $=CH(CH_2)_3CO-$, $-CH_2CH=CHCO-$, $-NHCH_2CO-$, $-NH(CH_2)_2CO-$, $-NH(CH_2)_3CO-$, $-N(CH_3)(CH_2)_2CO-$, $-CH_2NHCH_2CO-$, $-O(CH_2)_2CO-$, $-CH_2OCH_2CO-$, $-S(CH_2)_2CO-$, $-CH_2SCH_2CO-$, -(o-phenylene)-CO-, -(m-phenylene)-CO-, -(p-phenylene)-CO-, $-CH_2$-(o-phenylene)-CO-, -(o-phenylene)-CH_2CO-, -(m-phenylene)-CH_2CO-, -(p-phenylene)-CH_2CO-, $-CH_2$-(m-phenylene)-CO- and $-CH_2$-(p-phenylene)-CO- may be cited.

In the above Formula (1), R^1 and R^2 may be identical or different and represent one of the items 1) to 7) shown below.

1) a hydrogen atom,

2) a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and,

sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)

6) an acyl group having 1 to 10 carbon atoms when A^4 is not a carbonyl group,

7) a sulfonyl group having 1 to 8 carbon atoms when A^4 is not a carbonyl group (however, when either R^1 or R^2 represents a sulfonyl group having 1 to 8 carbon atoms, the other may neither be an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

or, when R^1 and R^2 are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

As examples of such R^1 and R^2 which are unsubstituted alkyl groups having 1 to 10 carbon atoms, a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl group, an t-butyl group, a pentyl group, an isopentyl group, a neopentyl group, a hexyl group, a heptyl group, an octyl group, a nonyl group and a decyl group may be cited.

As examples of unsubstituted cycloalkyl groups having 3 to 8 carbon atoms, a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group, a cycloheptyl

group and a cyclooctyl group may be cited.

As examples of unsubstituted heterocycles, monocyclic or bicyclic functional groups such as a furyl group, a thiophenyl group, a pyrrolyl group, an oxazolyl group, an isooxazolyl group, a thiazolyl group, an isothiazolyl group, an imidazolyl group, a pyrazolyl group, a triazolyl group, a tetrazolyl group, a pyranyl group, a pyridyl group, a pyrazinyl group, a pyrimidinyl group, a pyridazinyl group, a benzofuranyl group, an indolyl group, a benzimidazolyl group, a benzothiazolyl group, a benzoxazolyl group, a quinolyl group, an isoquinolyl group, a quinazolyl group, a purinyl group, a pteridinyl group, an azetidinyl group, a pyrrolidinyl group, a morpholino group, a piperidino group and pyperazinyl may be cited.

As examples of substitution groups when R^{51}, R^{61} or R^{62} is a substituted aliphatic hydrocarbon group having 1 to 10 carbon atoms, a fluorine atom, a chlorine atom, a bromine atom, an iodine atom, a hydroxyl group, alkoxy groups having 1 to 4 carbon atoms which are a methoxy group, an ethoxy group, a propoxy group, an isopropoxy group, a butoxy group, an s-butoxy group and a t-butoxy group, aryloxy groups having 6 to 10 carbon atoms which are a phenoxy group, a 1-naphthoxy group and a 2-naphthoxy group, aralkoxy groups having 7 to 9 carbon atoms such as a benzyloxy group, an α-phenethyloxy group, a β-phenethyloxy group, a phenylpropyloxy group and a cinnamyloxy group, acyloxy groups having 2 to 10 carbon atoms such as an acetoxy group, a trifluoroacetoxy group, a propionyloxy group, an isopropionyloxy group, a butyryloxy group, an isobutyryloxy group, an s-butyryloxy group, a valeryloxy group, an isovaleryloxy group, a hexanoyloxy group, a heptanoyloxy group, an octanoyloxy group, a nonanoyloxy group, a decanoyloxy group, a benzoyloxy group, a phenylacetyloxy group, a cinnamoyloxy group, a cyclopentylcarboxy group, a cyclohexylcarboxy group and a cycloheptylcarboxy group, sulfonyloxy groups having 1 to 8 carbon atoms such as a methanesulfonyloxy group, a trifluoromethanesulfonyloxy group, an ethanesulfonyloxy group, a butanesulfonyloxy group, a t-butanesulfonyloxy group, a nonafluorobutanesulfonyloxy group, a benzenesulfonyloxy group, a p-bromobenzenesulfonyloxy group, a p-toluenesulfonyloxy group, a benzylsulfonyloxy group, an α-phenethylsulfonyloxy group and a β-phenethylsulfonyloxy group, an oxo group, a carboxyl group, alkoxycaobonyl groups having 2 to 10 carbon atoms such as a methoxycarbonyl group, an ethoxycarbonyl group, a propoxycarbonyl group, an isopropoxycarbonyl group, a butoxycarbonyl group, an isobutoxycarbonyl group, an s-butoxycarbonyl group, a t-butoxycarbonyl group, a phenoxycarbonyl group, a 1-naphthoxycarbonyl group, a 2-naphthoxycarbonyl group, a benzyloxycarbonyl group, an α-phenethyloxycarbonyl group and a β-phenethyloxycarbonyl group, carbamoyl groups having 1 to 15 carbon atoms such as a carbamoyl group, an N-methylcarbamoyl group, an N-ethylcarbamoyl group, an N-propylcarbamoyl group, an N-isopropylcarbamoyl group, an

N-butylcarbamoyl group, an N-isobutylcarbamoyl group, an N-s-butylcarbamoyl group, an N-t-butylcarbamoyl group, an N-pentylcarbamoyl group, an N-hexylcarbamoyl group, an N-phenylcarbamoyl group, an N-benzylcarbamoyl group, an N-phenethylcarbamoyl group, an N-cyclopropylcarbamoyl group, an N-cyclobutylcarbamoyl group, an N-cyclopentylcarbamoyl group, an N-cyclohexylcarbamoyl group, an N-cycloheptylcarbamoyl group, an N-cyclopropanemethylcarbamoyl group, an N,N-dimethylcarbamoyl group, an N,N-ethylmethylcarbamoyl group, an N,N-diethylcarbamoyl group, an N,N-dipropylcarbamoyl group, an N,N-dibutylcarbamoyl group, an N,N-dicyclohexylcarbamoyl group, an N,N-diphenylcarbamoyl group, an N,N-dibenzylcarbamoyl group, a piperidinocarbonyl group, and a morpholinocarbonyl group, amino groups having 0 to 14 carbon atoms such as an amino group, a methylamino group, an ethylamino group, a propylamino group, an isopropylamino group, a butylamino group, an isobutylamino group, an s-butylamino group, a t-butylamino group, a pentylamino group, an hexylamino group, an heptylamino group, an octylamino group, a nonylamino group, a decylamino group, a phenylamino group, a benzylamino group, a phenethylamino group, a cyclopropylamino group, a cyclobutylamino group, a cyclopentylamino group, a cyclohexylamino group, a cycloheptylamino group, a cyclooctylamino group, a cyclopropanemethylamino group, a dimethylamino group, an N-ethylmethylamino group, a diethylamino group, an N-methylpropylamino group, an N-methylisopropylamino group, an N-methylbutylamino group, an N-methyl-t-butylamino group, an N-ethylisopropylamino group, a dipropylamino group, a diisopropylamino group, an ethylbutylamino group, an N-methylhexylamino group, a dibutylamino group, a dipentylamino group, a dicyclohexylamino group, a diphenylamino group, a dibenzylamino group, a piperidino group and a morpholino group, acylamino groups having 1 to 10 carbon atoms such as a formylamino group, an acetylamino group, a trifluoroacetylamino group, a propionylamino group, a butyrylamino group, an isobutyrylamino group, a valerylamino group, an hexanoylamino group, a benzoylamino group, a phenylacetylamino group, a phenylpropionylamino group, and a cinnamoylamino group, sulfonylamino groups having 1 to 8 carbon atoms such as a methanesulfonylamino group, a trifluoromethanesulfonylamino group, an ethanesulfonylamino group, a butanesulfonylamino group, a t-butanesulfonylamino group, a nonafluorobutanesulfonylamino group, a benzenesulfonylamino group, a p-bromobenzenesulfonylamino group, a p-toluenesulfonylamino group, a benzylsulfonylamino group, an α-phenethylsulfonylamino group and a β-phenethylsulfonylamino group, imino groups having 1 to 10 carbon atoms such as a methylimino group, an ethylimino group, a propylimino group, an isopropylimino group, a butylimino group, an isobutylimino group, a pentylimino group, an hexylimino group, an heptylimino group, an octylimino group, a

nonylimino group, a decylimino group, a phenylimino group, a benzylimino group, a phenethylimino group, a cyclopropylimino group, a cyclobutylimino group, a cyclopentylimino group, a cyclohexylimino group, and a cycloheptylimino group, a cyano group, a nitro group, sulfide groups having 1 to 6 carbon atoms such as a methylthio group, an ethylthio group, a propylthio group, an isopropylthio group, a butylthio group, an isobutylthio group, an s-butylthio group, a t-butylthio group, a pentylthio group, an hexylthio group, a phenylthio group, a cyclopentylthio group and a cyclohexylthio group, sulfinyl groups having 1 to 6 carbon atoms such as a methylsulfinyl group, an ethylsulfinyl group, a propylsulfinyl group, an isopropylsulfinyl group, a butylsulfinyl group, an isobutylsulfinyl group, an s-butylsulfinyl group, a t-butylsulfinyl group, a pentylsulfinyl group, a hexylsulfinyl group, a phenylsulfinyl group, a cyclopentylsulfinyl group, and a cyclohexylsulfinyl group, sulfonyl groups having 1 to 6 carbon atoms such as a methylsulfonyl group, an ethylsulfonyl group, a propylsulfonyl group, an isopropylsulfonyl group, a butylsulfonyl group, an isobutylsulfonyl group, an s-butylsulfonyl group, a t-butylsulfonyl group, a pentylsulfonyl group, a hexylsulfonyl group, a phenylsulfonyl group, a cyclopentylsulfonyl group and a cyclohexylsulfonyl group, a substituted or unsubstituted cycloalkyl group having 3 to 8 carbon atoms (in addition to the same examples as the examples chosen among the examples indicated as examples of substitution groups in the case of the previously mentioned alkyl group having 1 to 10 carbon atoms, alkyl groups having 1 to 4 carbon atoms which are a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, an s-butyl and a t-butyl group, acyl groups having 1 to 10 carbon atoms such as a formyl group, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group and a cinnamoyl group may be cited as examples of such cycloalkyl groups having 3 to 8 carbon atoms), a substituted or unsubstituted phenyl group(as examples of substitution groups for such a pheyl group, the substitution groups given in the case of the previously-mentioned alkyl group having 1 to 10 carbon atoms and the same examples as the examples chosen among the examples indicated as examples of substitution groups in the case of the previously-mentioned cycloalkyl groups having 3 to 8 carbon atoms may be cited), a substituted or unsubstituted heterocyclic group(include 1 to 4 oxygen atoms, nitrogen atoms or sulfur atoms. As examples of substitution groups for such a heterocyclic group, the same examples as the examples chosen among the examples indicated as examples of substitution groups in the case of the previously-mentioned alkyl group having 1 to 10 carbon atoms and in the case of the previously-mentioned cycloalkyl groups having 3 to 8 carbon atoms may be cited) may be cited.

When R^1 or R^2 represents an acyl group having 1 to 10 carbon atoms, as examples of

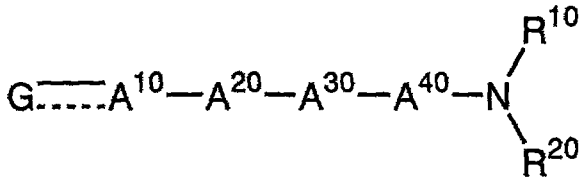
such an acyl group having 1 to 10 carbon atoms, a formyl group, an acetyl group, a trifluoroacetyl group, a propionyl group, a butyryl group, an isobutyryl group, a valeryl group, an hexanoyl group, a benzoyl group, a phenylacetyl group, a phenylpropionyl group and a cinnamoyl group may be cited.

When R^1 or ^{2} represents a solfonyl group having 1 to 8 carbon atoms, as examples of such a solfonyl group having 1 to 8 carbon atoms, a methanesulfonyl group, a trifluoromethanesulfonyl group, an ethanesulfonyl group, a butanesulfonyl group, a t-butanesulfonyl group, a nonafluorobutanesulfonyl group, a benzenesulfonyl group, a p-bromobenzenesulfonyl group, a p-toluenesulfonyl group, a benzylsulfonyl group, an α-phenethylsulfonyl group, β-phenethylsulfonyl group may be cited. As preferred examples of such R^1 and R^2, a hydrogen atom, a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, a t-butyl group, a 2-hydroxyethyl group, a carboxymethyl group, a carboxyethyl group, a methoxycarbonylethyl group, a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group, a cyclopropylmethyl group, a phenyl group, a tolyl group, a benzyl group, a phenethyl group, a pyridyl group, a 4-pyridyl group, a formyl group, an acetyl group, a propanoyl group, a benzoyl group, a methanesulfonyl group, a benzenesulfonyl group and a p-toluenesulphonyl may be cited.

When representing a functional group wherein R^1 and R^2 are bonded to each other and form an amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to, as examples of functional groups forming such an amino group having 4 to 8 carbon atoms, an azetidinyl group, a pyrrolidinyl group, a piperidino group, a morpholino group, a piperazinyl group and a perhydroazepinyl group may be cited.

As preferred examples of such amino groups formed by R^1, R^2 and the nitrogen atom they are bonded to, an amino group, a methylamino group, an ethylamino group, a propylamino group, a butylamino group, a dimethylamino group, an N-methylamino group, a diethylamino group, a dipropylamino group, a diisopropylamino group, a dibutylamino group, an N-methylamino group, a cyclohexylamino group, a phenylamino group, a benzylamino group, a tolylamino group, a (4-pyridylmethyl)amino group, a 2-pyridylamino group, a 1-pyrrolidinyl group, a piperidino group, a morpholino group, a 4-N-methylpiperadin-1-yl group, a carboxymethylamino group, a 1-carboxyethylamino group, a 2-hydroxyethylamino group, a 3-hydroxyethylamino group and a 2-methoxycarbonylethyl group may be cited.

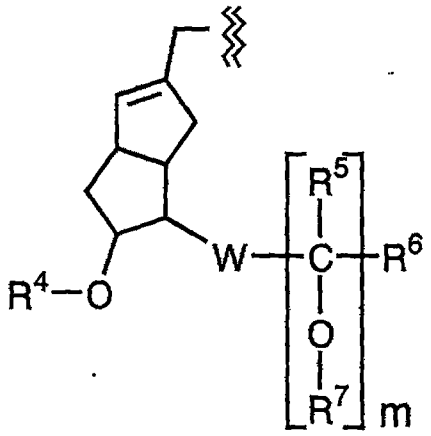
In the above Formula (1), the compound represented by the Formula (2) below is a novel substance.



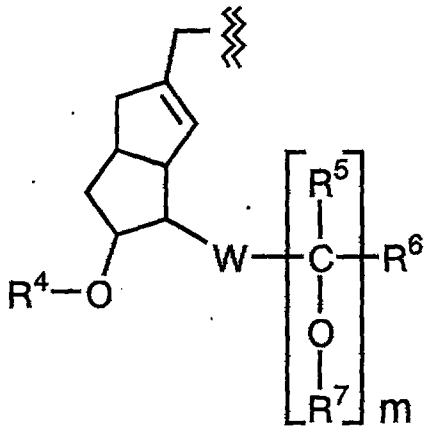
(2)

[In Formula (2), the symbol ⎓ represents a single bond or a double bond.

G represents one functional group chosen from the group consisting of the Formulae (G1), (G2), (G3), (G4), (G5), (G6), (G7), (G8), (G9), (G10), (G11) and (G12) shown below.



(G1)



(G2)

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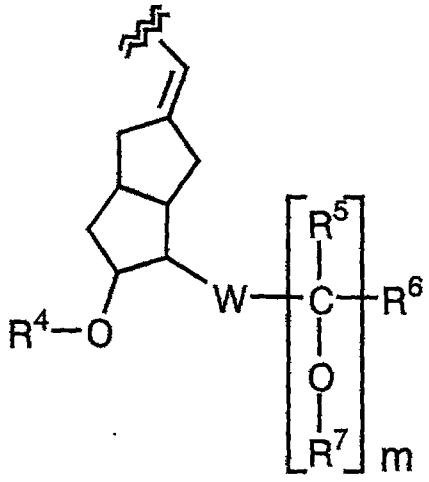
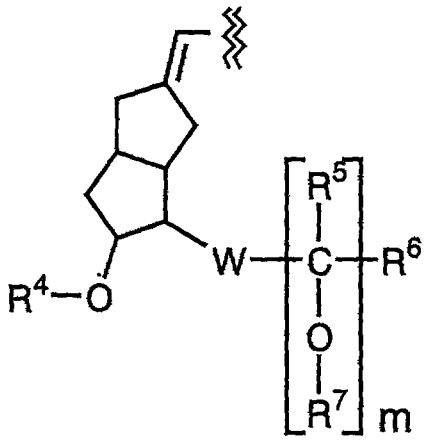
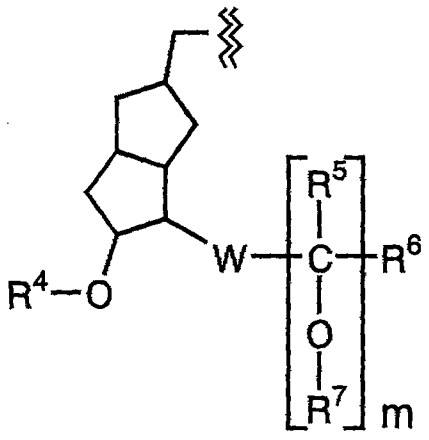


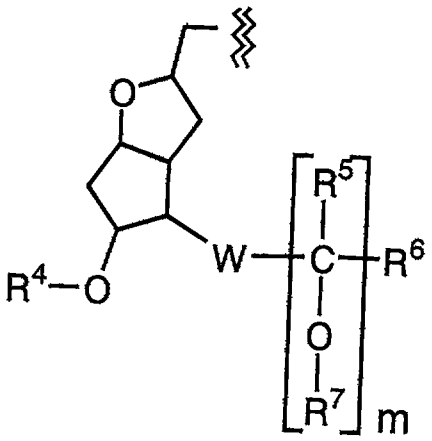
(G3)



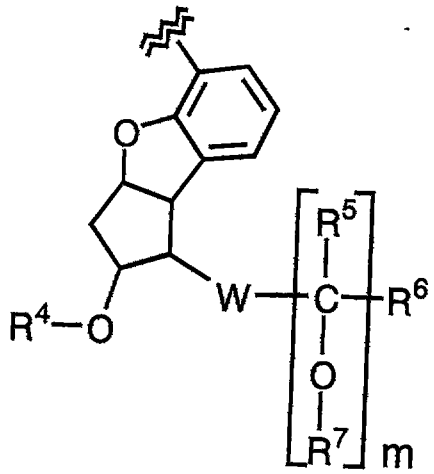
(G4)



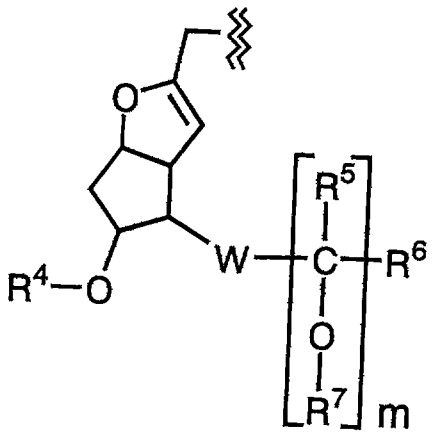
(G5)



(G6)



(G7)



(G8)

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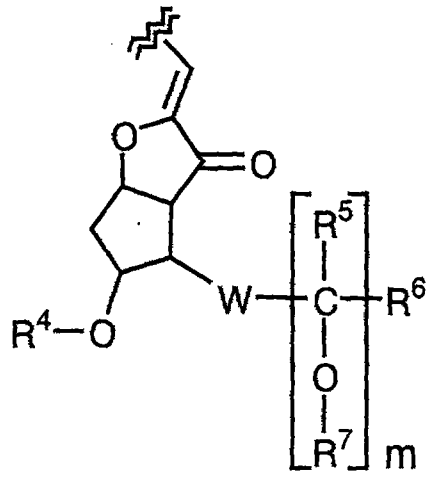
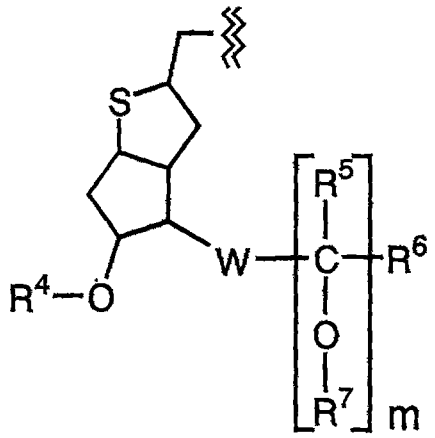
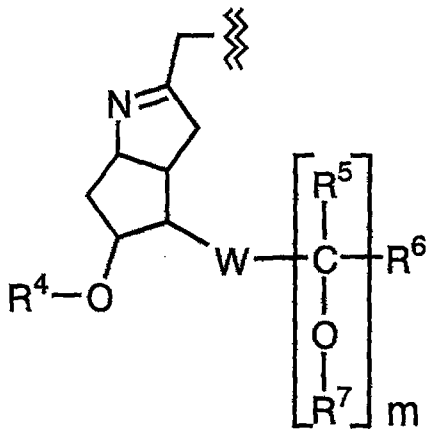


(G9)



(G10)



(G11)

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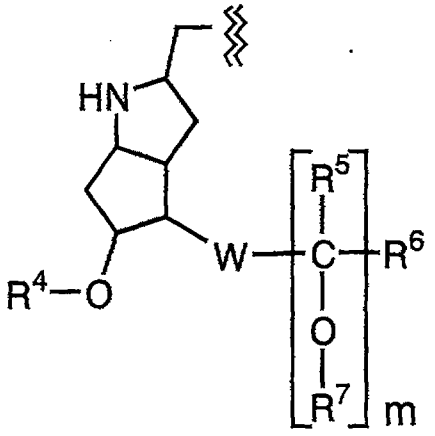


(G12)

(In Formula (G1), Formula (G2), Formula (G3), Formula (G4), Formula (G5), Formula (G6), Formula (G7), Formula (G8), Formula (G9), Formula (G10), Formula (G11) and Formula (G12),

the symbol ≋ represents the site of linkage with A^{10}.

R^4 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group or a functional group forming the acetal bond together with the oxygen atom bonded to R^4.

W represents a single bond, $-CH_2-$, $-(CH_2)_2-$, $-(CH_2)_3-$, -CH=CH-, $-CH=CHCH_2-$, $-C\equiv C-$ or $-C\equiv CCH_2-$.

m may be either 0 or 1. However, when W is a single bond, m is equal to 1.

R^5 and R^6 are either identical or different and, either represent one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having

1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl

group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

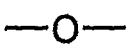
5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

or, when R^5 and R^6 are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms,

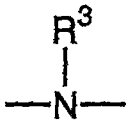
cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

R^7 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms,a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^7, or, when R^7 and R^5 are bonded to each other, it represents one portion of the bond forming the carbonyl group together with the carbon atom bonded to R^5 and the oxygen atom bonded to R^7.

A^{20} represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

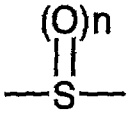


(A2A)



(A2B)

(In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.)



(A2C)

(In the formula, n represents 0, 1, or 2.)

A^{10} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^{20} through an identical atom or through different atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{30} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^{20} and A^{40} through an identical atom or through different atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group

having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{40} represents any of the items 1) to 3) below

1) a single bond

2) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^{10} and R^{20}, and A^{30} through an identical atom or through different atoms.

3) when A^{40} and R^{10} are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^{40} or R^{10} and the nitrogen atom they are bonded to are bonded through a double bond, R^{20} represents the bond between A^{40} or R^{10} and the nitrogen atom.)

However, in the combination of G, A^{10}, A^{20}, A^{30}, and A^{40} of the above Formula (2), when G represents the Formula (G1), and either of A^{10} or A^{30} is a phenylene group, A^{20} may not be a single bond. In addition, when A^{20} represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^{20} and the nitrogen atom bonded to R^{10} and R^{20} must be bonded with more than two carbon atoms in between.

R^{10} and R^{20} are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom (however, when R^{10} and R^{20} both represent a hydrogen atom, only in the case where G is equal to Formula (G1)),

2) when G is not equal to Formula (G7), a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) when G is not equal to Formula (G7), a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group,

acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) when G is not equal to Formula (G7), a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

6) when G is not equal to Formula (G7), an acyl group having 1 to 10 carbon atoms

7) when G is not equal to Formula (G7), a sulfonyl group having 1 to 8 carbon atoms (however, when either R^{10} or R^{20} represents a sulfonyl group having 1 to 8 carbon atoms, the other may be neither an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

or, when R^{10} and R^{20} are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms,

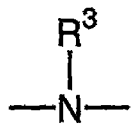
fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)]

The same examples given for G in the above Formula (1) may be cited as preferred examples for G in the above Formula (2).

In the above Formula (2), A^{20} represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

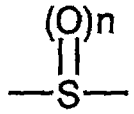


(A2A)



(A2B)

[In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.]



(A2C)

[In the formula, n represents 0, 1, or 2.]

The same examples given as concrete examples for R^3 in the above Formula (1) may be cited as concrete examples for R^3 in the above Formula (A2B).

In the above Formula (A2C), n represents 0, 1, or 2. However, 0 may be cited as the preferred value for n.

A single bond, -O-, -NH-, -N(CH_3)- and -S- may be cited as such preferred functional groups for A^{20}.

A^{10} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^{20} through an identical atom or through different atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

The same examples given as concrete examples for A^1 in the above Formula (1) may be cited as such concrete examples for A^{10}. A bond representing a single bond, $-CH_2-$, $-(CH_2)_2-$, =CH- and $=CHCH_2-$ may be cited as particularly preferred functional groups.

In the above Formula (2), A^{30} represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^{20} and A^{40} through an identical atom or through different atoms, and chosen from a group consisting of an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

The same examples given as concrete examples for A^3 in the above Formula (1) may be cited as concrete examples for A^{30}. A bond representing a single bond, $-CH_2-$, $-(CH_2)_2-$ and -CH=CH- may be cited as particularly preferred functional groups.

In the above Formula (2), A^{40} represents any of the items 1) to 3) below

1) a single bond

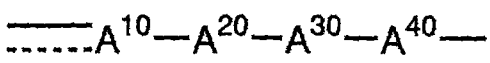
2) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^{10} and R^{20}, and A^{30} through an identical atom or through different atoms.

3) when A^{40} and R^{10} are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^{40} or R^{10} and the nitrogen atom they are bonded to are bonded through a double bond, R^{20} represents the bond between A^{40} or R^{10} and the nitrogen atom.). The same examples given as concrete examples for A^4 in the above Formula (1) may be cited as such concrete examples for A^{40}. A bond representing a single bond, $-CH_2-$ and $-(CH_2)_2-$ may be cited as particularly preferred functional groups. In addition, when A^{40} and R^{10} are bonded to each other, to represent a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to, 2-pyridyl, 4-pyridyl and 4-piperidinyl may be cited as particularly preferred examples.

However, in the combination of G, A^{10}, A^{20}, A^{30}, and A^{40}, when G represents the Formula (G1), and either of A^{10} or A^{30} is a phenylene group, A^{20} may not be a single bond. In addition, when A^{20} represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^{20} and the nitrogen atom bonded to R^{10} and R^{20} must be bonded with more than two carbon atoms in between.

In the above Formula (2), as preferred examples of functional groups represented by

the Formula (A0) below,



(A0)

[In Formula (A0), A^{10}, A^{20}, A^{30}, A^{40}, and the symbol have the same definition as above.]

$-(CH_2)_3-$, $-(CH_2)_4-$, $-(CH_2)_5-$, $=CH(CH_2)_2-$, $=CH(CH_2)_3-$, $=CH(CH_2)_4-$, $-CH_2CH=CHCH_2-$, $-NH(CH_2)_2-$, $-NH(CH_2)_3-$, $-NH(CH_2)_4-$, $-N(CH_3)(CH_2)_3-$, $-CH_2NH(CH_2)_2-$, $-O(CH_2)_3-$, $-CH_2O(CH_2)_2-$, $-S(CH_2)_3-$ and $-CH_2S(CH_2)_2-$ may be cited.

In the above Formula (2), R^{10} and R^{20} are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom (however, when R^{10} and R^{20} both represent a hydrogen atom, only in the case where G is equal to Formula (G1)),

2) when G is not equal to Formula (G7), a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) when G is not equal to Formula (G7), a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group

having 1 to 6 carbon atoms may be cited as substituents),

4) when G is not equal to Formula (G7), a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

6) when G is not equal to Formula (G7), an acyl group having 1 to 10 carbon atoms

7) when G is not equal to Formula (G7), a sulfonyl group having 1 to 8 carbon atoms (however, when either R^{10} or R^{20} represents a sulfonyl group having 1 to 8 carbon atoms, the other may neither be an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

or, when R^{10} and R^{20} are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon

atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

As concrete examples of R^{10} and R^{20}, the same examples as the examples given in the above Formula (1) as concrete examples may be cited, and, as particularly preferred examples, a hydrogen atom, a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, a t-butyl group, a 2-hydroxyethyl group, a 3-hydroxyethyl group, a carboxymethyl group, a carboxyethyl group, a methoxycarbonylethyl group, a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group, a cyclopropylmethyl group, a phenyl group, a tolyl group, a benzyl group, a phenethyl group, a pyridyl group, a 4-pyridyl group, a formyl group, an acetyl group, a propanoyl group, a benzoyl group, a methanesulfonyl group, a benzenesulfonyl group and a p-toluenesulfonyl may be cited.

When representing a functional group wherein R^1 and R^2 are bonded to each other and form an amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to, as examples of functional groups forming such an amino group having 4 to 8 carbon atoms, the same examples as the examples given in the above Formula (1) as concrete examples of R^1 and R^2 may be cited.

As preferred examples of such amino groups formed by R^{10}, R^{20} and the nitrogen atom they are bonded to, an amino group, a methylamino group, an ethylamino group, a propylamino group, a butylamino group, a dimethylamino group, an N-methylamino group, a diethylamino group, a dipropylamino group, a diisopropylamino group, a dibutylamino group, an N-methylamino group, a cyclohexylamino group, a phenylamino group, a benzylamino group, a tolylamino group, a (4-pyridylmethyl)amino group, a 2-pyridylamino group, a 1-pyrrolidinyl group, a piperidino group, a morpholino group, a 4-N-methylpiperadin-1-yl group, a carboxymethylamino group, a 1-carboxyethylamino group, a 2-hydroxyethylamino group, and a 3-hydroxyethylamino group may be cited.

There are instances where the nitrogen-containing compound represented by the above Formula (1) may form salts. No particular restriction exists for such salts provided they are pharmacologically accepted. Concretely, mineral acid salts such as hydrochlorides, hydrobromates, hydroiodates, phosphates, nitrates, and sulfates, organic sulfonates such as methane sulfonates, 1-hydroxyethane sulfonates, and p-toluenesulfonates, and, organic carboxylates such as acetates, trifluoroacetates, propionates, oxalates, malonates, succinates, glutarates, adipinates, tartrates, maleates, malates and mendelates may be included as added acidic salts, and, salts formed with inorganic bases such as sodium salts, potassium salts,

magnesium salts, calcium salts, inorganic salt groups such as aluminium salts, and, salts formed with organic bases such as methylamine salts, ethylamine salts, lysine salts, and ornithin salts may be cited as salts made with bases.

Concrete examples of the nitrogen-containing compounds represented by the above Formula (1) provided by the present invention will be given in the following. However, the invention is not limited to these examples.

1) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene

2) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

3) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

4) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

5) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

6) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

7) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

8) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

9) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

10) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

11) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

12) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

13) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

14) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

15) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

16) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

17) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

18) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

19) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

20) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

21) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

22) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

23) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

24) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

25) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

26) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

27) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

28) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

29) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

30) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

31) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

32) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

33) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

34) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

35) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

36) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

37) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

38) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

39) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

40) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

41) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

42) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

43) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

44) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

45) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

46) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

47) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

48) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

49) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

50) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-

octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

51) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

52) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

53) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

54) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

55) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

56) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

57) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

58) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

59) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

60) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

61) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

62) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

63) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

64) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

65) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

66) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

67) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

68) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

69) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

70) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

71) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

72) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

73) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

74) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

75) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

76) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

77) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

78) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

79) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

80) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

81) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

82) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

83) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

84) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

85) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

86) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

87) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

88) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

89) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

90) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

91) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

92) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

93) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

94) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

95) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

96) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

97) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

98) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

99) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

100) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

101) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

102) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

103) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

104) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

105) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

106) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

107) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

108) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

109) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

110) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

111) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

112) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

113) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

114) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

115) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

116) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

117) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

118) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

119) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

120) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

121) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

122) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

123) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

124) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

125) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

126) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

127) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

128) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

129) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

130) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

131) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

132) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

133) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

134) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

135) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

136) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

137) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

138) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

139) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

140) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

141) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

142) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

143) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

144) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

145) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

146) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

147) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

148) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

149) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

150) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

151) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

152) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

153) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

154) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

155) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(3S,5S,1E)-3-

hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

156) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

157) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

158) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

159) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

160) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

161) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

162) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

163) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

164) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

165) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

166) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

167) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

168) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

169) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

170) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

171) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

172) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

173) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

174) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

175) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

176) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

177) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

178) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

179) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

180) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

181) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

182) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

183) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

184) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

185) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

186) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

187) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

188) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

189) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

190) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-

octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

191) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

192) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

193) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

194) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

195) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

196) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

197) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

198) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

199) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

200) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

201) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

202) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

203) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

204) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

205) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

206) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

207) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

208) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

209) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

210) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

211) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

212) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

213) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

214) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

215) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

216) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

217) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

218) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

219) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

220) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

221) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

222) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

223) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

224) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

225) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(4S,1E)-4-

hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

226) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

227) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

228) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

229) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

230) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

231) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

232) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

233) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

234) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

235) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

236) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

237) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

238) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

239) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

240) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

241) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

242) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

243) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

244) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

245) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

246) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

247) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

248) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

249) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

250) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

251) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

252) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

253) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

254) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

255) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

256) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

257) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

258) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

259) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

260) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-

octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

261) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

262) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

263) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

264) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

265) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

266) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

267) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

268) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

269) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

270) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

271) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

272) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

273) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

274) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

275) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

276) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

277) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

278) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

279) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

280) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

281) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

282) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

283) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

284) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

285) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

286) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

287) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

288) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

289) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

290) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

291) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

292) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

293) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

294) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

295) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-

butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

296) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

297) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

298) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

299) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

300) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

301) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

302) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

303) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

304) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

305) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

306) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

307) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

308) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

309) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

310) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

311) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

312) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

313) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

314) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

315) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

316) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

317) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

318) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

319) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

320) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

321) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

322) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

323) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

324) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

325) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

326) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

327) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

328) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

329) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

330) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(3S,1E)-3-hydroxy-4-

(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

331) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

332) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

333) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

334) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

335) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

336) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

337) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

338) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

339) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

340) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

341) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

342) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

343) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

344) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

345) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

346) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

347) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

348) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

349) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

350) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

351) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

352) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

353) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

354) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

355) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

356) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

357) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

358) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

359) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

360) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

361) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

362) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

363) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

364) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

365) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-

butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

366) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

367) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

368) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

369) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

370) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

371) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

372) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

373) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

374) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

375) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

376) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

377) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

378) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

379) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

380) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

381) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

382) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

383) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

384) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

385) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

386) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

387) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

388) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

389) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

390) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

391) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

392) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

393) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

394) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

395) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

396) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

397) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

398) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

399) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

400) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-

[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

401) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

402) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

403) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

404) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

405) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

406) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

407) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

408) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

409) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

410) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

411) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

412) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

413) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

414) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

415) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

416) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

417) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

418) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

419) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

420) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

421) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

422) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

423) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

424) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

425) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

426) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

427) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

428) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

429) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

430) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

431) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

432) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

433) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

434) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

435) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(3R,1E)-3-hydroxy-4-

(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

436) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

437) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

438) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

439) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

440) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

441) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

442) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

443) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

444) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

445) (1S,5S,6R,7R)-3-(4-N-methylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

446) (1S,5S,6R,7R)-3-(4-N-ethylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

447) (1S,5S,6R,7R)-3-(4-N-propylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

448) (1S,5S,6R,7R)-3-(4-N-isopropylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

449) (1S,5S,6R,7R)-3-(4-N-butylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

450) (1S,5S,6R,7R)-3-(4-N-t-butylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

451) (1S,5S,6R,7R)-3-(4-N-phenylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

452) (1S,5S,6R,7R)-3-(4-N-benzylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

453) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

454) (1S,5S,6R,7R)-3-[4-(4-N-methyl-1-piperazinyl)carbonylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

455) (1S,5S,6R,7R)-3-[4-N-(2-pyridyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

456) (1S,5S,6R,7R)-3-(4-N,N-dipropylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

457) (1S,5S,6R,7R)-3-(4-N,N-dibutylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

458) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

459) (1S,5S,6R,7R)-3-[4-N-(2-hydroxyethyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

460) (1S,5S,6R,7R)-3-[4-N-(3-hydroxypropyl)carbamoylbutyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

461) (1S,5S,6R,7R)-3-(3-carbamoylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

462) (1S,5S,6R,7R)-3-(3-N,N-dimethylcarbamoylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

463) (1S,5S,6R,7R)-3-(3-N,N-diisopropylcarbamoylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

464) (1S,5S,6R,7R)-3-(3-N-t-butyl-N-methylcarbamoylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

465) (1S,5S,6R,7R)-3-[3-(1-pyrrolidinyl)carbonylpropyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

466) (1S,5S,6R,7R)-3-(3-piperidinocarbonylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

467) (1S,5S,6R,7R)-3-(3-morpholinocarbonylpropyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

468) (1S,5S,6R,7R)-3-(5-carbamoylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

469) (1S,5S,6R,7R)-3-(5-N,N-dimethylcarbamoylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

470) (1S,5S,6R,7R)-3-(5-N,N-diisopropylcarbamoylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

471) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylcarbamoylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

472) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)carbonylpentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

473) (1S,5S,6R,7R)-3-(5-piperidinocarbonylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

474) (1S,5S,6R,7R)-3-(5-morpholinocarbonylpentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

475) (1S,5S,6R,7R)-3-[(1Z)-3-N,N-dimethylcarbamoyl-1-propenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

476) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

477) (1S,5S,6R,7R)-3-[(1E)-4-N,N-dimethylcarbamoyl-1-butenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

478) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylcarbamoyl-1-pentenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

479) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

480) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

481) (1S,5S,6R,7R)-3-[N-(2-N,N-diisopropylcarbamoylethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

482) (1S,5S,6R,7R)-3-[N-(2-N-t-butyl-N-methylcarbamoylethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

483) (1S,5S,6R,7R)-3-[N-[2-(1-pyrrolidinyl)carbonylethyl]aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

484) (1S,5S,6R,7R)-3-[N-(2-piperidinocarbonylethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

485) (1S,5S,6R,7R)-3-[N-(2-morpholinocarbonylethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

486) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylcarbamoylpropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

487) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylcarbamoylethyl)-N-methylaminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

488) (1S,5S,6R,7R)-3-[N-(N,N-dimethylcarbamoylmethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

489) (1S,5S,6R,7R)-3-[N-(N,N-diisopropylcarbamoylmethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

490) (1S,5S,6R,7R)-3-[N-(N-t-butyl-N-methylcarbamoylmethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

491) (1S,5S,6R,7R)-3-[2-N-[(1-pyrrolidinyl)carbonylmethyl]aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

492) (1S,5S,6R,7R)-3-[2-N-(piperidinocarbonylmethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

493) (1S,5S,6R,7R)-3-[2-N-(morpholinocarbonylmethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

494) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylcarbamoylethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

495) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

496) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

497) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

498) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinyl)carbonylethyl]oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

499) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

500) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

501) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

502) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

503) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

504) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

505) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

506) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

507) (1S,5S,6R,7R)-3-[(2-N,N-dimethylcarbamoylethyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

508) (1S,5S,6R,7R)-3-[(2-N,N-diisopropylcarbamoylethyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

509) (1S,5S,6R,7R)-3-[(2-N-t-butyl-N-methylcarbamoylethyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

510) (1S,5S,6R,7R)-3-[[2-(1-pyrrolidinylcarbonyl)ethyl]thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

511) (1S,5S,6R,7R)-3-[(2-piperidinocarbonylethyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

512) (1S,5S,6R,7R)-3-[(2-morpholinocarbonylethyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

513) (1S,5S,6R,7R)-3-[2-(N,N-dimethylcarbamoylmethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

514) (1S,5S,6R,7R)-3-[2-(N,N-diisopropylcarbamoylmethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

515) (1S,5S,6R,7R)-3-[2-(N-t-butyl-N-methylcarbamoylmethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

516) (1S,5S,6R,7R)-3-[2-[(1-pyrrolidinyl)carbonylmethyl]thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

517) (1S,5S,6R,7R)-3-[2-(piperidinocarbonylmethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

518) (1S,5S,6R,7R)-3-[2-(morpholinocarbonylmethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

519) (1S,5S,6R,7R)-3-[(2-carbamoylphenyl)methyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

520) (1S,5S,6R,7R)-3-[(4-carbamoylphenyl)methyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

521) (1S,5S,6R,7R)-3-[2-(3-carbamoylphenyl)ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

522) (1S,5S,6R,7R)-3-[2-[3-(piperidinocarbonyl)phenyl]ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

523) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

524) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

525) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

526) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

527) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

528) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

529) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

530) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

531) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

532) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group

533) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

534) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

535) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

536) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

537) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

538) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

539) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-

octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

540) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

541) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

542) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group

543) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

544) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

545) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

546) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

547) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

548) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

549) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

550) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

551) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

552) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group

553) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

554) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

555) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

556) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

557) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

558) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

559) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

560) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

561) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

562) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group

563) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

564) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

565) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

566) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

567) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

568) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

569) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

570) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

571) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-

propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

572) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group

573) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

574) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

575) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

576) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

577) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

578) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

579) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

580) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

581) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

582) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group

583) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

584) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

585) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

586) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

587) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

588) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

589) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

590) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

591) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

592) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group

593) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

594) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

595) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

596) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

597) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

598) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

599) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

600) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

601) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

602) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-3-phenyl-

1-propenyl group

603) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

604) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

605) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

606) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

607) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

608) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

609) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

610) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

611) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

612) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group

613) (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

614) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

615) (1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

616) (1S,5S,6R,7R)-3-[4-N-(2-methoxycarbonylethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

617) (1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl)carbamoylbutyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

618) (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

619) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)carbonylbutyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

620) (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

621) (1S,5S,6R,7R)-3-(4-morpholinocarbonylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

622) compounds of compound numbers 10 to 87 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-1-octenyl group

623) (1S,5S,6R,7S)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

624) (1S,5S,6R,7S)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

625) (1R,5R,6S,7S)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

626) (1R,5R,6S,7S)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

627) (1R,5R,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

628) (1R,5R,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

629) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-hydroxy-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

630) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

631) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

632) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

633) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

634) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-hexenyl]-7-hydroxybicyclo[3.3.0]-2-octene

635) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-hexenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

636) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-heptenyl]-7-hydroxybicyclo[3.3.0]-2-octene

637) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-heptenyl]-7-hydroxybicyclo[3.3.0]-2-octene

638) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

639) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

640) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-decenyl]-7-hydroxybicyclo[3.3.0]-2-octene

641) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-1-decenyl]-7-hydroxybicyclo[3.3.0]-2-octene

642) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

643) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

644) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

655) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

646) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

647) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-(3-ethylcyclopentyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

648) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-(3-ethylcyclopentyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

649) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

650) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

651) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

652) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

653) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

654) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

655) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

656) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

657) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

658) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

659) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

660) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

661) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

662) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-(p-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

663) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-(p-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

664) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

665) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

666) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

667) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

668) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

669) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

670) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-5-(m-tolyl)-1-

pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

671) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

672) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

673) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

674) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(4-methoxyphenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

675) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(4-methoxyphenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

676) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(4-N,N-dimethylaminophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

677) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(4-N,N-dimethylaminophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

678) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(3-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

679) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(3-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

680) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(4-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

681) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(4-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

682) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

683) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

684) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

685) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

686) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

687) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

688) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

689) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

690) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

691) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

692) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

693) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

694) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-3-methyl-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

695) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-3-methyl-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

696) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

697) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

698) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E,5Z)-3-hydroxy-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

699) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E,5Z)-3-hydroxy-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

700) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

701) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

702) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

703) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

704) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4,4-dimethyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

705) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4,4-dimethyl-6-

octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

706) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

707) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

708) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

709) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

710) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

711) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-1-octynyl]-7-hydroxybicyclo[3.3.0]-2-octene

712) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-1-octynyl]-7-hydroxybicyclo[3.3.0]-2-octene

713) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1Z)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

714) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1Z)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

715) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxyoctyl]-7-hydroxybicyclo[3.3.0]-2-octene

716) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxyoctyl]-7-hydroxybicyclo[3.3.0]-2-octene

717) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-3-methyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

718) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-3-methyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

719) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-4,4-dimethyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

720) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-4,4-dimethyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

721) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-3-phenylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

722) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-3-phenylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

723) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-4-phenylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

724) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-4-phenylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

725) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-4-(m-tolyl)butyl]-7-hydroxybicyclo[3.3.0]-2-octene

726) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-4-(m-tolyl)butyl]-7-hydroxybicyclo[3.3.0]-2-octene

727) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S)-3-hydroxy-3-cyclopentylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

728) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R)-3-hydroxy-3-cyclopentylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

729) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

730) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

731) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-hydroxy-4-butyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

732) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-butyl-1,5-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

733) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-butyl-1,5-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

734) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-cyclopentyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

735) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-cyclopentyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

736) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-cyclohexyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

737) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-cyclohexyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

738) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

739) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-4-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

740) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-(1-hydroxycyclopentyl)-1-

propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

741) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-(1-hydroxycyclohexyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

742) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

743) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-4-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

744) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

745) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

746) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,5S)-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

747) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,5R)-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

748) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E,5S)-5-methyl-1,3-nonadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

749) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E,5R)-5-methyl-1,3-nonadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

750) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,4R)-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

751) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,4S)-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

752) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-4-methyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

753) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,4R)-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

754) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,4S)-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

755) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-4-ethyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

756) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-butyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

757) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,5Z)-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

758) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E,5Z)-1,3,5-octatrienyl]-7-hydroxybicyclo[3.3.0]-2-octene

759) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-cyclopentyliden-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

760) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-cyclohexyliden-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

761) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-2-phenylvinyl]-7-hydroxybicyclo[3.3.0]-2-octene

762) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-2-(o-tolyl)vinyl]-7-hydroxybicyclo[3.3.0]-2-octene

763) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-2-(m-tolyl)vinyl]-7-hydroxybicyclo[3.3.0]-2-octene

764) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-2-(p-tolyl)vinyl]-7-hydroxybicyclo[3.3.0]-2-octene

765) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

766) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

767) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-4-phenyl-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

768) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-4-phenyl-3-methyl-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

769) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

770) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

771) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

772) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-4-(m-tolyl)-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

773) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

774) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-5-(m-tolyl)-1,3-pentadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

775) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-4,4-bisphenylsulfonyl-4-

(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

776) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E,3E)-5-(m-tolyl)-1,3-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

777) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(4-phenoxybutyl)-7-hydroxybicyclo[3.3.0]-2-octene

778) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

779) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

780) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

781) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-hexenyl]-7-hydroxybicyclo[3.3.0]-2-octene

782) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-heptenyl]-7-hydroxybicyclo[3.3.0]-2-octene

783) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

784) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

785) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-1-decenyl]-7-hydroxybicyclo[3.3.0]-2-octene

786) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-3-oxo-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

787) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4R,1E)-3-oxo-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

788) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

789) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(5S,1E)-3-oxo-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

790) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(5R,1E)-3-oxo-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

791) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

792) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

793) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

794) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

795) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

796) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

797) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

798) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

799) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

800) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-3-(p-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

801) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

802) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

803) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

804) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

805) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

806) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1E)-3-oxo-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

807) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-hydroxymethyl-7-hydroxybicyclo[3.3.0]-2-octene

808) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R)-1-hydroxyethyl]-7-hydroxybicyclo[3.3.0]-2-octene

809) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S)-1-hydroxyethyl]-7-hydroxybicyclo[3.3.0]-2-octene

810) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R)-1-hydroxypentyl]-7-

hydroxybicyclo[3.3.0]-2-octene

811) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S)-1-hydroxypentyl]-7-hydroxybicyclo[3.3.0]-2-octene

812) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R)-1-hydroxy-1-methylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

813) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S)-1-hydroxy-1-methylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

814) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R,2E)-1-hydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

815) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S,2E)-1-hydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

816) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R,3S,2E)-1,3-dihydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

817) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S,3S,2E)-1,3-dihydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

818) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R,3S,2E)-1,3-dihydroxy-4-cyclopentyl-2-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

819) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S,3S,2E)-1,3-dihydroxy-4-cyclopentyl-2-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

820) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R,3S,2E)-1,3-dihydroxy-5-phenyl-2-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

821) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S,3S,2E)-1,3-dihydroxy-5-phenyl-2-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

822) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S)-1-hydroxy-2-pentynyl]-7-hydroxybicyclo[3.3.0]-2-octene

823) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R)-1-hydroxy-2-pentynyl]-7-hydroxybicyclo[3.3.0]-2-octene

824) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1R)-1-hydroxy-5-phenoxypentyl]-7-hydroxybicyclo[3.3.0]-2-octene

825) (1S,5S,6S,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(1S)-1-hydroxy-5-phenoxypentyl]-7-hydroxybicyclo[3.3.0]-2-octene

826) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxyphenylmethyl]-7-hydroxybicyclo[3.3.0]-2-octene

827) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxyphenylmethyl]-7-hydroxybicyclo[3.3.0]-2-octene

828) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(o-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

829) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(o-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

830) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(m-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

831) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(m-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

832) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(p-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

833) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(p-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

834) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(4-methoxyphenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

835) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(4-methoxyphenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

836) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(4-N,N-dimethylaminophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

837) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(4-N,N-dimethylaminophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

838) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(R)-hydroxy(3-chlorophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

839) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(S)-hydroxy(3-chlorophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

840) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-formyl-7-hydroxybicyclo[3.3.0]-2-octene

841) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-acetyl-7-hydroxybicyclo[3.3.0]-2-octene

842) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-benzoyl-7-hydroxybicyclo[3.3.0]-2-octene

843) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(o-tolyl)-7-hydroxybicyclo[3.3.0]-2-octene

844) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(m-tolyl)-7-hydroxybicyclo[3.3.0]-2-octene

845) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(p-tolyl)-7-hydroxybicyclo[3.3.0]-2-

octene

846) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(4-methoxyphenylcarbonyl)-7-hydroxybicyclo[3.3.0]-2-octene

847) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(4-N,N-dimethylaminophenyl carbonyl)-7-hydroxybicyclo[3.3.0]-2-octene

848) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-(3-chlorophenylcarbonyl)-7-hydroxybicyclo[3.3.0]-2-octene

849) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-phenylvinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

850) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-(4-methoxyphenyl)vinyl carbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

851) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-(4-N,N-dimethylamino phenyl)vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

852) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-(3-chlorophenyl)vinyl carbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

853) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-(2-thienyl)vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

854) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(2E)-2-(4-pyridyl)vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

855) compounds of compound numbers 623 to 854 of the examples given above, wherein the 4-N,N-dimethylcarbamoylbutyl group, which is a substitution group at position 3 of the bicyclo[3.3.0]-2-octene cycle, has been replaced by either of the 4-carbamoylbutyl group, the 4-N,N-diethylcarbamoylbutyl group, the 4-N-(2-methoxycarbonylethyl)carbamoylbutyl group, the 4-N-(4-pyridylmethyl)carbamoylbutyl group, the 4-N,N-diisopropylcarbamoylbutyl group, the 4-(1-pyrrolidinyl)carbonylbutyl group, the 4-piperidinocarbonylbutyl group or the 4-morpholinocarbonylbutyl group

856) (1S,2R,3R,5S)-7-[(E)-4-carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

857) (1S,2R,3R,5S)-7-[(E)-4-N-methylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

858) (1S,2R,3R,5S)-7-[(E)-4-N-ethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

859) (1S,2R,3R,5S)-7-[(E)-4-N-propylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

860) (1S,2R,3R,5S)-7-[(E)-4-N-isopropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-

octenyl]-3-hydroxybicyclo[3.3.0]octane

861) (1S,2R,3R,5S)-7-[(E)-4-N-butylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

862) (1S,2R,3R,5S)-7-[(E)-4-N-t-butylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

863) (1S,2R,3R,5S)-7-[(E)-4-N-phenylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

864) (1S,2R,3R,5S)-7-[(E)-4-N-benzylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

865) (1S,2R,3R,5S)-7-[(E)-4-N-(4-pyridylmethyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

866) (1S,2R,3R,5S)-7-[(E)-4-(1-pyrrolidinyl)carbonylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

867) (1S,2R,3R,5S)-7-[(E)-4-piperidinocarbonylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

868) (1S,2R,3R,5S)-7-[(E)-4-morpholinocarbonylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

869) (1S,2R,3R,5S)-7-[(E)-4-(4-N-methyl-1-piperazinyl)carbonylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

870) (1S,2R,3R,5S)-7-[(E)-4-N-(2-pyridyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

871) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

872) (1S,2R,3R,5S)-7-[(E)-4-N,N-diethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

873) (1S,2R,3R,5S)-7-[(E)-4-N,N-dipropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

874) (1S,2R,3R,5S)-7-[(E)-4-N,N-diisopropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

875) (1S,2R,3R,5S)-7-[(E)-4-N,N-dibutylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

876) (1S,2R,3R,5S)-7-[(E)-4-N-t-butyl-N-methylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

877) (1S,2R,3R,5S)-7-[(E)-4-N-(2-hydroxyethyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

878) (1S,2R,3R,5S)-7-[(E)-4-N-(3-hydroxypropyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

879) (1S,2R,3R,5S)-7-[(E)-3-carbamoylpropylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

880) (1S,2R,3R,5S)-7-[(E)-3-N,N-dimethylcarbamoylpropylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

881) (1S,2R,3R,5S)-7-[(E)-5-carbamoylpentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

882) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylcarbamoylpentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

883) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

884) (1S,2R,3R,5S)-7-[(E)-2-(N,N-diisopropylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

885) (1S,2R,3R,5S)-7-[(E)-2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

886) (1S,2R,3R,5S)-7-[(E)-2-[(1-pyrrolidinyl)carbonylmethyl]oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

887) (1S,2R,3R,5S)-7-[(E)-2-(piperidinocarbonylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

888) (1S,2R,3R,5S)-7-[(E)-2-(morpholinocarbonylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

889) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)thioethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

890) (1S,2R,3R,5S)-7-[(E)-2-N-(N,N-dimethylcarbamoylmethyl)aminoethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

891) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethoxymethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

892) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethylthiomethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

893) (1S,2R,3R,5S)-7-[(E)-N-(N,N-dimethylcarbamoylmethyl)aminomethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

894) (1S,2R,3R,5S)-7-[(E)-4-carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

895) (1S,2R,3R,5S)-7-[(E)-4-N-methylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-

cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

896) (1S,2R,3R,5S)-7-[(E)-4-N-ethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

897) (1S,2R,3R,5S)-7-[(E)-4-N-propylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

898) (1S,2R,3R,5S)-7-[(E)-4-N-isopropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

899) (1S,2R,3R,5S)-7-[(E)-4-N-butylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

900) (1S,2R,3R,5S)-7-[(E)-4-N-t-butylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

901) (1S,2R,3R,5S)-7-[(E)-4-N-phenylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

902) (1S,2R,3R,5S)-7-[(E)-4-N-benzylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

903) (1S,2R,3R,5S)-7-[(E)-4-N-(4-pyridylmethyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

904) (1S,2R,3R,5S)-7-[(E)-4-(1-pyrrolidinyl)carbonylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

905) (1S,2R,3R,5S)-7-[(E)-4-piperidinocarbonylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

906) (1S,2R,3R,5S)-7-[(E)-4-morpholinocarbonylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

907) (1S,2R,3R,5S)-7-[(E)-4-(4-N-methyl-1-piperazinyl)carbonylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

908) (1S,2R,3R,5S)-7-[(E)-4-N-(2-pyridyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

909) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

910) (1S,2R,3R,5S)-7-[(E)-4-N,N-diethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

911) (1S,2R,3R,5S)-7-[(E)-4-N,N-dipropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

912) (1S,2R,3R,5S)-7-[(E)-4-N,N-diisopropylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

913) (1S,2R,3R,5S)-7-[(E)-4-N,N-dibutylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

914) (1S,2R,3R,5S)-7-[(E)-4-N-t-butyl-N-methylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

915) (1S,2R,3R,5S)-7-[(E)-4-N-(2-hydroxyethyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

916) (1S,2R,3R,5S)-7-[(E)-4-N-(3-hydroxypropyl)carbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

917) (1S,2R,3R,5S)-7-[(E)-3-carbamoylpropylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

918) (1S,2R,3R,5S)-7-[(E)-3-N,N-dimethylcarbamoylpropylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

919) (1S,2R,3R,5S)-7-[(E)-5-carbamoylpentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

920) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylcarbamoylpentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

921) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

922) (1S,2R,3R,5S)-7-[(E)-2-(N,N-diisopropylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

923) (1S,2R,3R,5S)-7-[(E)-2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

924) (1S,2R,3R,5S)-7-[(E)-2-[(1-pyrrolidinyl)carbonylmethyl]oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

925) (1S,2R,3R,5S)-7-[(E)-2-(piperidinocarbonylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

926) (1S,2R,3R,5S)-7-[(E)-2-(morpholinocarbonylmethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

927) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)thioethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

928) (1S,2R,3R,5S)-7-[(E)-2-N-(N,N-dimethylcarbamoylmethyl)aminoethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

929) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethoxymethylene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

930) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethylthiomethylene]-2-[(3S,1E)-3-

hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

931) (1S,2R,3R,5S)-7-[(E)-N-(N,N-dimethylcarbamoylmethyl)aminomethylene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

932) (1S,2R,3R,5S)-7-[(E)-4-carbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

933) (1S,2R,3R,5S)-7-[(E)-4-N-methylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

934) (1S,2R,3R,5S)-7-[(E)-4-N-ethylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

935) (1S,2R,3R,5S)-7-[(E)-4-N-propylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

936) (1S,2R,3R,5S)-7-[(E)-4-N-isopropylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

937) (1S,2R,3R,5S)-7-[(E)-4-N-butylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

938) (1S,2R,3R,5S)-7-[(E)-4-N-t-butylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

939) (1S,2R,3R,5S)-7-[(E)-4-N-phenylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

940) (1S,2R,3R,5S)-7-[(E)-4-N-benzylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

941) (1S,2R,3R,5S)-7-[(E)-4-N-(4-pyridylmethyl)carbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

942) (1S,2R,3R,5S)-7-[(E)-4-(1-pyrrolidinyl)carbonylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

943) (1S,2R,3R,5S)-7-[(E)-4-piperidinocarbonylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

944) (1S,2R,3R,5S)-7-[(E)-4-morpholinocarbonylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

945) (1S,2R,3R,5S)-7-[(E)-4-(4-N-methyl-1-piperazinyl)carbonylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

946) (1S,2R,3R,5S)-7-[(E)-4-N-(2-pyridyl)carbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

947) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

948) (1S,2R,3R,5S)-7-[(E)-4-N,N-diethylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

949) (1S,2R,3R,5S)-7-[(E)-4-N,N-dipropylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

950) (1S,2R,3R,5S)-7-[(E)-4-N,N-diisopropylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

951) (1S,2R,3R,5S)-7-[(E)-4-N,N-dibutylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

952) (1S,2R,3R,5S)-7-[(E)-4-N-t-butyl-N-methylcarbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

953) (1S,2R,3R,5S)-7-[(E)-4-N-(2-hydroxyethyl)carbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

954) (1S,2R,3R,5S)-7-[(E)-4-N-(3-hydroxypropyl)carbamoylbutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

955) (1S,2R,3R,5S)-7-[(E)-3-carbamoylpropylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

956) (1S,2R,3R,5S)-7-[(E)-3-N,N-dimethylcarbamoylpropylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

957) (1S,2R,3R,5S)-7-[(E)-5-carbamoylpentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

958) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylcarbamoylpentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

959) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

960) (1S,2R,3R,5S)-7-[(E)-2-(N,N-diisopropylcarbamoylmethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

961) (1S,2R,3R,5S)-7-[(E)-2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

962) (1S,2R,3R,5S)-7-[(E)-2-[(1-pyrrolidinyl)carbonylmethyl]oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

963) (1S,2R,3R,5S)-7-[(E)-2-(piperidinocarbonylmethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

964) (1S,2R,3R,5S)-7-[(E)-2-(morpholinocarbonylmethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

965) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)thioethylidene]-2-[(3S,4S,1E)-3-

hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

966) (1S,2R,3R,5S)-7-[(E)-2-N-(N,N-dimethylcarbamoylmethyl)aminoethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

967) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethoxymethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

968) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethylthiomethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

969) (1S,2R,3R,5S)-7-[(E)-N-(N,N-dimethylcarbamoylmethyl)aminomethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

970) (1S,2R,3R,5S)-7-[(E)-4-carbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

971) (1S,2R,3R,5S)-7-[(E)-4-N-methylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

972) (1S,2R,3R,5S)-7-[(E)-4-N-ethylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

973) (1S,2R,3R,5S)-7-[(E)-4-N-propylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

974) (1S,2R,3R,5S)-7-[(E)-4-N-isopropylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

975) (1S,2R,3R,5S)-7-[(E)-4-N-butylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

976) (1S,2R,3R,5S)-7-[(E)-4-N-t-butylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

977) (1S,2R,3R,5S)-7-[(E)-4-N-phenylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

978) (1S,2R,3R,5S)-7-[(E)-4-N-benzylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

979) (1S,2R,3R,5S)-7-[(E)-4-N-(4-pyridylmethyl)carbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

980) (1S,2R,3R,5S)-7-[(E)-4-(1-pyrrolidinyl)carbonylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

981) (1S,2R,3R,5S)-7-[(E)-4-piperidinocarbonylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

982) (1S,2R,3R,5S)-7-[(E)-4-morpholinocarbonylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

983) (1S,2R,3R,5S)-7-[(E)-4-(4-N-methyl-1-piperazinyl)carbonylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

984) (1S,2R,3R,5S)-7-[(E)-4-N-(2-pyridyl)carbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

985) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

986) (1S,2R,3R,5S)-7-[(E)-4-N,N-diethylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

987) (1S,2R,3R,5S)-7-[(E)-4-N,N-dipropylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

988) (1S,2R,3R,5S)-7-[(E)-4-N,N-diisopropylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

989) (1S,2R,3R,5S)-7-[(E)-4-N,N-dibutylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

990) (1S,2R,3R,5S)-7-[(E)-4-N-t-butyl-N-methylcarbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

991) (1S,2R,3R,5S)-7-[(E)-4-N-(2-hydroxyethyl)carbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

992) (1S,2R,3R,5S)-7-[(E)-4-N-(3-hydroxypropyl)carbamoylbutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

993) (1S,2R,3R,5S)-7-[(E)-3-carbamoylpropylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

994) (1S,2R,3R,5S)-7-[(E)-3-N,N-dimethylcarbamoylpropylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

995) (1S,2R,3R,5S)-7-[(E)-5-carbamoylpentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

996) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylcarbamoylpentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

997) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

998) (1S,2R,3R,5S)-7-[(E)-2-(N,N-diisopropylcarbamoylmethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

999) (1S,2R,3R,5S)-7-[(E)-2-(N-t-butyl-N-methylcarbamoylmethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1000) (1S,2R,3R,5S)-7-[(E)-2-[(1-pyrrolidinyl)carbonylmethyl]oxyethylidene]-2-[(3S,4R,1E)-

3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1001) (1S,2R,3R,5S)-7-[(E)-2-(piperidinocarbonylmethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1002) (1S,2R,3R,5S)-7-[(E)-2-(morpholinocarbonylmethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1003) (1S,2R,3R,5S)-7-[(E)-2-(N,N-dimethylcarbamoylmethyl)thioethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1004) (1S,2R,3R,5S)-7-[(E)-2-N-(N,N-dimethylcarbamoylmethyl)aminoethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1005) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethoxymethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1006) (1S,2R,3R,5S)-7-[(E)-N,N-dimethylcarbamoylmethylthiomethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1007) (1S,2R,3R,5S)-7-[(E)-N-(N,N-dimethylcarbamoylmethyl)aminomethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

1008) compounds of compound numbers 856 to 893 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the (3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group, or, the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group or the 2-(1-hydroxycyclohexyl)ethynyl group

1009) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-carbamoylpropyl)-1H-cyclopenta[b]benzofuran

1010) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1011) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-ethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1012) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-propylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1013) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-isopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1014) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1015) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-t-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1016) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-phenylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1017) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-benzylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1018) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[3-N-(4-pyridylmethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1019) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[3-(1-pyrrolidinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1020) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-piperidinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1021) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-morpholinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1022) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[3-(4-N-methyl-1-piperazinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1023) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[3-N-(2-pyridyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1024) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-dimethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1025) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-diethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1026) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-dipropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1027) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-diisopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1028) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-dibutylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1029) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N-t-butyl-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1030) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[3-N-(2-hydroxyethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1031) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-

[3-N-(3-hydroxypropyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1032) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(2-carbamoylethyl)-1H-cyclopenta[b]benzofuran

1033) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(2-N,N-dimethylcarbamoylethyl)-1H-cyclopenta[b]benzofuran

1034) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-carbamoylbutyl)-1H-cyclopenta[b]benzofuran

1035) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-dimethylcarbamoylbutyl)-1H-cyclopenta[b]benzofuran

1036) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(2-N,N-dimethylcarbamoylethyloxy)-1H-cyclopenta[b]benzofuran

1037) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-carbamoylpropyl)-1H-cyclopenta[b]benzofuran

1038) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1039) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-ethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1040) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-propylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1041) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-isopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1042) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1043) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-t-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1044) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-phenylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1045) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-benzylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1046) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(4-pyridylmethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1047) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-(1-pyrrolidinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1048) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-piperidinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1049) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-morpholinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1050) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-(4-N-methyl-1-piperazinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1051) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(2-pyridyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1052) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1053) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-diethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1054) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dipropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1055) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-diisopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1056) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dibutylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1057) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-t-butyl-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1058) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(2-hydroxyethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1059) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(3-hydroxypropyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1060) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-carbamoylethyl)-1H-cyclopenta[b]benzofuran

1061) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-N,N-dimethylcarbamoylethyl)-1H-cyclopenta[b]benzofuran

1062) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-carbamoylbutyl)-1H-cyclopenta[b]benzofuran

1063) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dimethylcarbamoylbutyl)-1H-cyclopenta[b]benzofuran

1064) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-N,N-dimethylcarbamoylethyloxy)-1H-cyclopenta[b]benzofuran

1065) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-carbamoylpropyl)-1H-cyclopenta[b]benzofuran

1066) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-

octen-6-ynyl]-5-(3-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1067) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-ethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1068) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-propylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1069) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-isopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1070) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1071) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-t-butylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1072) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-phenylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1073) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-benzylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1074) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(4-pyridylmethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1075) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-(1-pyrrolidinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1076) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-piperidinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1077) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-morpholinocarbonylpropyl)-1H-cyclopenta[b]benzofuran

1078) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-(4-N-methyl-1-piperazinyl)carbonylpropyl]-1H-cyclopenta[b]benzofuran

1079) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(2-pyridyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1080) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1081) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-diethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1082) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dipropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1083) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-diisopropylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1084) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dibutylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1085) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N-t-butyl-N-methylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

1086) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(2-hydroxyethyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1087) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[3-N-(3-hydroxypropyl)carbamoylpropyl]-1H-cyclopenta[b]benzofuran

1088) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-carbamoylethyl)-1H-cyclopenta[b]benzofuran

1089) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-N,N-dimethylcarbamoylethyl)-1H-cyclopenta[b]benzofuran

1090) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-carbamoylbutyl)-1H-cyclopenta[b]benzofuran

1091) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dimethylcarbamoylbutyl)-1H-cyclopenta[b]benzofuran

1092) (1R;2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(2-N,N-dimethylcarbamoylethyloxy)-1H-cyclopenta[b]benzofuran

1093) compounds of compound numbers 1009 to 1036 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the (3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group or the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group

1094) (1S,2R,3R,5S)-7-[(Z)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1095) (1R,5S,7R,8R)-3-(4-N,N-dimethylcarbamoylbutyl)-8-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1096) (1S,2R,3R,5S,7R)-7-(4-N,N-dimethylcarbamoylbutyl)-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1097) (1S,2R,3R,5S,7R)-7-[2-(N,N-dimethylaminocarbamoylmethoxy)ethyl]-2-[(3R,5S,1E)-3-

hydroxy-5-methyl-1-nonenyl]-3-hydroxybicyclo[3.3.0]octane

1098) (1S,3S,5R,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-oxabicyclo[3.3.0]octane

1099) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-oxabicyclo[3.3.0]-3-octen

1100) (1S,5R,6R,7R)-3-[(Z)-4-N,N-dimethylcarbamoylbutylidene]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-4-oxo-2-oxabicyclo[3.3.0]octane

1101) (1S,3S,5R,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-thiabicyclo[3.3.0]octane

1102) (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-azabicyclo[3.3.0]-2-octene

1103) (1S,3S,5R,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-azabicyclo[3.3.0]octane

1104) compounds of compound numbers 1094 to 1103 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the (3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group, the (3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group, the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group or the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group

1105) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1106) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1107) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1108) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1109) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1110) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1111) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1112) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1113) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1114) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1115) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1116) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1117) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1118) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1119) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1120) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1121) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1122) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1123) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1124) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1125) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1126) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1127) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-

7-hydroxybicyclo[3.3.0]-2-octene

1128) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1129) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1130) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1131) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1132) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1133) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1134) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1135) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1136) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1137) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1138) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1139) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1140) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1141) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1142) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1143) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1144) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1145) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1146) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1147) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1148) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1149) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1150) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1151) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1152) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1153) (1S;5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1154) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1155) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1156) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1157) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1158) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1159) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1160) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1161) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1162) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-

1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1163) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1164) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1165) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1166) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1167) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1168) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1169) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1170) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1171) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1172) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1173) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1174) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1175) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1176) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1177) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1178) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1179) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1180) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1181) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1182) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1183) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1184) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1185) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1186) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1187) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1188) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1189) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1190) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1191) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1192) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1193) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1194) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1195) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1196) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1197) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-

nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1198) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1199) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1200) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1201) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1202) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1203) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1204) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1205) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1206) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1207) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1208) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1209) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1210) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1211) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1212) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1213) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1214) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1215) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1216) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1217) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1218) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1219) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1220) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1221) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1222) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1223) (1S;5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1224) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1225) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1226) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1227) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1228) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1229) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1230) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1231) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1232) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1233) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1234) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1235) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1236) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1237) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1238) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1239) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1240) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1241) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1242) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1243) (1S,5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1244) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1245) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1246) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1247) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1248) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1249) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1250) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1251) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1252) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1253) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1254) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1255) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1256) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1257) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1258) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1259) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1260) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1261) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1262) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1263) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1264) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1265) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1266) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1267) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(3S,5S,1E)-3-

hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1268) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1269) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1270) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1271) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1272) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1273) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1274) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1275) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1276) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1277) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1278) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1279) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1280) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1281) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1282) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1283) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1284) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1285) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1286) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1287) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1288) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1289) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1290) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1291) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1292) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1293) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1294) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1295) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1296) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1297) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1298) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1299) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1300) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1301) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1302) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-

1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1303) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1304) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1305) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1306) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1307) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1308) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1309) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1310) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1311) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1312) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1313) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1314) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1315) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1316) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1317) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1318) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1319) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1320) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1321) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1322) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1323) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1324) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1325) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1326) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1327) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1328) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1329) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1330) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1331) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1332) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1333) (1S,5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1334) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1335) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1336) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1337) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(4S,1E)-4-

hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1338) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1339) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1340) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1341) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1342) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1343) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1344) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1345) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1346) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1347) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1348) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1349) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1350) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1351) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1352) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1353) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1354) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1355) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1356) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1357) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1358) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1359) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1360) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1361) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1362) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1363) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1364) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1365) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1366) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1367) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1368) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1369) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1370) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1371) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1372) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1373) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1374) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1375) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1376) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1377) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1378) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1379) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1380) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1381) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1382) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1383) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1384) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1385) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1386) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1387) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1388) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1389) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1390) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1391) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1392) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1393) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1394) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1395) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1396) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1397) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1398) (1S;5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1399) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1400) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1401) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1402) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1403) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1404) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1405) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1406) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1407) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-

butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1408) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1409) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1410) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1411) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1412) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1413) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1414) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1415) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1416) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1417) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1418) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1419) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1420) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1421) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1422) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1423) (1S,5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1424) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1425) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1426) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1427) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1428) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1429) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1430) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1431) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1432) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1433) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1434) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1435) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1436) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1437) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1438) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1439) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1440) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1441) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1442) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-

1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1443) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1444) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1445) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1446) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1447) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1448) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1449) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1450) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1451) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1452) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1453) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1454) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1455) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1456) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1457) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1458) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1459) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1460) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1461) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1462) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1463) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1464) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1465) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1466) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1467) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1468) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1469) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1470) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1471) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1472) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1473) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1474) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1475) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1476) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1477) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-

butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1478) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1479) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1480) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1481) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1482) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1483) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1484) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1485) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1486) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1487) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1488) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1489) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1490) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1491) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1492) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1493) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1494) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1495) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1496) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1497) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1498) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1499) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1500) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1501) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1502) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1503) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1504) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1505) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1506) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1507) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1508) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1509) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1510) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1511) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1512) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-

(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1513) (1S,5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1514) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1515) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1516) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1517) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1518) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1519) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1520) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1521) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1522) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1523) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1524) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1525) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1526) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1527) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1528) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1529) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1530) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1531) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1532) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1533) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1534) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1535) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1536) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1537) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1538) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1539) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1540) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1541) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1542) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1543) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1544) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1545) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1546) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1547) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(3R,1E)-3-hydroxy-4-

(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1548) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1549) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1550) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1551) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1552) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1553) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1554) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1555) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1556) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1557) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1558) (1S,5S,6R,7R)-3-[5-N-(2-methoxycarbonylethyl)aminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1559) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1560) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1561) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1562) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1563) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1564) (1S,5S,6R,7R)-3-(5-N-methylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1565) (1S,5S,6R,7R)-3-(5-N-ethylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1566) (1S,5S,6R,7R)-3-(5-N-propylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1567) (1S,5S,6R,7R)-3-(5-N-isopropylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1568) (1S,5S,6R,7R)-3-(5-N-butylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1569) (1S,5S,6R,7R)-3-(5-N-t-butylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1570) (1S,5S,6R,7R)-3-(5-N-phenylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1571) (1S,5S,6R,7R)-3-(5-N-benzylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1572) (1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1573) (1S,5S,6R,7R)-3-[5-N-(2-pyridyl)aminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1574) (1S,5S,6R,7R)-3-(5-N,N-dipropylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1575) (1S,5S,6R,7R)-3-(5-N,N-dibutylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1576) (1S,5S,6R,7R)-3-(5-N-t-butyl-N-methylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1577) (1S,5S,6R,7R)-3-[5-N-(2-hydroxyethyl)aminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1578) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1579) (1S,5S,6R,7R)-3-(4-aminobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1580) (1S,5S,6R,7R)-3-(4-N,N-dimethylaminobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1581) (1S,5S,6R,7R)-3-(4-N,N-diisopropylaminobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1582) (1S,5S,6R,7R)-3-(4-N-t-butyl-N-methylaminobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1583) (1S,5S,6R,7R)-3-[4-(1-pyrrolidinyl)butyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1584) (1S,5S,6R,7R)-3-(4-piperidinobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1585) (1S,5S,6R,7R)-3-(4-morpholinobutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1586) (1S,5S,6R,7R)-3-(6-aminohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1587) (1S,5S,6R,7R)-3-(6-N,N-dimethylaminohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1588) (1S,5S,6R,7R)-3-(6-N,N-diisopropylaminohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1589) (1S,5S,6R,7R)-3-(6-N-t-butyl-N-methylaminohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1590) (1S,5S,6R,7R)-3-[6-(1-pyrrolidinyl)hexyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1591) (1S,5S,6R,7R)-3-(6-piperidinohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1592) (1S,5S,6R,7R)-3-(6-morpholinohexyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1593) (1S,5S,6R,7R)-3-[(1Z)-4-N,N-dimethylamino-1-butenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1594) (1S,5S,6R,7R)-3-[(1Z)-5-N,N-dimethylamino-1-pentenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1595) (1S,5S,6R,7R)-3-[(1E)-5-N,N-dimethylamino-1-pentenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1596) (1S,5S,6R,7R)-3-[(1Z)-6-N,N-dimethylamino-1-hexenyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1597) (1S,5S,6R,7R)-3-[N-(2-N,N-dimethylaminoethyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1598) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1599) (1S,5S,6R,7R)-3-[N-(3-N,N-diisopropylaminopropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1600) (1S,5S,6R,7R)-3-[N-(3-N-t-butyl-N-methylaminopropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1601) (1S,5S,6R,7R)-3-[N-[3-(1-pyrrolidinyl)propyl]aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1602) (1S,5S,6R,7R)-3-[N-(3-piperidinopropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1603) (1S,5S,6R,7R)-3-[N-(3-morpholinopropyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1604) (1S,5S,6R,7R)-3-[N-(4-N,N-dimethylaminobutyl)aminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1605) (1S,5S,6R,7R)-3-[N-(3-N,N-dimethylaminopropyl)-N-methylaminomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1606) (1S,5S,6R,7R)-3-[2-N-(2-N,N-dimethylaminoethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1607) (1S,5S,6R,7R)-3-[2-N-(2-N,N-diisopropylaminoethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1608) (1S,5S,6R,7R)-3-[2-N-(2-N-t-butyl-N-methylaminoethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1609) (1S,5S,6R,7R)-3-[2-N-[2-(1-pyrrolidinyl)ethyl]aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1610) (1S,5S,6R,7R)-3-[2-N-(2-piperidinoethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1611) (1S,5S,6R,7R)-3-[2-N-(2-morpholinoethyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1612) (1S,5S,6R,7R)-3-[2-N-(3-N,N-dimethylaminopropyl)aminoethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1613) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1614) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1615) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1616) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1617) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1618) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)oxymethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1619) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1620) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1621) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1622) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1623) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1624) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)oxyethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1625) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminopropyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1626) (1S,5S,6R,7R)-3-[(3-N,N-diisopropylaminopropyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1627) (1S,5S,6R,7R)-3-[(3-N-t-butyl-N-methylaminopropyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1628) (1S,5S,6R,7R)-3-[[3-(1-pyrrolidinyl)propyl]thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1629) (1S,5S,6R,7R)-3-[(3-piperidinopropyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1630) (1S,5S,6R,7R)-3-[(3-morpholinopropyl)thiomethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1631) (1S,5S,6R,7R)-3-[2-(2-N,N-dimethylaminoethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1632) (1S,5S,6R,7R)-3-[2-(2-N,N-diisopropylaminoethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1633) (1S,5S,6R,7R)-3-[2-(2-N-t-butyl-N-methylaminoethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1634) (1S,5S,6R,7R)-3-[2-[2-(1-pyrrolidinyl)ethyl]thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1635) (1S,5S,6R,7R)-3-[2-(2-piperidinoethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1636) (1S,5S,6R,7R)-3-[2-(2-morpholinoethyl)thioethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1637) (1S,5S,6R,7R)-3-[(3-N,N-dimethylaminophenyl)methyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1638) (1S,5S,6R,7R)-3-[[2-(aminomethyl)phenyl]methyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1639) (1S,5S,6R,7R)-3-[[4-(aminomethyl)phenyl]methyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1640) (1S,5S,6R,7R)-3-[2-[3-(aminomethyl)phenyl]ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1641) (1S,5S,6R,7R)-3-[2-[3-(piperidinomethyl)phenyl]ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1642) (1S,5S,6R,7R)-3-[2-(4-piperidyl)ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1643) (1S,5S,6R,7R)-3-[2-(4-pyridyl)ethyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1644) (1S,5S,6R,7R)-3-[4-(2-pyridyl)butyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1645) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1646) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1647) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1648) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1649) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1650) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1651) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1652) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1653) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1654) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group

1655) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1656) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1657) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1658) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1659) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1660) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1661) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1662) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1663) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1664) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group

1665) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1666) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1667) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1668) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1669) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1670) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1671) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1672) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1673) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1674) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group

1675) (1S;5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1676) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1677) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1678) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1679) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1680) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1681) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1682) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1683) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1684) compounds of compound numbers 1114 to 1194 of the examples given above, wherein

the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group

1685) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1686) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1687) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1688) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1689) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1690) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1691) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1692) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1693) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1694) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group

1695) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1696) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1697) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1698) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1699) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1700) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1701) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1702) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1703) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1704) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group

1705) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1706) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1707) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1708) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1709) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1710) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1711) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1712) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1713) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1714) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group

1715) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1716) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1717) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1718) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1719) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1720) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1721) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1722) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1723) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3R,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1724) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group

1725) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1726) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1727) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1728) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1729) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1730) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1731) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1732) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1733) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3R,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1734) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group

1735) (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1736) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1737) (1S,5S,6R,7R)-3-(5-N,N-diethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1738) (1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1739) (1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)aminopentyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1740) (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1741) (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1742) (1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1743) (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1744) compounds of compound numbers 1114 to 1194 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group at position 6 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by the (3R,1E)-3-hydroxy-1-octenyl group

1745) (1S,5S,6R,7S)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1746) (1S,5S,6R,7S)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1747) (1R,5R,6S,7S)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1748) (1R,5R,6S,7S)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1749) (1R,5R,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1750) (1R,5R,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1751) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-hydroxy-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1752) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1753) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1754) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1755) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1756) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-hexenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1757) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-hexenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1758) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-heptenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1759) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-heptenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1760) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1761) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1762) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-decenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1763) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-1-decenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1764) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1765) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1766) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1767) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1768) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1769) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-(3-ethylcyclopentyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1770) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-(3-ethylcyclopentyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1771) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1772) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1773) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1774) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1775) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1776) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1777) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1778) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1779) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1780) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1781) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1782) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-(m-tolyl)-1-

propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1783) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1784) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-(p-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1785) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-(p-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1786) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1787) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1788) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1789) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1790) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1791) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1792) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1793) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1794) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1795) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1796) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(4-methoxyphenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1797) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(4-methoxyphenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1798) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(4-N,N-dimethylaminophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1799) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(4-N,N-dimethylaminophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1800) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(3-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1801) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(3-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1802) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(4-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1803) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(4-chlorophenyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1804) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1805) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1806) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1807) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1808) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1809) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1810) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1811) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1812) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1813) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1814) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1815) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1816) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-3-methyl-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1817) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-3-methyl-5-

(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1818) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1819) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1820) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E,5Z)-3-hydroxy-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1821) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E,5Z)-3-hydroxy-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1822) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1823) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1824) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1825) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1826) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4,4-dimethyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1827) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4,4-dimethyl-6-octyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1828) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,4S,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1829) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1830) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4S,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1831) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,4R,1E)-3-hydroxy-4-methyl-6-nonyn-1-enyl]-7-hydroxybicyclo[3.3.0]-2-octene

1832) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-phenoxy-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1833) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-1-octynyl]-7-hydroxybicyclo[3.3.0]-2-octene

1834) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-1-octynyl]-7-hydroxybicyclo[3.3.0]-2-octene

1835) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1Z)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1836) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1Z)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1837) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxyoctyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1838) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxyoctyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1839) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-3-methyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

1840) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-3-methyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

1841) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-4,4-dimethyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

1842) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-4,4-dimethyloctyl]-7-hydroxybicyclo[3.3.0]-2-octene

1843) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-3-phenylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

1844) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-3-phenylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

1845) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-4-phenylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

1846) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-4-phenylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

1847) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-4-(m-tolyl)butyl]-7-hydroxybicyclo[3.3.0]-2-octene

1848) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-4-(m-tolyl)butyl]-7-hydroxybicyclo[3.3.0]-2-octene

1849) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S)-3-hydroxy-3-cyclopentylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

1850) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R)-3-hydroxy-3-cyclopentylpropyl]-7-hydroxybicyclo[3.3.0]-2-octene

1851) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1852) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-ethyl-1-

octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1853) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-hydroxy-4-butyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1854) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-butyl-1,5-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1855) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-butyl-1,5-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1856) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-cyclopentyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1857) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-cyclopentyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1858) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-cyclohexyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1859) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-cyclohexyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1860) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1861) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-4-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1862) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-(1-hydroxycyclopentyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1863) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-(1-hydroxycyclohexyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1864) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1865) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-4-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1866) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1867) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-1,3-octadienyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1868) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,5S)-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1869) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,5R)-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1870) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E,5S)-5-methyl-1,3-nonadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1871) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E,5R)-5-methyl-1,3-nonadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1872) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,4R)-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1873) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,4S)-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1874) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-4-methyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1875) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,4R)-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1876) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,4S)-4-ethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1877) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-4-ethyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1878) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-butyl-1,3-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1879) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,5Z)-1,5-octadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1880) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E,5Z)-1,3,5-octatrienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1881) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-cyclopentyliden-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1882) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-cyclohexyliden-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1883) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-2-phenylvinyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1884) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-2-(o-tolyl)vinyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1885) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-2-(m-tolyl)vinyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1886) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-2-(p-tolyl)vinyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1887) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-phenyl-1-propenyl]-7-hydroxy

bicyclo[3.3.0]-2-octene

1888) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-phenyl-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1889) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-4-phenyl-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1890) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-4-phenyl-3-methyl-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1891) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-(o-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1892) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1893) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4-(p-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1894) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-4-(m-tolyl)-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1895) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1896) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-5-(m-tolyl)-1,3-pentadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1897) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-4,4-bisphenylsulfonyl-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1898) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E,3E)-5-(m-tolyl)-1,3-hexadienyl]-7-hydroxybicyclo[3.3.0]-2-octene

1899) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(4-phenoxybutyl)-7-hydroxy bicyclo[3.3.0]-2-octene

1900) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-propenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1901) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1902) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-pentenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1903) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-hexenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1904) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-heptenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1905) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1906) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1907) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-1-decenyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1908) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-3-oxo-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1909) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4R,1E)-3-oxo-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1910) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4,4-dimethyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1911) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(5S,1E)-3-oxo-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1912) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(5R,1E)-3-oxo-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1913) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-cyclopentyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1914) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1915) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1916) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-cyclohexyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1917) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-phenyl-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1918) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-phenyl-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1919) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-5-phenyl-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1920) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-(o-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1921) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-(m-tolyl)-1-propenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1922) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-3-(p-tolyl)-1-propenyl]-7-

hydroxybicyclo[3.3.0]-2-octene

1923) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-(o-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1924) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1925) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-4-(p-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1926) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-5-(o-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1927) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-5-(m-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1928) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1E)-3-oxo-5-(p-tolyl)-1-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1929) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-hydroxymethyl-7-hydroxy bicyclo[3.3.0]-2-octene

1930) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R)-1-hydroxyethyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1931) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S)-1-hydroxyethyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1932) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R)-1-hydroxypentyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1933) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S)-1-hydroxypentyl]-7-hydroxy bicyclo[3.3.0]-2-octene

1934) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R)-1-hydroxy-1-methylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

1935) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S)-1-hydroxy-1-methylbutyl]-7-hydroxybicyclo[3.3.0]-2-octene

1936) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R,2E)-1-hydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1937) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S,2E)-1-hydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1938) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R,3S,2E)-1,3-dihydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1939) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S,3S,2E)-1,3-dihydroxy-2-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1940) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R,3S,2E)-1,3-dihydroxy-4-cyclopentyl-2-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1941) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S,3S,2E)-1,3-dihydroxy-4-cyclopentyl-2-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1942) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R,3S,2E)-1,3-dihydroxy-5-phenyl-2-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1943) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S,3S,2E)-1,3-dihydroxy-5-phenyl-2-pentenyl]-7-hydroxybicyclo[3.3.0]-2-octene

1944) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S)-1-hydroxy-2-pentynyl]-7-hydroxybicyclo[3.3.0]-2-octene

1945) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R)-1-hydroxy-2-pentynyl]-7-hydroxybicyclo[3.3.0]-2-octene

1946) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1R)-1-hydroxy-5-phenoxypentyl]-7-hydroxybicyclo[3.3.0]-2-octene

1947) (1S,5S,6S,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(1S)-1-hydroxy-5-phenoxypentyl]-7-hydroxybicyclo[3.3.0]-2-octene

1948) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxyphenylmethyl]-7-hydroxybicyclo[3.3.0]-2-octene

1949) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxyphenylmethyl]-7-hydroxybicyclo[3.3.0]-2-octene

1950) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(o-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1951) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(o-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1952) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(m-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1953) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(m-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1954) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(p-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1955) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(p-tolyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1956) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(4-methoxyphenyl) methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1957) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(4-methoxyphenyl)

methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1958) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(4-N,N-dimethylamino phenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1959) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(4-N,N-dimethylamino phenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1960) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(R)-hydroxy(3-chlorophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1961) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(S)-hydroxy(3-chlorophenyl)methyl]-7-hydroxybicyclo[3.3.0]-2-octene

1962) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-formyl-7-hydroxybicyclo[3.3.0]-2-octene

1963) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-acetyl-7-hydroxybicyclo[3.3.0]-2-octene

1964) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-benzoyl-7-hydroxybicyclo[3.3.0]-2-octene

1965) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(o-tolyl)-7-hydroxybicyclo[3.3.0]-2-octene

1966) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(m-tolyl)-7-hydroxybicyclo[3.3.0]-2-octene

1967) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(p-tolyl)-7-hydroxybicyclo[3.3.0]-2-octene

1968) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(4-methoxyphenylcarbonyl)-7-hydroxy bicyclo[3.3.0]-2-octene

1969) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(4-N,N-dimethylaminophenyl carbonyl)-7-hydroxybicyclo[3.3.0]-2-octene

1970) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-(3-chlorophenylcarbonyl)-7-hydroxy bicyclo[3.3.0]-2-octene

1971) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-phenylvinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1972) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-(4-methoxyphenyl)vinyl carbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1973) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-(4-N,N-dimethylaminophenyl) vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1974) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-(3-chlorophenyl)vinyl carbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1975) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-(2-thienyl)vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1976) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(2E)-2-(4-pyridyl)vinylcarbonyl]-7-hydroxybicyclo[3.3.0]-2-octene

1977) compounds of compound numbers 1655 to 1976 of the examples given above, wherein the 5-N,N-dimethylaminopentyl group, which is a substitution group at position 3 in the structure of the bicyclo[3.3.0]-2-octene cycle, has been replaced by either of the 5-aminopentyl group, the 5-N,N-diethylaminopentyl group, the 5-N-(3-hydroxypropyl)aminopentyl group, the 5-N-(4-pyridylmethyl)aminopentyl group, the 5-N,N-diisopropylaminopentyl group, the 5-(1-pyrrolidinyl)pentyl group or the 5-piperidinopentyl group, the 5-morpholinopentyl group

1978) (1S,2R,3R,5S)-7-[(E)-5-aminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxy bicyclo[3.3.0]octane

1979) (1S,2R,3R,5S)-7-[(E)-5-N-methylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1980) (1S,2R,3R,5S)-7-[(E)-5-N-ethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1981) (1S,2R,3R,5S)-7-[(E)-5-N-propylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1982) (1S,2R,3R,5S)-7-[(E)-5-N-isopropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1983) (1S,2R,3R,5S)-7-[(E)-5-N-butylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1984) (1S,2R,3R,5S)-7-[(E)-5-N-t-butylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1985) (1S,2R,3R,5S)-7-[(E)-5-N-phenylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1986) (1S,2R,3R,5S)-7-[(E)-5-N-benzylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1987) (1S,2R,3R,5S)-7-[(E)-5-N-(4-pyridylmethyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1988) (1S,2R,3R,5S)-7-[(E)-5-(1-pyrrolidinyl)pentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1989) (1S,2R,3R,5S)-7-[(E)-5-piperidinopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1990) (1S,2R,3R,5S)-7-[(E)-5-morpholinopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-

hydroxybicyclo[3.3.0]octane

1991) (1S,2R,3R,5S)-7-[(E)-5-(4-N-methyl-1-piperazinyl)pentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1992) (1S,2R,3R,5S)-7-[(E)-5-N-(2-pyridyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1993) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1994) (1S,2R,3R,5S)-7-[(E)-5-N,N-diethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1995) (1S,2R,3R,5S)-7-[(E)-5-N,N-dipropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1996) (1S,2R,3R,5S)-7-[(E)-5-N,N-diisopropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1997) (1S,2R,3R,5S)-7-[(E)-5-N,N-dibutylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1998) (1S,2R,3R,5S)-7-[(E)-5-N-t-butyl-N-methylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

1999) (1S,2R,3R,5S)-7-[(E)-5-N-(2-hydroxyethyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2000) (1S,2R,3R,5S)-7-[(E)-5-N-(3-hydroxypropyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2001) (1S,2R,3R,5S)-7-[(E)-4-aminobutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxy bicyclo[3.3.0]octane

2002) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylaminobutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2003) (1S,2R,3R,5S)-7-[(E)-6-aminohexylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxy bicyclo[3.3.0]octane

2004) (1S,2R,3R,5S)-7-[(E)-6-N,N-dimethylaminohexylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2005) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-diisopropylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2006) (1S,2R,3R,5S)-7-[(E)-2-(2-N-t-butyl-N-methylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2007) (1S,2R,3R,5S)-7-[(E)-2-[2-(1-pyrrolidinyl)ethyl]oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2008) (1S,2R,3R,5S)-7-[(E)-2-(2-piperidinoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2009) (1S,2R,3R,5S)-7-[(E)-2-(2-morpholinoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2010) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)thioethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2011) (1S,2R,3R,5S)-7-[(E)-2-N-(2-N,N-dimethylaminoethyl)aminoethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2012) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)oxymethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2013) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)thiomethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2014) (1S,2R,3R,5S)-7-[(E)-N-(2-N,N-dimethylaminoethyl)aminomethylene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2015) (1S,2R,3R,5S)-7-[(E)-5-aminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2016) (1S,2R,3R,5S)-7-[(E)-5-N-methylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2017) (1S,2R,3R,5S)-7-[(E)-5-N-ethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2018) (1S,2R,3R,5S)-7-[(E)-5-N-propylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2019) (1S,2R,3R,5S)-7-[(E)-5-N-isopropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2020) (1S,2R,3R,5S)-7-[(E)-5-N-butylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2021) (1S,2R,3R,5S)-7-[(E)-5-N-t-butylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2022) (1S,2R,3R,5S)-7-[(E)-5-N-phenylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2023) (1S,2R,3R,5S)-7-[(E)-5-N-benzylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2024) (1S,2R,3R,5S)-7-[(E)-5-N-(4-pyridylmethyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2025) (1S,2R,3R,5S)-7-[(E)-5-(1-pyrrolidinyl)pentylidene]-2-[(3S,1E)-3-hydroxy-3-

cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2026) (1S,2R,3R,5S)-7-[(E)-5-piperidinopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2027) (1S,2R,3R,5S)-7-[(E)-5-morpholinopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2028) (1S,2R,3R,5S)-7-[(E)-5-(4-N-methyl-1-piperazinyl)pentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2029) (1S,2R,3R,5S)-7-[(E)-5-N-(2-pyridyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2030) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2031) (1S,2R,3R,5S)-7-[(E)-5-N,N-diethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2032) (1S,2R,3R,5S)-7-[(E)-5-N,N-dipropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2033) (1S,2R,3R,5S)-7-[(E)-5-N,N-diisopropylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2034) (1S,2R,3R,5S)-7-[(E)-5-N,N-dibutylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2035) (1S,2R,3R,5S)-7-[(E)-5-N-t-butyl-N-methylaminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2036) (1S,2R,3R,5S)-7-[(E)-5-N-(2-hydroxyethyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2037) (1S,2R,3R,5S)-7-[(E)-5-N-(3-hydroxypropyl)aminopentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2038) (1S,2R,3R,5S)-7-[(E)-4-aminobutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2039) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylaminobutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2040) (1S,2R,3R,5S)-7-[(E)-6-aminohexylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2041) (1S,2R,3R,5S)-7-[(E)-6-N,N-dimethylaminohexylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2042) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2043) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-diisopropylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2044) (1S,2R,3R,5S)-7-[(E)-2-(2-N-t-butyl-N-methylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2045) (1S,2R,3R,5S)-7-[(E)-2-[2-(1-pyrrolidinyl)ethyl]oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2046) (1S,2R,3R,5S)-7-[(E)-2-(2-piperidinoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2047) (1S,2R,3R,5S)-7-[(E)-2-(2-morpholinoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2048) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)thioethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2049) (1S,2R,3R,5S)-7-[(E)-2-N-(2-N,N-dimethylaminoethyl)aminoethylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2050) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)oxymethylene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2051) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)thiomethylene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2052) (1S,2R,3R,5S)-7-[(E)-N-(2-N,N-dimethylaminoethyl)aminomethylene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxybicyclo[3.3.0]octane

2053) (1S,2R,3R,5S)-7-[(E)-5-aminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2054) (1S,2R,3R,5S)-7-[(E)-5-N-methylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2055) (1S,2R,3R,5S)-7-[(E)-5-N-ethylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2056) (1S,2R,3R,5S)-7-[(E)-5-N-propylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2057) (1S,2R,3R,5S)-7-[(E)-5-N-isopropylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2058) (1S,2R,3R,5S)-7-[(E)-5-N-butylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2059) (1S,2R,3R,5S)-7-[(E)-5-N-t-butylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2060) (1S,2R,3R,5S)-7-[(E)-5-N-phenylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-

6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2061) (1S,2R,3R,5S)-7-[(E)-5-N-benzylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2062) (1S,2R,3R,5S)-7-[(E)-5-N-(4-pyridylmethyl)aminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2063) (1S,2R,3R,5S)-7-[(E)-5-(1-pyrrolidinyl)pentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2064) (1S,2R,3R,5S)-7-[(E)-5-piperidinopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2065) (1S,2R,3R,5S)-7-[(E)-5-morpholinopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2066) (1S,2R,3R,5S)-7-[(E)-5-(4-N-methyl-1-piperazinyl)pentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2067) (1S,2R,3R,5S)-7-[(E)-5-N-(2-pyridyl)aminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2068) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2069) (1S,2R,3R,5S)-7-[(E)-5-N,N-diethylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2070) (1S,2R,3R,5S)-7-[(E)-5-N,N-dipropylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2071) (1S,2R,3R,5S)-7-[(E)-5-N,N-diisopropylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2072) (1S,2R,3R,5S)-7-[(E)-5-N,N-dibutylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2073) (1S,2R,3R,5S)-7-[(E)-5-N-t-butyl-N-methylaminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2074) (1S,2R,3R,5S)-7-[(E)-5-N-(2-hydroxyethyl)aminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2075) (1S,2R,3R,5S)-7-[(E)-5-N-(3-hydroxypropyl)aminopentylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2076) (1S,2R,3R,5S)-7-[(E)-4-aminobutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2077) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylaminobutylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2078) (1S,2R,3R,5S)-7-[(E)-6-aminohexylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2079) (1S,2R,3R,5S)-7-[(E)-6-N,N-dimethylaminohexylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2080) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2081) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-diisopropylaminoethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2082) (1S,2R,3R,5S)-7-[(E)-2-(2-N-t-butyl-N-methylaminoethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2083) (1S,2R,3R,5S)-7-[(E)-2-[2-(1-pyrrolidinyl)ethyl]oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2084) (1S,2R,3R,5S)-7-[(E)-2-(2-piperidinoethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2085) (1S,2R,3R,5S)-7-[(E)-2-(2-morpholinoethyl)oxyethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2086) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)thioethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2087) (1S,2R,3R,5S)-7-[(E)-2-N-(2-N,N-dimethylaminoethyl)aminoethylidene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2088) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)oxymethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2089) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)thiomethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2090) (1S,2R,3R,5S)-7-[(E)-N-(2-N,N-dimethylaminoethyl)aminomethylene]-2-[(3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2091) (1S,2R,3R,5S)-7-[(E)-5-aminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2092) (1S,2R,3R,5S)-7-[(E)-5-N-methylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2093) (1S,2R,3R,5S)-7-[(E)-5-N-ethylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2094) (1S,2R,3R,5S)-7-[(E)-5-N-propylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2095) (1S,2R,3R,5S)-7-[(E)-5-N-isopropylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-

methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2096) (1S,2R,3R,5S)-7-[(E)-5-N-butylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2097) (1S,2R,3R,5S)-7-[(E)-5-N-t-butylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2098) (1S,2R,3R,5S)-7-[(E)-5-N-phenylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2099) (1S,2R,3R,5S)-7-[(E)-5-N-benzylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2100) (1S,2R,3R,5S)-7-[(E)-5-N-(4-pyridylmethyl)aminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2101) (1S,2R,3R,5S)-7-[(E)-5-(1-pyrrolidinyl)pentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2102) (1S,2R,3R,5S)-7-[(E)-5-piperidinopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2103) (1S,2R,3R,5S)-7-[(E)-5-morpholinopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2104) (1S,2R,3R,5S)-7-[(E)-5-(4-N-methyl-1-piperazinyl)pentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2105) (1S,2R,3R,5S)-7-[(E)-5-N-(2-pyridyl)aminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2106) (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2107) (1S,2R,3R,5S)-7-[(E)-5-N,N-diethylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2108) (1S,2R,3R,5S)-7-[(E)-5-N,N-dipropylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2109) (1S,2R,3R,5S)-7-[(E)-5-N,N-diisopropylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2110) (1S,2R,3R,5S)-7-[(E)-5-N,N-dibutylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2111) (1S,2R,3R,5S)-7-[(E)-5-N-t-butyl-N-methylaminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2112) (1S,2R,3R,5S)-7-[(E)-5-N-(2-hydroxyethyl)aminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2113) (1S,2R,3R,5S)-7-[(E)-5-N-(3-hydroxypropyl)aminopentylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2114) (1S,2R,3R,5S)-7-[(E)-4-aminobutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2115) (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylaminobutylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2116) (1S,2R,3R,5S)-7-[(E)-6-aminohexylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2117) (1S,2R,3R,5S)-7-[(E)-6-N,N-dimethylaminohexylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2118) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2119) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-diisopropylaminoethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2120) (1S,2R,3R,5S)-7-[(E)-2-(2-N-t-butyl-N-methylaminoethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2121) (1S,2R,3R,5S)-7-[(E)-2-[2-(1-pyrrolidinyl)ethyl]oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2122) (1S,2R,3R,5S)-7-[(E)-2-(2-piperidinoethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2123) (1S,2R,3R,5S)-7-[(E)-2-(2-morpholinoethyl)oxyethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2124) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)thioethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2125) (1S,2R,3R,5S)-7-[(E)-2-N-(2-N,N-dimethylaminoethyl)aminoethylidene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2126) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)oxymethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2127) (1S,2R,3R,5S)-7-[(E)-(2-N,N-dimethylaminoethyl)thiomethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2128) (1S,2R,3R,5S)-7-[(E)-N-(2-N,N-dimethylaminoethyl)aminomethylene]-2-[(3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl]-3-hydroxybicyclo[3.3.0]octane

2129) compounds of compound numbers 1978 to 2014 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the

(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group or the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group, the 2-(1-hydroxycyclohexyl)ethynyl group

2130) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-aminobutyl)-1H-cyclopenta[b]benzofuran

2131) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2132) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-ethylaminobutyl)-1H-cyclopenta[b]benzofuran

2133) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-propylaminobutyl)-1H-cyclopenta[b]benzofuran

2134) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-isopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2135) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2136) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-t-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2137) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-phenylaminobutyl)-1H-cyclopenta[b]benzofuran

2138) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-benzylaminobutyl)-1H-cyclopenta[b]benzofuran

2139) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-N-(4-pyridylmethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2140) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-(1-pyrrolidinyl)butyl]-1H-cyclopenta[b]benzofuran

2141) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-piperidinobutyl)-1H-cyclopenta[b]benzofuran

2142) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-morpholinobutyl)-1H-cyclopenta[b]benzofuran

2143) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-(4-N-methyl-1-piperazinyl)butyl]-1H-cyclopenta[b]benzofuran

2144) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-N-(2-pyridyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2145) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-dimethylaminobutyl)-1H-cyclopenta[b]benzofuran

2146) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-diethylaminobutyl)-1H-cyclopenta[b]benzofuran

2147) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-dipropylaminobutyl)-1H-cyclopenta[b]benzofuran

2148) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-diisopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2149) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N,N-dibutylaminobutyl)-1H-cyclopenta[b]benzofuran

2150) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(4-N-t-butyl-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2151) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-N-(2-hydroxyethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2152) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-[4-N-(3-hydroxypropyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2153) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-aminopropyl)-1H-cyclopenta[b]benzofuran

2154) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-dimethylaminopropyl)-1H-cyclopenta[b]benzofuran

2155) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(5-aminopentyl)-1H-cyclopenta[b]benzofuran

2156) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(5-N,N-dimethylaminopentyl)-1H-cyclopenta[b]benzofuran

2157) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-1-octenyl]-5-(3-N,N-dimethylaminopropyloxy)-1H-cyclopenta[b]benzofuran

2158) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-aminobutyl)-1H-cyclopenta[b]benzofuran

2159) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2160) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-ethylaminobutyl)-1H-cyclopenta[b]benzofuran

2161) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-

octen-6-ynyl]-5-(4-N-propylaminobutyl)-1H-cyclopenta[b]benzofuran

2162) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-isopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2163) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2164) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-t-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2165) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-phenylaminobutyl)-1H-cyclopenta[b]benzofuran

2166) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-benzylaminobutyl)-1H-cyclopenta[b]benzofuran

2167) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(4-pyridylmethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2168) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-(1-pyrrolidinyl)butyl]-1H-cyclopenta[b]benzofuran

2169) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-piperidinobutyl)-1H-cyclopenta[b]benzofuran

2170) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-morpholinobutyl)-1H-cyclopenta[b]benzofuran

2171) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-(4-N-methyl-1-piperazinyl)butyl]-1H-cyclopenta[b]benzofuran

2172) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(2-pyridyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2173) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dimethylaminobutyl)-1H-cyclopenta[b]benzofuran

2174) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-diethylaminobutyl)-1H-cyclopenta[b]benzofuran

2175) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dipropylaminobutyl)-1H-cyclopenta[b]benzofuran

2176) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-diisopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2177) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dibutylaminobutyl)-1H-cyclopenta[b]benzofuran

2178) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-t-butyl-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2179) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(2-hydroxyethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2180) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(3-hydroxypropyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2181) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-aminopropyl)-1H-cyclopenta[b]benzofuran

2182) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylaminopropyl)-1H-cyclopenta[b]benzofuran

2183) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(5-aminopentyl)-1H-cyclopenta[b]benzofuran

2184) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(5-N,N-dimethylaminopentyl)-1H-cyclopenta[b]benzofuran

2185) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4R,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylaminopropyloxy)-1H-cyclopenta[b]benzofuran

2186) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-aminobutyl)-1H-cyclopenta[b]benzofuran

2187) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2188) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-ethylaminobutyl)-1H-cyclopenta[b]benzofuran

2189) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-propylaminobutyl)-1H-cyclopenta[b]benzofuran

2190) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-isopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2191) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2192) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-t-butylaminobutyl)-1H-cyclopenta[b]benzofuran

2193) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-phenylaminobutyl)-1H-cyclopenta[b]benzofuran

2194) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-benzylaminobutyl)-1H-cyclopenta[b]benzofuran

2195) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(4-pyridylmethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2196) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-

octen-6-ynyl]-5-[4-(1-pyrrolidinyl)butyl]-1H-cyclopenta[b]benzofuran

2197) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-piperidinobutyl)-1H-cyclopenta[b]benzofuran

2198) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-morpholinobutyl)-1H-cyclopenta[b]benzofuran

2199) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-(4-N-methyl-1-piperazinyl)butyl]-1H-cyclopenta[b]benzofuran

2200) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(2-pyridyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2201) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dimethylaminobutyl)-1H-cyclopenta[b]benzofuran

2202) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-diethylaminobutyl)-1H-cyclopenta[b]benzofuran

2203) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dipropylaminobutyl)-1H-cyclopenta[b]benzofuran

2204) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-diisopropylaminobutyl)-1H-cyclopenta[b]benzofuran

2205) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N,N-dibutylaminobutyl)-1H-cyclopenta[b]benzofuran

2206) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(4-N-t-butyl-N-methylaminobutyl)-1H-cyclopenta[b]benzofuran

2207) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(2-hydroxyethyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2208) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-[4-N-(3-hydroxypropyl)aminobutyl]-1H-cyclopenta[b]benzofuran

2209) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-aminopropyl)-1H-cyclopenta[b]benzofuran

2210) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylaminopropyl)-1H-cyclopenta[b]benzofuran

2211) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(5-aminopentyl)-1H-cyclopenta[b]benzofuran

2212) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(5-N,N-dimethylaminopentyl)-1H-cyclopenta[b]benzofuran

2213) (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,4S,1E)-3-hydroxy-4-methyl-1-octen-6-ynyl]-5-(3-N,N-dimethylaminopropyloxy)-1H-cyclopenta[b]benzofuran

2214) compunds of compound numbers 2130 to 1256 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the (3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenyl group or the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl

2215) (1S,2R,3R,5S)-7-[(Z)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2216) (1R,5S,7R,8R)-3-(5-N,N-dimethylaminopentyl)-8-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

2217) (1S,2R,3R,5S,7R)-7-(5-N,N-dimethylaminopentyl)-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

2218) (1S,2R,3R,5S,7R)-7-[2-(2-N,N-dimethylaminoethoxy)ethyl]-2-[(3R,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-3-hydroxybicyclo[3.3.0]octane

2219) (1S,3S,5R,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-oxabicyclo[3.3.0]octane

2220) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-oxabicyclo[3.3.0]-3-octen

2221) (1S,5R,6R,7R)-3-[(Z)-5-N,N-dimethylaminopentylidene]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-4-oxo-2-oxabicyclo[3.3.0]octane

2222) (1S,3S,5R,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-thiabicyclo[3.3.0]octane

2223) (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-azabicyclo[3.3.0]-2-octene

2224) (1S,3S,5R,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy-2-azabicyclo[3.3.0]octane

2225) compunds of compound numbers 2215 to 1224 of the examples given above, wherein the (3S,1E)-3-hydroxy-1-octenyl group, which is a substitution group bonded to the carbon at position 12 of the prostacyclin carbon identification number, has been replaced by either of the (3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl group, the (4S,1E)-4-hydroxy-4-methyl-1-octenyl group, the (4R,1E)-4-hydroxy-4-

methyl-1-octenyl group, the (3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl group, the (E)-4-(m-tolyl)-1-butenyl group, the (3S,4S,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group, the (3S,4R,1E)-3-hydroxy-4-methyl-6-octyn-1-enyl group, the (3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl group, the (3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl group, the (3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl group, the (3R,1E)-3-hydroxy-3-phenyl-1-propenylgroup or the (3R,1E)-3-hydroxy-4-phenoxy-1-butenyl group

2226) compunds of compound numbers 1 to 174, 262 to 435, 523 to 532, 543 to 728, 855 to 1104, 1105 to 1284, 1375 to 1554, 1645 to 1654, 1665 to 1850 and 1977 to 2225 of the examples given above, wherein the hydroxyl groups/group, which are/is bonded to the carbon at position 11 and/or at position 15 of the prostacyclin carbon identification number, has/have been substituted for either of the acetoxy group, t-butyldimethylsilyloxy group, trimethylsilyloxy group or the tetrahydropyran-2-yloxy group

2227) compunds of compound numbers 175 to 261, 533 to 542, 729 to 743, 855, 1008, 1093, 1104, 1285 to 1374, 1655 to 1664, 1851 to 1865, 1977, 2129, 2214 and 2225 of the examples given above, whrein the hydroxyl groups/group, which are/is bonded to the carbon at position 11 and/or at position 16 of the prostacyclin carbon identification number, has/have been substituted for either of the acetoxy group, the t-butyldimethylsilyloxy group, the trimethylsilyloxy group or the tetrahydropyran-2-yloxy group

2228) compunds of compound numbers 436 to 522, 744 to 855, 1008, 1093, 1104, 1555 to 1644, 1866 to 1977, 2129, 2214 and 2225of the examples given above, whrein the hydroxyl group, which is bonded to the carbon at position 11 of the prostacyclin carbon identification number, has been substituted for either of the acetoxy group, the t-butyldimethylsilyloxy group, the trimethylsilyloxy group or the tetrahydropyran-2-yloxy group

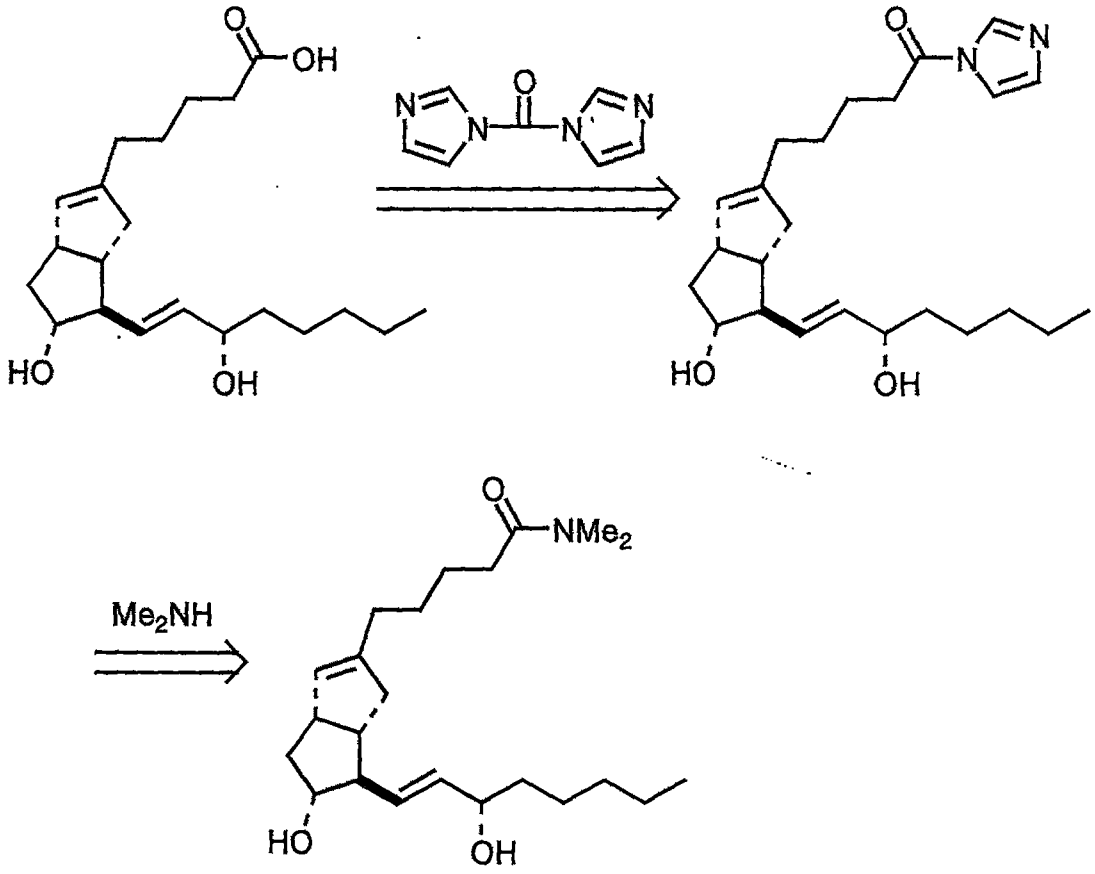
2229) (1S,2R,3R,5S)-7-[(E)-2-(2-N,N-dimethylaminoethyl)oxyethylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane

The nitrogen-containing compound represented by the above Formula (1) has an activity for the remedy of neural damage. Therefore, the nitrogen-containing compound of the present invention can be used as an agent for the treatment of disorders due to neural damage, or and agent for the treatment of lesion of nerves due to external injuries.

Among the nitrogen-containing compound represented by the above Formula (1) of the present invention, those having an amido group at the extremity of the α-chain of prostacyclin analog structure, in other words, those whose A^4 in the above Formula (1) is a carbonyl group are derived from functional groups such as a carboxyl group, an alkoxycarbonyl group or a cyano group, by the method described in pages 137 through 173 of the "Fourth

Edition of the Experimental Chemistry Course" by the Chemical Society of Japan, Volume 220 (Maruzen Co., Ltd.). In other words, the target amide can be obtained by inserting a functional group such as a carboxyl group, an alkoxycarbonyl group or a cyano group at the site corresponding to the α-chain of the synthetic intermediate having the prostacyclin analog structure indicated by G in the above Formula (1), and by adding the appropriate chemical modification. For example, as indicated in Scheme 1 below,

Scheme 1

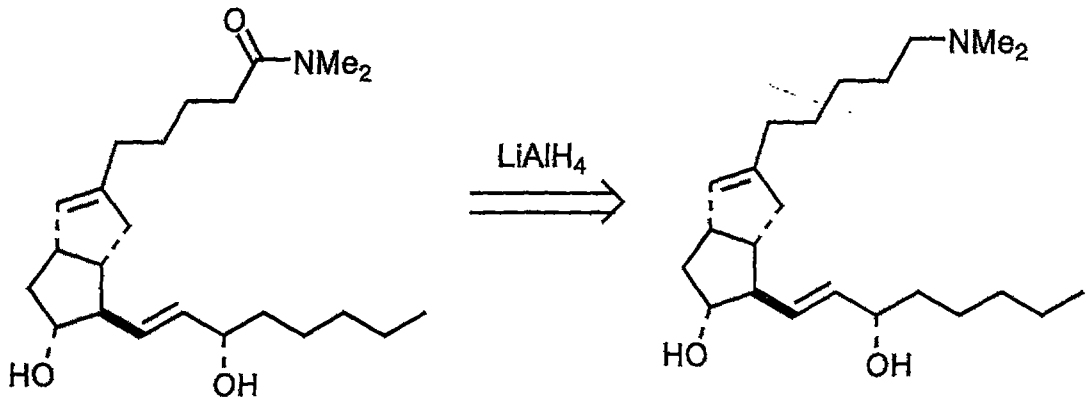


by converting the carboxyl group at position 1 of an isocarbacyclin into an imidazolylcarbonyl group using 1,1'-carbonyldiimidazole, then reacting with an amine to convert into an amide group, the target amide can be obtained. Usually, the reaction uses polar aprotic solvents such as dimethylformamide, N-methylpyrrolidone, hexamethyl phosphoric triamide, dimethyl sulfoxide. However, dimethylformamide and N-methylpyrrolidone are used preferably. The reaction is performed at a temperature range of 0 to 100°C with a timeframe of 10 minutes to 24 hours. However, it is performed preferably at a temperature range of 10 to 60°C with a timeframe of 15

minutes to 18 hours.

Among the nitrogen-containing compound represented by the above Formula (1) of the present invention, those having an amino group at the extremity of the α-chain of prostacyclin analog structure, in other words, those whose A^4 in the above Formula (1) represents a single bond, or an aliphatic hydrocarbon group having 1 to 3 carbon atoms, are derived from functional groups such as an amide group, an imino group, a halogen group, a carbonyl group, a cyano group or an azide group by the method described in pages 279 through 317 of the "Fourth Edition of the Experimental Chemistry Course" by the Chemical Society of Japan, Volume 20 (Maruzen Co., Ltd.). In other words, the target amines can be obtained by inserting a functional group such as an amide group, an imino group, a halogen group, a carbonyl group, a cyano group or an azide group at the site corresponding to the α-chain of the synthetic intermediate having the prostacyclin analog structure indicated by G in the above Formula (1), and by adding an adequate chemical modification. For example, as indicated in Scheme 2 below,

Scheme 2

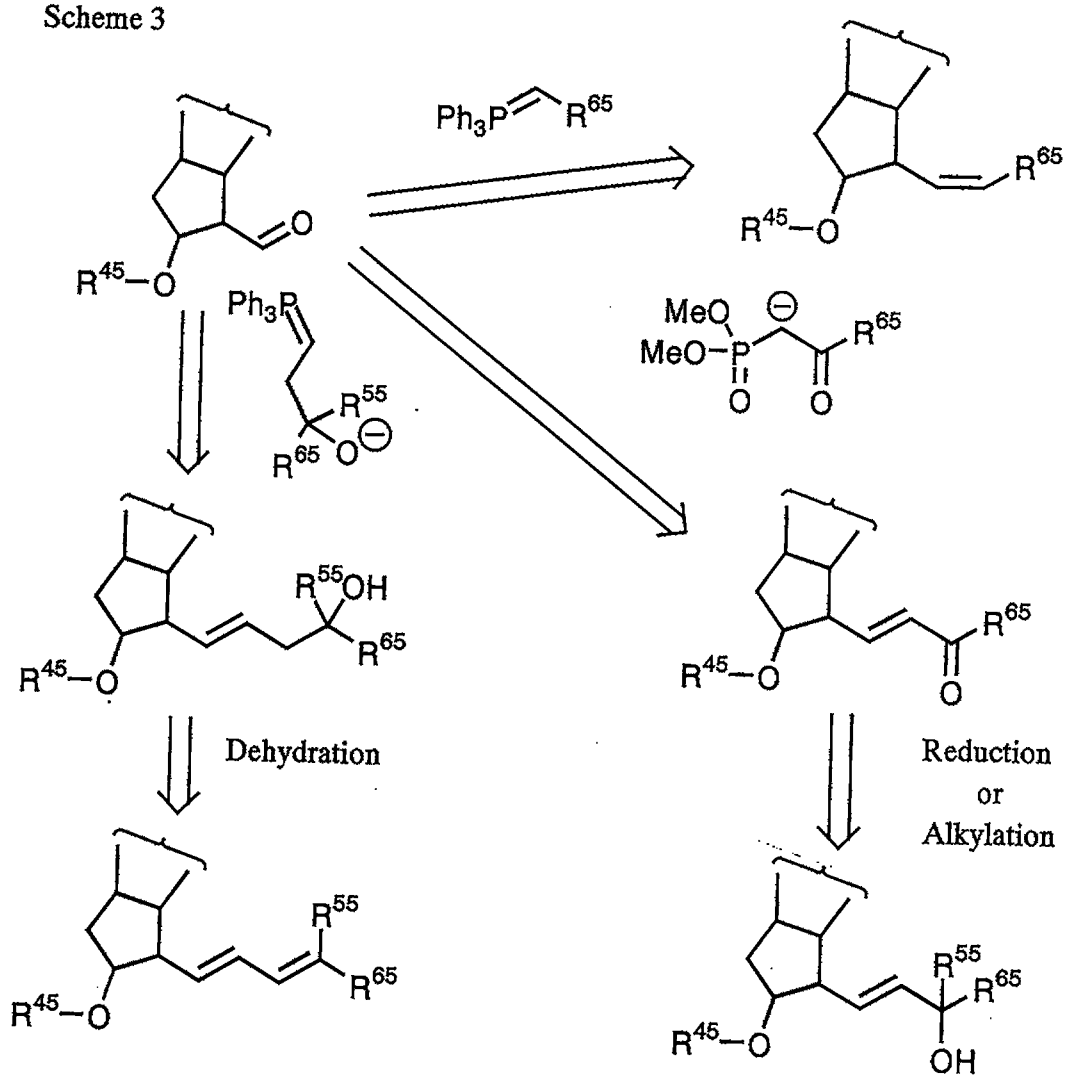


from an amide obtained using a method, for example, indicated in Scheme 1, the target amine can be obtained with reducing agents such as lithium aluminium hydride or borane. Usually, the reaction uses ether solvents such as tetrahydrofurane, dioxane, dimethoxyethane, and preferably uses tetrehydrofurane. The reaction is performed at a temperature range of 0 to 100°C and with a timeframe of 10 minutes to 24 hours. However, it is performed preferably at a temperature range of 10 to 60°C with a timeframe of 15 minutes to 18 hours.

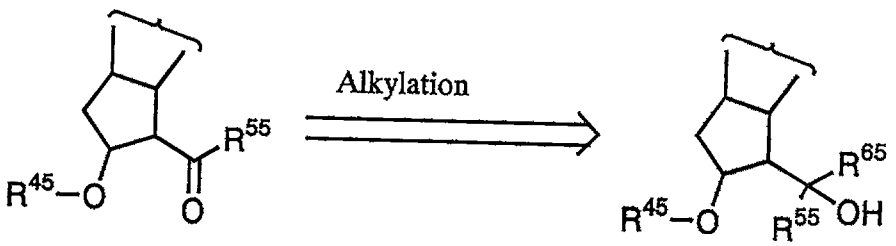
In addition, modifications at sites on the cyclic structure and at sites on the ω-chain of the nitrogen-containing compound represented by the above Formula (1) of the present invention can be achieved following routes indicated for example in Scheme 3, Scheme 4 and

Scheme 5, but are not limited to the these.

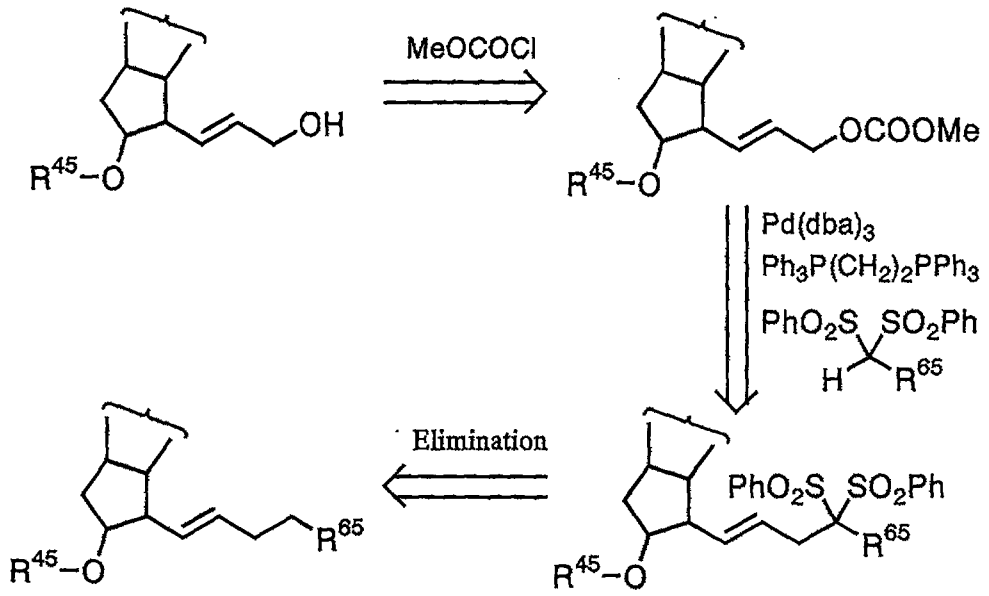
Scheme 3



Scheme 4



Scheme 5



[In the above, R^{45}, R^{55}, R^{65} in Scheme 3, Scheme 4 and Scheme 5 are functional groups chosen among those exemplified by R^4, R^5, R^6, respectively.]

The nitrogen-containing compound of the present invention is produced by combining the modifications of the sites on the α-chain, the sites on the cyclic structure and the site on the ω-chain.

Since the nitrogen-containing compound of the present invention has an activity for the remedy of nerve damage, it can be used as an agent for the treatment of disorders caused by nerve damage, or for the treatment of lesions of the nerves due to external injuries. There are no particular limitations on the scope of application of such an agent for treating neural damage or lesion of nerves due to external injuries. The drug agent of the present invention is particularly useful for mammals, and can be suitably used for livestock, laboratory animals, pets and humans, among others.

The agent for the treatment of disorders caused by nerve damage, or for the treatment of lesions of the nerves due to external injuries of the present invention, can be used for the treatment of animal or human disorders or lesions. There are no particular limitations on the scope of disorders, which must be caused by a neural damage. The following can be cited as concrete examples,

1) Neuro-degenerative disorders such as Alzheimer's disease, Pick's disease, Lewy body disease, Parkinson's disease, Huntington's chorea, spinocerebellar degeneration and amyotrophic lateral sclerosis,

2) demyelinating disorders such as acute disseminated encephalomyelitis and multiple sclerosis,
3) metabolic disorders such as brain lipidosis and Wilson's Disease,
4) infectious disorders such as meningitis and Creutzfeld-Jacob disease,
5) peripheral neural damage such as polyneuritis and Guillain-Barre Syndrome,
6) cerebrovascular disorders such as cerebral infarction and transient ischemia,
7) nervous disorders (neuropathies) associated with diabetes and renal diseases and
8) brain tumors.
However, it is preferably used in disorders cited from 1) through 5).

No particular restriction exists on the method of administration. However, oral administration, percutaneous administration, nasal administration, intravenous injection, intraperitoneal administration, rectal administration or intracerebroventricular administration are preferred.

For the clinical application of the nitrogen-containing compound or the salts thereof of the present invention, or clathrate compounds, it is desirable to produce a pharmaceutical preparation formed by the nitrogen-containing compound and a pharmaceutically accepted solid or liquid carrier, and to further add diluents, in other words additives such as excipients and stabilizers, as necessary. The amine injectable preparation of the present invention to be used for therapeutic administration must be sterile. Sterilization can be easily achieved by filtration through a sterilization filter membrane such as a membrane filter having a pore diameter of 0.2μm.

In such pharmaceutical composition, the proportion of the above-mentioned active ingredient with respect to the constituents of the carrier can be modulated, for example, between 0.000001 and 90% W/W. Therapeutic effective dose depends on the method of administration, age, and the disorder considered, however, 0.01μg to 1000mg/day/individual is possible, and 0.01μg to 10mg/day/individual is preferred. For each administration route, it is desirable to determine the efficacy of absorption into the body for each compound, separately.

Concerning the formulation and the administration form, oral administration is possible by making formulations such as granules, subtle granules, powders, pills, tablets, capsules or liquids, or, parenteral administration is possible by making agents for local applications such as suppositories, aerosols, or ointments and skin patches. As injectable agents, intravenous administration, intra-arterial administration, intramuscular administration, subcutaneous administration are possible. In addition, prior to use, powders for injectable solution can be prepared. In addition, nasal administration, intraperitoneal administration, rectal administration or intracerebroventricular administration are possible.

Organic or inorganic, solid or liquid carriers or diluents can also be used to prepare the

nitrogen-containing compound of the current invention to serve as a pharmaceutical preparation suited for oral, enteral or parenteral administration.

Binding agents such as acacia, corn starch, or gelatin, excipients such as microcrystalline cellulose, disintegrants such as cornstarch and alginic acid, lubricants such as magnesium stearate, and sweeteners such as saccharose and lactose can be cited as representative carriers or diluents entering in the composition of tablets and capsules. If the formulation is a capsule, in addition to the above substances, liquid carriers such as lipid oils may be included. Various sorts of other substances may be used as coating agents or agents for improving the physical state of the dose units. Sterile compositions for injection, may be formulated according to a pharmaceutical method of the art. For example, it is desirable to dissolve or suspend the active compound in an excipient such as water or natural vegetal oil or synthetic lipid excipient such as ethyl oleate. It is also possible to include buffers such as citrate, acetate, phosphate, and antioxydants such as ascorbate, according to accepted pharmaceutical methods.

The tablet form can be obtained by the usual method, for example it can be made by using excipients such as lactose, starch or crystalline cellulose; binding agents such as carboxymethyl cellulose, methyl cellulose or polyvinyl pyrrolidone; disintegrants such as sodium alginate, sodium bicarbonate and sodium lauryl sulfate.

Likewise, pills, powders, granules can be made by the usual method using the above-mentioned excipients. Liquid agents and suspensions can be made by the usual method using, for example, glycerin esters such as tricaprilyn or triacetin, or alcohols such as ethanol. Capsules can be obtained by filling capsules, for instance, made of gelatin with granules, powders, or liquids.

As a formulation for oral administration, the nitrogen-containing compound of the present invention, can be converted into a cyclodextrin clathrate compound. The clathrate can be prepared by adding a solution made by dissolving cyclodextrin in water and/or an organic solvent capable of mixing easily with water, to a solution made by dissolving the nitrogen-containing compound in an organic solvent capable of mixing easily with water. The mixture is heated, then vacuum concentrated under refrigeration, filtered or decanted to separate the product and isolate the target cyclodextrin clathrate compound. The proportion of organic solvent and water varies with the solubility of the starting material and of the product. It is desirable that the temperature when preparing cyclodextrin clathrate compound does not exceed 70°C. α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin or any combination of the above, can be used for the preparation of cyclodextrin clathrate compound. The stability of the nitrogen-containing compound can be increased by a conversion into a cyclodextrin clathrate

compound

As formulation for subcutaneous, intramuscular and intravenous administration, injectable agents exist in the form of aqueous and non-aqueous solutions. For example, physiological saline can be used for aqueous solutions. For non-aqueous solution, for example, propyleneglycol, polyethylene glycol, olive oil, ethyl oleate can be used, and anticeptic agents and stabilizers can be added to the above, as needed. Injectable agents are sterilized by suitably performing treatments such as filtration through bacterial retention filters or mixing with bactericides.

As formulations for percutaneous administration, ointments and creams can be cited as examples. Ointments can be made by the usual method with fats such as castor oil and olive oil, and emulsifiers such as diethyleneglycol, sorbitan monofatty acid ester; creams can be made using vaseline with grease oil and emulsifiers such as diethyleneglycol, sorbitan monofatty acid ester

For rectal administration, a usual suppository such as a gelatin soft capsule may be used.

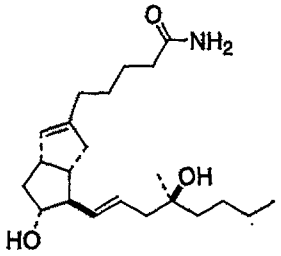
Preparations for parenteral administration can be administered as emulsions. In other words, water is added to a homogenous solution made of vegetal oils such as soybean oil, phospholipids such as lecithins and the nitrogen-containing compound of the present invention, and homogenized by homogenizers such as, for example, pressure-injection homogenizer or ultrasonic homogenizer, to give lipid emulsion which can also be used as an injectable agent.

Embodiments

In the following, the present invention will be explained more concretely by giving examples and reference examples. However, the present invention is not limited to these examples and reference examples.

[Reference example 1]

Preparation of (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene



73mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and dissolved in 2mL of

dimethylformamide. After addition of 49mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was then cooled to ambient temperature, 5mL of 25% ammonium hydroxide in water was added, and stirred for 1 hour. An aqueous solution saturated with potassium hydrogen sulfate was added and extracted with ethyl acetate. The organic layer was washed with an aqueous solution saturated with sodium bicarbonate, then with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 29mg of the compound presented in the title (40% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.91 (brt, 3H, J=7.1Hz), 1.17 (s, 3H), 1.2-1.7 (m, 15H), 1.8-2.5 (m, 11H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 5.30 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H).

[Reference example 2]

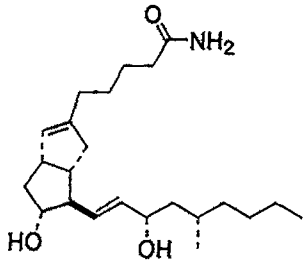
The compound shown in Table 1 was obtained with a method identical to Reference example 1.

Table 1

Ref. Ex. No.	starting material	product	Yield %	NMR data δ
2	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene	36	0.7-1.0 (m, 3H), 1.0-2.5 (m, 24H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.0-4.2 (m, 1H), 5.29 (brs, 1H), 5.3-5.6 (m, 2H), 6.0-6.1 (m, 1H), 6.6-6.9 (m, 1H)

[Reference example 3]

Preparation of (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene

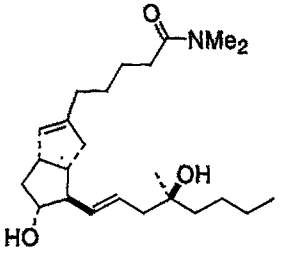


59mg of (1S,5S,6R,7R)-3-(4-methoxycarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and dissolved in 3mL acetonitrile, under stirring, 10mL of 25% ammonium hydroxide in water was added and stirred for 6 days. After concentration, it was subjected to a silicagel column chromatography, to obtain 34mg of the compound presented in the title(60% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.88 (d, 3H, J=6.5Hz), 0.7-1.0 (m, 3H), 1.0-2.5 (m, 25H), 2.9-3.1 (m, 1H), 3.7-3.9 (q, 1H, J=8.9Hz), 4.0-4.2 (m, 1H), 5.29 (brs, 1H), 5.3-5.6 (m, 2H), 6.0-6.1 (m, 1H), 6.6-6.9 (m, 1H).

[Reference example 4]

Preparation of (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene



36mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and dissolved in 1.5mL of dimethylformamide. After addition of 32mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was then cooled to ambient temperature, 25mg of imidazole and 33mg of methylamine hydrochloride were added, and stirred at 50°C for 1.5 hours. An aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 22mg of the compound presented in the title (57% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.91 (brt, 3H, J=6.8Hz), 1.16 (s, 3H), 1.2-1.7 (m, 15H), 1.8-2.5 (m, 9H), 2.9-3.1 (m, 1H), 2.94 (s, 3H), 3.00 (s, 3H), 3.7-3.9 (m, 1H), 5.30 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H).

[Reference examples 5-8]

The compounds shown in Table 2 were obtained with a method identical to Reference example 4.

Table 2

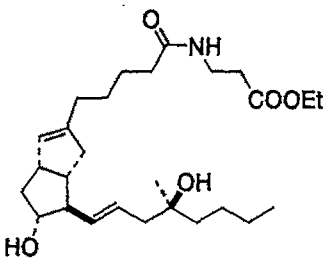
Ref. Ex. No.	starting material	product	Yield %	NMR data δ
5	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene	35	1.2-1.8 (m, 6H), 2.33 (s, 3H), 1.9-2.5 (m, 12H), 2.7-3.1 (m, 1H), 2.94 (s, 3H), 3.01 (s, 3H), 3.5-3.7 (m, 1H), 4.2-4.5 (m, 1H), 5.27 (brs, 1H), 5.45-5.65 (m, 2H), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H)
6	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene	78	1.2-1.75 (m, 6H), 2.33 (s, 3H), 1.75-2.5 (m, 12H), 2.94 (s, 3H), 3.00 (s, 3H), 2.9-3.1 (m, 1H), 3.5-3.7 (m, 1H), 4.34, (q, 1H, J=6.2Hz), 5.27 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H)
7	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo [3.3.0]- 2-octene	(1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene	60	1.2-2.1 (m, 12H), 2.33 (s, 3H), 2.1-2.5 (m, 5H), 2.5-2.8 (m, 2H), 2.94 (s, 3H), 3.00 (s, 3H), 2.9-3.1 (m, 1H), 3.5-3.7 (m, 1H), 5.2-5.3 (m, 2H), 5.4-5.6 (m, 1H), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H)

8	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[4-(m-tolyl)-1,3-butadienyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoyl butyl)-6-[4-(m-tolyl)-1,3-butadienyl]-7-hydroxybicyclo[3.3.0]-2-octene	35	1.2-1.9 (m, 7H), 1.95-2.2 (m, 4H), 2.32 (s, 3H), 2.2-2.5 (m, 4H), 2.95 (s, 3H), 3.01 (s, 3H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 5.31 (brs, 1H), 5.65-5.8 (m, 1H), 6.15-6.55 (m, 2H), 6.65-6.8 (m, 1H), 6.95-7.1 (m, 1H), 7.1-7.3 (m, 3H)

5

[Reference example 9]

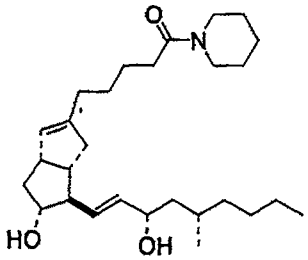
Preparation of (1S,5S,6R,7R)-3-[4-N-(2-ethoxycarbonylethyl)carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene



36mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and dissolved in 1mL of dimethylformamide. After addition of 24mg of 1,1'-carbonyldiimidazole, it was stirred for 20 hours. 14mg of imidazole and 31mg of ethyl 3-aminopropionate were added and stirred for 8 hours. An aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to silicagel column chromatography, to obtain 36mg of the compound presented in the title (79% yield). 1H-NMR(270MHz, $CDCl_3$):δ 0.91 (brt, 3H, J=6.1Hz), 1.16 (s, 3H), 1.27 (t, 3H, J=7.2Hz), 1.2-1.7 (m, 13H), 2.53 (t, 2H, J=5.9Hz), 1.8-2.6 (m, 11H), 2.9-3.1 (m, 1H), 3.51 (q, 2H, J=5.8Hz), 3.77 (q, 1H, J=7.0Hz), 4.15 (q, 2H, J=7.1Hz), 5.28 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H), 6.0-6.2 (m, 1H).

[Reference example 10]

Preparation of (1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene



3ml of toluene and 1mL of 15% trimethylaluminium-hexane solution were added to a nitrogen exchanged flask. 148μL of piperidine was added and stirred at ambient temperature for 3 hours. 59mg of (1S,5S,6R,7R)-3-(4-methoxycarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene was dissolved and added in 4mL of toluene, and stirred at 60°C for 18 hours. An aqueous solution saturated with potassium

hydrogen sulfate was added, extracted with ethyl acetate. The organic layer was washed with an aqueous solution saturated with sodium bicarbonate, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 62mg of the compound presented in the title (93% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.8-0.95 (m, 3H), 0.90 (d, 3H, J=6.2Hz), 1.1-1.7 (m, 22H), 1.8-2.5 (m, 9H), 2.9-3.1 (m, 1H), 3.3-3.5 (m, 2H), 3.5-3.6 (m, 2H), 3.77 (q, 1H, J=6.8Hz), 4.1-4.25 (m, 1H), 5.29 (brs, 1H), 5.45-5.6 (m, 2H).

[Reference examples 11-13]

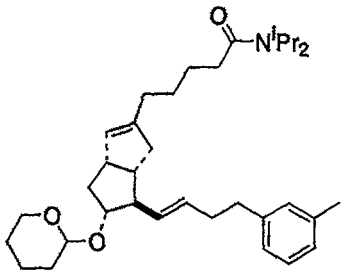
The compounds shown in Table 3 were obtained with a method identical to Reference example 10.

Table 3

Ref. Ex. No.	starting material		product	Yield %	NMR data δ
	carboxylic acid derivatives	amine			
11	(1S,5S,6R,7R)-3-(4-methoxy carbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2- octene	diethylamine	(1S,5S,6R,7R)-3-(4-N,N-diethyl carbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	42	0.7-1.0 (m, 6H), 1.11 (t, 3H, J=7.0Hz), 1.17 (t, 3H, J=7.2Hz), 1.0-1.8 (m, 13H), 1.8-2.1 (m, 4H), 2.1-2.5 (m, 5H), 2.9-3.1 (m, 1H), 3.30 (q, 2H, J=7.2Hz), 3.37 (q, 2H, J=7.1Hz), 3.7-3.8 (m, 1H), 4.1-4.2 (m, 1H), 5.29 (brs, 1H), 5.4-5.6 (m, 2H)
12	(1S,5S,6R,7R)-3-(4-methoxy carbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2- octene	morpholine	(1S,5S,6R,7R)-3-(4-morpholinocarbonyl butyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	92	0.7-1.0 (m, 6H), 1.0-2.1 (m, 21H), 2.1-2.5 (m, 4H), 2.9-3.1 (m, 1H), 3.4-3.5 (m, 2H), 3.5-3.7 (m, 6H), 3.7-3.8 (m, 1H), 4.1-4.2 (m, 1H), 5.29 (brs, 1H), 5.4-5.6 (m, 2H)
13	(1S,5S,6R,7R)-3-(4-methoxy carbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2- octene	4-aminomethylpyridine	(1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl) carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	71	0.7-1.0 (m, 6H), 1.0-2.5 (m, 25H), 2.9-3.1 (m, 1H), 3.7-3.85 (m, 1H), 4.1-4.2 (m, 1H)4.45 (d, 2H, J=6.2Hz), 5.27 (brs, 1H), 5.4-5.6 (m, 2H), 6.0-6.2 (m, 1H), 7.20 (d, 2H, J=5.9Hz), 8.53 (d, 2H, J=5.9Hz)

[Reference example 14]

Preparation of (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-(tetrahydropyran-2-yloxy)-bicyclo[3.3.0]-2-octene

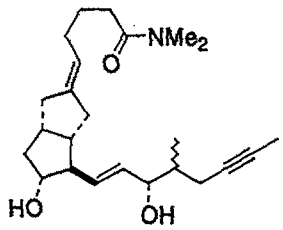


40mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-(tetrahydropyran-2-yloxy)-bicyclo[3.3.0]-2-octene was dissolved in 4mL of dimethylformamide, and 27mg of 1-hydroxybenzotriazole monohydrate was added. While stirring on ice, 71μL of diisopropylamine was added and stirred at 0°C for 20 minutes. 38mg of 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide monohydrochloride was added, and stirred for 13 hours. An aqueous solution of ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 29mg of the compound presented in the title (56% yield).

1H-NMR(270MHz, $CDCl_3$):δ 1.22 (d, 6H, J=5.0Hz), 1.37 (d, 6H, J=5.0Hz), 1.1-1.8 (m, 13H), 2.34 (s, 3H), 1.8-2.7 (m, 11H), 2.9-3.1 (m, 1H), 3.5-4.0 (m, 5H), 4.1-4.3 (m, 1H), 5.15-5.3 (m, 2H), 5.45-5.9 (m, 1H), 6.9-7.05 (m, 3H), 7.1-7.25 (m, 1H).

[Reference example 15]

Preparation of (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane.



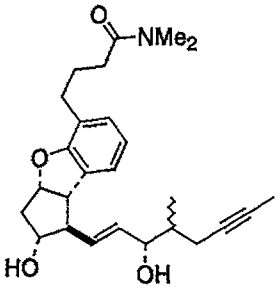
59mg of (1S,2R,3R,5S)-7-[(E)-4-carboxybutylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane was taken and was dissolved in 2mL of dimethylformamide. 25mg of 1, 1'-carbonyldiimidazole was added and, stirred at ambient temperature for 5 hours. 20mg of imidazole and 23mg of dimethylamine hydrochloride were added, and stirred at ambient temperature for 18 hours. An aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed

with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 17mg of the compound presented in the title (26% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.96 and 1.00 (d, 3H, J=6.9Hz), 1.1-1.3 (m, 1H), 1.5-2.5 (m, 22H), 2.94 (s, 3H), 3.0 (s, 3H), 3.65-3.8 (m, 1H), 3.9-4.05 and 4.1-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.45-5.65 (m, 2H).

[Reference example 16]

Preparation of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-N,N-dimethylcarbamoylpropyl)-1H-cyclopenta[b]benzofuran

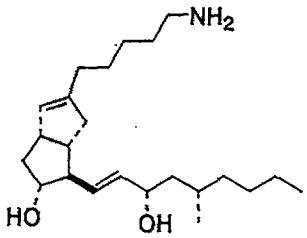


20mg of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-carboxypropyl)-1H-cyclopenta[b]benzofuran was taken and dissolved in 2mL of dimethylformamide. 16mg of 1,1'-carbonyldiimidazole was added and stirred at 50°C for 1 hour. 13mg of imidazole and 16mg of dimethylamine hydrochloride was added, and stirred at 50°C for 1 hour. An aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to a silicagel column chromatography, to obtain 5mg of the compound presented in the title (23% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.9-1.1 (m, 3H), 1.2-1.7 (m, 5H), 1.79 (brs, 3H), 1.9-2.8 (m, 9H), 2.96 (s, 3H), 3.0 (s, 3H), 3.49 (t, 1H, J=8.5Hz), 3.9-4.3 (m, 2H), 5.0-5.2 (m, 1H), 5.5-5.8 (m, 2H), 6.7-6.85 (m, 1H), 6.9-7.05 (m, 2H).

[Example 1]

Preparation of (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene



29mg of (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene obtained in Reference example 3 was taken and dissolved in 4mL of tetrahydrofurane. 20mg of lithium aluminium hydride was added, and stirred for 4 hours. 100μL of an aqueous solution saturated with sodium sulfate was added, then 500mg of anhydrous sodium sulfate was added, and stirred for 18 hours. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 8mg of the compound presented in the title (29% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.7-1.0 (m, 6H), 1.0-1.6 (m, 16H), 1.8-2.1 (m, 4H), 2.2-2.5 (m, 3H), 2.72 (t, 2H, J=7.0Hz), 2.7-3.1 (m, 5H), 3.76 (q, 1H, J=8.6Hz), 4.0-4.15 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H).

[Example 2]

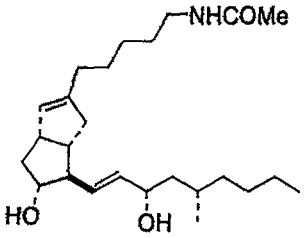
The compound shown in Table 4 was obtained with a method identical to Example 1.

Table 4

Example No.	starting material	product	Yield %	NMR data δ
2	(1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	17	0.7-1.0 (m, 3H), 1.0-1.6 (m, 15H), 1.8-2.1 (m, 4H), 2.2-2.5 (m, 3H), 2.73 (t, 2H, J=7.0Hz), 2.7-3.1 (m, 5H), 3.6-3.85 (m, 1H), 4.0-4.15 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)

[Example 3]

Preparation of (1S,5S,6R,7R)-3-(5-N-acetylaminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene



20μL of acetic acid was dissolved in 2mL of dimethylformamide. After adding 60mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was cooled to ambient temperature, and 18mg of (1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene was added, and stirred for 18 hours. An aqueous solution saturated with potassium hydrogen sulfate was added and extracted with ethyl acetate. The organic layer was washed with an aqueous solution saturated with sodium bicarbonate, then with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, it was subjected to silicagel column chromatography, to obtain 3.5mg of the compound presented in the title (22% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.7-1.0 (m, 6H), 1.0-1.6 (m, 16H), 1.96 (s, 3H), 1.8-2.1 (m, 4H), 2.2-2.5 (m, 3H), 2.7-3.1 (m, 3H), 3.1-3.4 (m, 2H), 3.76 (q, 1H, J=8.6Hz), 4.0-4.15 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H), 6.6-6.8 (m, 1H).

[Example 4]

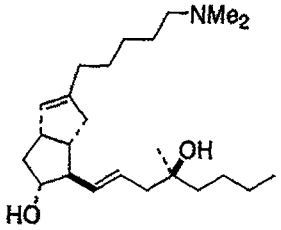
The compound shown in Table 5 was obtained with a method identical to Example 3.

Table 5

Example No.	starting material		product	Yield %	NMR data δ
	amine	acid			
4	(1S,5S,6R,7R)-3-(5-aminopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	benzoic acid	(1S,5S,6R,7R)-3-(5-N-benzoylamino pentyl)-6-[(3S,5S,1E) -3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	37	0.7-1.0 (m, 6H), 1.0-1.6 (m, 16H), 1.8-2.1 (m, 4H), 2.2-2.5 (m, 3H), 2.7-3.1 (m, 3H), 3.3-3.5 (m, 2H), 3.77 (q, 1H, J=8.5Hz), 4.0-4.15 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H), 7.0-7.2 (m, 1H), 7.2-7.5 (m, 3H), 7.7-7.85 (m, 2H)

[Example 5]

Preparation of (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene



36mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and was dissolved in 1.5mL of dimethylformamide. After addition of 32mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was then cooled to ambient temperature, 27mg of imidazole was added, and 33mg of dimethylamine hydrochloride was further added. After stirring at 50°C for 1.5 hours, an aqueous solution saturated with ammonium chloride was added and extraction was performed with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 1.5mL of tetrahydrofurane was added. While stirring on ice, 38mg of lithium aluminium hydride was added and stirring continued at 0°C for 15 minutes, then at 50°C for 1.5 hours. While stirring at ambient temperature, 200μL of an aqueous solution saturated with sodium sulfate was added, then 800mg of anhydrous sodium sulfate and 4mL of ethyl acetate were added, and stirred for 1 hour. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to silicagel column chromatography, to obtain 19mg of the compound presented in the title (51% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.91 (brt, 3H, J=6.9Hz), 1.16 (s, 3H), 1.2-1.6 (m, 15H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 5.27 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H).

[Examples 6-16]

The compounds shown in Table 6 were obtained with a method identical to Example 5.

Table 6

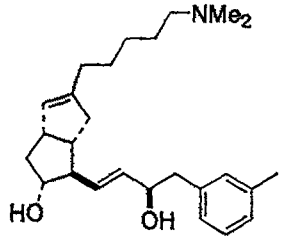
Example No.	starting material	product	Yield %	NMR data δ
6	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene	46	0.92 (brt, 3H, J=6.8Hz), 1.2-1.6 (m, 15H), 1.8-2.5 (m, 11H), 2.23 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H)
7	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	47	0.7-1.0 (m, 6H), 1.1-1.7 (m, 15H), 1.75-2.2 (m, 7H), 2.23 (s, 6H), 2.1-2.5 (m, 5H), 2.9-3.1 (m, 1H), 3.7-3.8 (m, 1H), 4.1-4.2 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H)
8	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,5R,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	38	0.7-1.0 (m, 6H), 1.1-1.6 (m, 15H), 1.75-2.2 (m, 7H), 2.23 (s, 6H), 2.2-2.5 (m, 5H), 2.9-3.1 (m, 1H), 3.7-3.8 (m, 1H), 4.1-4.2 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)

9	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	17	0.92 (brt, 3H, J=7.0Hz), 1.16 (s, 3H), 1.2-1.6 (m, 15H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 5.26 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H)
10	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-7-hydroxybicyclo [3.3.0]-2-octene	34	0.95 and 1.00 (d, 3H, J=2.3Hz), 1.1-1.7 (m, 10H), 1.8-2.5 (m, 14H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)
11	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	50	1.1-1.6 (m, 16H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.25 (brs, 1H), 5.35-5.7 (m, 2H)
12	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-3-cyclohexyl-1-propenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	39	1.1-1.6 (m, 18H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.24 (brs, 1H), 5.3-5.7 (m, 2H)
13	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-4-cyclopentyl-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	43	1.1-1.75 (m, 18H), 1.8-2.6 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.25 (brs, 1H), 5.4-5.6 (m, 2H)

14	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3R,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	44	0.93 (brt, 3H, J=6.9Hz), 1.2-1.7 (m, 15H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.28 (brs, 1H), 5.4-5.6 (m, 2H)
15	(1S,5S,6R,7R)-3-(2-carboxymethyloxy ethyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-[2-(2-N,N-dimethylamino ethyl)oxyethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	21	0.94 (brt, 3H, J=6.9Hz), 1.2-1.6 (m, 9H), 1.8-2.5 (m, 11H), 2.24 (s, 6H), 2.8-3.1 (m, 1H), 3.4-4.2 (m, 6H), 5.28 (brs, 1H), 5.4-5.7 (m, 2H)
16	(1S,5S,6R,7R)-3-(2-carboxymethylthio ethyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-[2-(2-N,N-dimethylamino ethyl)thioethyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	15	0.91 (brt, 3H, J=6.8Hz), 1.2-1.6 (m, 9H), 1.8-2.5 (m, 11H), 2.23 (s, 6H), 2.9-3.4 (m, 5H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)

[Example 17]

Preparation of (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene



39mg of (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene obtained in Reference example 6 was taken, 4mL of tetrahydrofuran was added, then 36mg of lithium aluminium hydride was added, and stirred at ambient temperature for 5 hours. While stirring at ambient temperature, 100μL of an aqueous solution saturated with sodium sulfate was added, then 300mg of anhydrous sodium sulfate was added, and stirred for 1.5 hours. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 26mg of the compound presented in the title (70% yield). 1H-NMR(270MHz, $CDCl_3$):δ 1.2-1.6 (m, 7H), 1.7-2.1 (m, 7H), 2.22 (s, 6H), 2.33 (s, 3H), 2.2-2.5 (m, 4H), 2.7-2.9 (m, 2H), 2.9-3.1 (m, 1H)3.55-3.7 (m, 1H), 4.34 (q, 1H, J=6.5Hz), 5.26 (brs, 1H), 5.45 (dd, 1H, J=15.8, 8.2Hz), 5.59 (dd, 1H, J=15.5, 6.6Hz), 6.9-7.1 (m, 3H), 7.1-7.25 (m, 1H).

[Examples 18-26]

The compounds shown in Table 7 were obtained with a method identical to Example 17.

Table 7

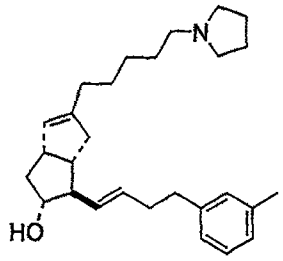
Example No.	starting material	product	Yield %	NMR data δ
18	(1S,5S,6R,7R)-3-[4-N-(2-ethoxycarbonylethyl) carbamoylbutyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-[5-N-(3-hydroxypropyl) aminopentyl]-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	68	0.91 (brt, 3H, J=6.6Hz), 1.16 (s, 3H), 1.1-2.5 (m, 29H), 2.9-3.1 (m, 1H), 3.41 (q, 2H, J=6.1Hz), 3.63 (t, 2H, J=5.4Hz), 4.7-4.9 (m, 1H), 5.29 (brs, 1H), 5.41 (dd, 1H, J=15.4, 8.4Hz), 5.5-5.7 (m, 1H), 5.9-6.0 (m, 1H)
19	(1S,5S,6R,7R)-3-(4-N,N-diethylcarbamoyl butyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-diethylamino pentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	43	0.7-1.0 (m, 6H), 1.04 (t, 6H, J=7.2Hz), 1.1-1.6 (m, 15H), 1.75-2.2 (m, 7H), 2.2-2.5 (m, 5H), 2.56 (q, 4H, J=6.4Hz), 2.9-3.1 (m, 1H), 3.7-3.8 (m, 1H), 4.1-4.2 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H)
20	(1S,5S,6R,7R)-3-(4-morpholinocarbonyl butyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	50	0.7-1.0 (m, 6H), 1.0-1.6 (m, 15H), 1.75-2.1 (m, 5H), 2.1-2.65 (m, 10H), 2.9-3.1 (m, 1H), 3.6-3.8 (m, 6H), 4.0-4.2 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)

21	(1S,5S,6R,7R)-3-(4-piperidinocarbonylbutyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-piperidinopentyl)-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	81	0.7-1.0 (m, 6H), 1.0-1.7 (m, 21H), 1.7-2.1 (m, 9H), 2.2-2.5 (m, 7H), 2.9-3.1 (m, 1H), 3.7-3.85 (m, 1H), 4.1-4.25 (m, 1H), 5.27 (brs, 1H), 5.45-5.6 (m, 2H)
22	(1S,5S,6R,7R)-3-[4-N-(4-pyridylmethyl) carbamoylbutyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-[5-N-(4-pyridylmethyl)amino pentyl]-6-[(3S,5S,1E)-3-hydroxy-5-methyl-1-nonenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	89	0.8-0.95 (m, 6H), 1.0-2.1 (m, 18H), 2.04 (t, 2H, J=8.5Hz), 2.27 (t, 2H, J=7.4Hz), 2.2-2.5 (m, 5H), 2.9-3.1 (m, 1H), 3.7-3.85 (m, 1H), 4.1-4.2 (m, 1H), 4.46 (d, 2H, J=5.9Hz), 5.27 (brs, 1H), 5.45-5.6 (m, 2H), 5.9-6.0 (m, 1H), 7.20 (d, 2H, J=5.9Hz), 8.54 (d, 2H, J=5.9Hz)
23	(1S,5S,6R,7R)-3-(4-N,N-dimethyl carbamoylbutyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	43	1.2-1.55 (m, 7H), 1.8-2.1 (m, 7H), 2.23 (s, 6H), 2.33 (s, 3H), 2.1-2.5 (m, 4H), 2.7-2.9 (m, 2H), 2.9-3.1 (m, 1H), 3.6-3.8 (m, 1H), 4.32 (q, 1H, J=6.5Hz), 5.26 (brs, 1H), 5.49 (dd, 1H, J=15.3, 8.5Hz), 5.60 (dd, 1H, J=15.4, 6.2Hz), 6.9-7.1 (m, 3H), 7.1-7.25 (m, 1H)

24	(1S,5S,6R,7R)-3-(4-N,N-dimethyl carbamoylbutyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	70	1.2-1.55 (m, 7H), 1.6-2.1 (m, 7H), 2.22 (s, 6H), 2.33 (s, 3H), 2.1-2.5 (m, 4H), 2.75-2.9 (m, 2H), 2.9-3.1 (m, 1H), 3.5-3.7 (m, 1H), 4.33 (q, 1H, J=6.5Hz), 5.26 (brs, 1H), 5.45 (dd, 1H, J=15.8, 8.2Hz), 5.59 (dd, 1H, J=15.5, 6.6Hz), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H)
25	(1S,5S,6R,7R)-3-(4-N,N-dimethyl carbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo [3.3.0]-2-octene	81	1.2-2.1 (m, 13H), 2.22 (s, 6H), 2.33 (s, 3H), 2.15-2.5 (m, 6H), 2.5-2.7 (m, 2H), 2.9-3.05 (m, 1H), 3.5-3.7 (m, 1H), 5.2-5.3 (m, 2H), 5.45-5.6 (m, 1H), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H)
26	(1S,5S,6R,7R)-3-(4-N,N-dimethyl carbamoylbutyl)-6-[(1E,3E)-6-(m-tolyl)-1,3-hexadienyl]-7-hydroxybicyclo [3.3.0]-2-octene	(1S,5S,6R,7R)-3-(5-N,N-dimethylamino pentyl)-6-[(1E,3E)-6-(m-tolyl)-1,3-hexa dienyl]-7-hydroxy bicyclo[3.3.0]-2-octene	7	1.2-1.7 (m, 7H), 2.33 (s, 9H), 1.7-2.7 (m, 14H), 2.9-3.1 (m, 1H), 3.5-3.7 (m, 1H), 5.30 (brs, 1H), 5.35-5.55 (m, 1H), 5.55-5.75 (m, 1H), 5.9-6.2 (m, 2H), 6.8-7.05 (m, 3H), 7.05-7.2 (m, 1H)

[Example 27]

Preparation of (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene



24mg of (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene was taken and dissolved in 2mL of dimethylformamide. 25mg of 1,1'-carbonyldiimidazole was added and stirred at 50°C for 1.5 hours. It was then cooled to ambient temperature and 100mg pyrrolidine was added. After stirring at 50°C for 2 hours, an aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 3mL of tetrahydrofurane was added. While stirring on ice, 112mg of lithium aluminium hydride was added, and stirring continued at 50°C for 3 hours. While stirring at ambient temperature, 200μL of an aqueous solution saturated with sodium sulfate was added, then 1g of anhydrous sodium sulfate was added, and stirred for 16 hours. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to silicagel column chromatography, to obtain 18mg of the compound presented in the title (65% yield).

1H-NMR(270MHz, $CDCl_3$):δ 1.2-1.6 (m, 7H), 1.7-2.1 (m, 10H), 2.33 (s, 3H), 2.15-2.7 (m, 12H), 2.8-3.1 (m, 1H), 3.5-3.7 (m, 1H), 5.15-5.3 (m, 2H), 5.45-5.65 (m, 1H), 6.9-7.1 (m, 3H), 7.1-7.2 (m, 1H).

[Examples 28-33]

The compounds shown in Table 8 were obtained with a method identical to Example 27.

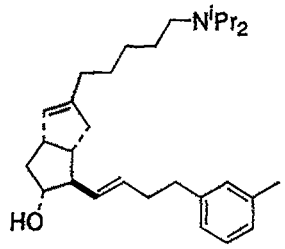
Table 8

Example No.	starting material		product	Yield %	NMR data δ
	carboxylic acid	amine			
28	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	methylamine	(1S,5S,6R,7R)-3-(5-N-methylamino pentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	33	0.94 (brt, 3H, J=6.9Hz), 1.2-1.6 (m, 16H), 1.8-2.6 (m, 11H), 2.42 (s, 3H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.28 (brs, 1H), 5.4-5.6 (m, 2H)
29	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	cyclohexylamine	(1S,5S,6R,7R)-3-(5-N-cyclohexyl aminopentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	14	0.93 (brt, 3H, J=6.9Hz), 0.9-2.5 (m, 37H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.26 (brs, 1H), 5.4-5.6 (m, 2H)
30	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	benzylamine	(1S,5S,6R,7R)-3-(5-N-benzylamino pentyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	33	0.92 (brt, 3H, J=6.7Hz), 1.1-1.7 (m, 16H), 1.8-2.7 (m, 11H), 2.9-3.1 (m, 1H), 3.77 (s, 2H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.27 (brs, 1H), 5.4-5.6 (m, 2H), 7.1-7.3 (m, 5H)

31	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxybicyclo [3.3.0]-2-octene	N-methylpiperazine	(1S,5S,6R,7R)-3-[5-(4-N-methyl-1-piperazinyl)pentyl]-6-[(3S,1E)-3-hydroxy-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	23	0.92 (brt, 3H, J=6.8Hz), 1.2-1.6 (m, 15H), 1.8-2.9 (m, 19H), 2.29 (s, 3H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 4.1-4.2 (m, 1H), 5.28 (brs, 1H), 5.4-5.6 (m, 2H)
32	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo 3.3.0]-2-octene	butylamine	(1S,5S,6R,7R)-3-(5-N-butylamino pentyl)-6-[(4R,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	41	0.7-1.0 (m, 6H), 1.17 (s, 3H), 1.2-1.6 (m, 19H), 1.8-2.7 (m, 14H), 2.9-3.1 (m, 1H), 3.7-3.9 (m, 1H), 5.27 (brs, 1H), 5.3-5.5 (m, 1H), 5.5-5.7 (m, 1H)
33	(1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybi cyclo[3.3.0]-2- octene	morpholine	(1S,5S,6R,7R)-3-(5-morpholinopentyl) -6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxy bicyclo[3.3.0]-2-octene	87	1.2-1.6 (m, 6H), 1.6-2.1 (m, 11H), 2.33 (s, 3H), 2.1-2.5 (m, 6H), 2.5-2.75 (m, 2H), 2.8-3.1 (m, 1H), 3.5-3.75 (m, 5H)5.2-5.3 (m, 2H)5.4-5.6 (m, 1H), 6.9-7.05 (m, 3H), 7.1-7.2 (m, 1H)

[Example 34]

Preparation of (1S,5S,6R,7R)-3-(5-N,N-diisopropylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

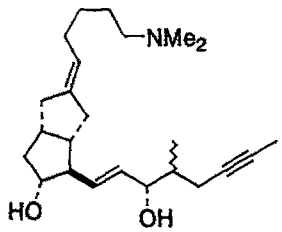


29mg of (1S,5S,6R,7R)-3-(4-N,N-diisopropylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-(tetrahydropyran-2-yloxy)-bicyclo[3.3.0]-2-octene obtained in Reference example 14 was dissolved in 5mL of tetrahydrofuran and 118mg of lithium aluminium hydride was added. After stirring at 50°C for 2 hours, 150μL of an aqueous solution saturated with sodium sulfate was added, then anhydrous sodium sulfate was further added, and stirred for 18 hours. After filtration and concentration, the obtained oily matter was dissolved in 5mL of methanol, and 20mg of p-toluene sulfonic acid monohydrate was added. After stirring for 1.5 hours, an aqueous solution of potassium carbonate was added. After concentration extraction was performed with ethyl acetate, and the organic layer was washed with a saturated saline solution. It was then dried with anhydrous sodium sulfate, filtered, concentrated, and subjected to a silicagel column chromatography, to obtain 3mg of the compound presented in the title (12% yield).

1H-NMR(270MHz, $CDCl_3$):δ 1.03 (d, 12H, J=6.2Hz), 1.2-2.1 (m, 14H), 2.2-2.5 (m, 5H), 2.33 (s, 3H), 2.55-2.75 (m, 2H), 2.8-3.2 (m, 3H), 3.6-3.7 (m, 1H), 5.2-5.3 (m, 2H), 5.4-5.7 (m, 1H), 6.9-7.1 (m, 3H), 7.1-7.25 (m, 1H).

[Example 35]

Preparation of (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane



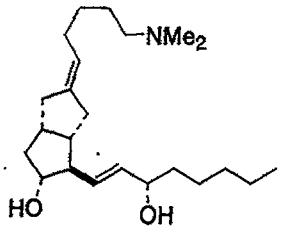
14mg of (1S,2R,3R,5S)-7-[(E)-4-N,N-dimethylcarbamoylbutylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane obtained in Reference example 15 was taken and 4mL of tetrahydrofuran was added. In addition, while stirring on ice,

15mg of lithium aluminium hydride was added and stirred at ambient temperature for 4 hours. While stirring at ambient temperature, 100μL of an aqueous solution saturated with sodium sulfate was added, 300mg anhydrous sodium sulfate was added, and stirred for 16 hours. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 9mg of the compound presented in the title (65% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.96 and 1.01 (d, 3H, J=6.8Hz), 1.1-1.6 (m, 7H), 1.79 (t, 3H, J=2.4Hz), 2.24 (s, 6H), 1.7-2.5 (m, 15H), 3.7-3.9 (m, 1H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H).

[Example 36]

Preparation of (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane



28mg of (1S,2R,3R,5S)-7-[(E)-4-carboxybutylidene]-2-[(3S,1E)-3-hydroxy-1-octenyl]-3-hydroxybicyclo[3.3.0]octane was taken and was dissolved in 1.5mL of dimethylformamide. 35mg of 1,1'-carbonyldiimidazole was added and stirred at 50°C for 1 hour. It was then cooled to ambient temperature, 27mg of imidazole was added, and 33m of dimethylamine hydrochloride was also added. After stirring at 50°C for 1.5 hours, an aqueous solution saturated with ammonium chloride was added and extraction was performed with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 1.5mL of tetrahydrofurane was added. While stirring on ice, 38mg of lithium aluminium hydride was added and stirring continued at 0°C for 15 minutes, then at 50°C for 1.5 hours. While stirring at ambient temperature, 200μL of an aqueous solution saturated with sodium sulfate was added, then 800mg of anhydrous sodium sulfate and 4mL of ethyl acetate were added, and stirred for 1 hour. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 11mg of the compound presented in the title (41% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.93 (brt, 3H, J=6.8Hz), 1.1-1.6 (m, 12H), 2.24 (s, 6H), 1.7-2.5 (m, 15H), 3.7-3.9 (m, 1H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H).

[Example 37]

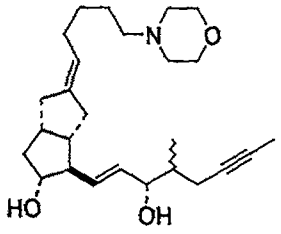
The compound shown in Table 9 was obtained with a method identical to Example 36.

Table 9

Example No.	starting material	product	Yield %	NMR data δ
37	(1S,2R,3R,5S)-7-[(E)-4-carboxybutylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxy bicyclo[3.3.0]octane	(1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylamino pentylidene]-2-[(3S,1E)-3-hydroxy-3-cyclopentyl-1-propenyl]-3-hydroxy bicyclo[3.3.0]octane	37	1.0-1.7 (m, 13H), 2.23 (s, 6H), 1.7-2.5 (m, 15H), 3.7-3.9 (m, 1H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H)

[Example 38]

Preparation of (1S,2R,3R,5S)-7-[(E)-5-morpholinopentylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane



20mg of (1S,2R,3R,5S)-7-[(E)-4-carboxybutylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane was taken and dissolved in 2mL of dimethylformamide. After addition of 20mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1.5 hours. It was then cooled to ambient temperature, and 100mg of morpholine was added. After stirring at 50°C for 2 hours, an aqueous solution saturated with ammonium chloride was added and extraction was performed with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 3mL of tetrahydrofurane was added. While stirring, 100mg of lithium aluminium hydride was added, and stirring continued at 50°C for 3 hours. While stirring at ambient temperature, 200μL of an aqueous solution saturated with sodium sulfate was added, then 1g of anhydrous sodium sulfate was added, and stirred for 16 hours. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 7mg of the compound presented in the title (40% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.96 and 1.01 (d, 3H, J=6.8Hz), 1.1-1.6 (m, 7H), 1.79 (t, 3H, J=2.4Hz), 1.7-2.7 (m, 19H), 3.6-3.9 (m, 5H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H).

[Examples 39-40]

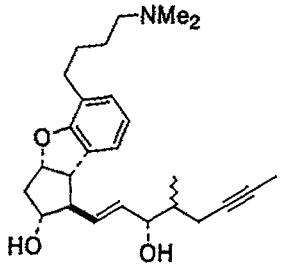
The compounds shown in Table 10 were obtained with a method identical to Example 38.

Table 10

Example No.	starting material		product	Yield %	NMR data δ
	carboxylic acid	amine			
39	(1S,2R,3R,5S)-7-[(E)-4-carboxy butylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxy bicyclo[3.3.0]octane	diethylamine	(1S,2R,3R,5S)-7-[(E)-5-N,N-diethyl aminopentylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxy bicyclo[3.3.0]octane	35	0.96 and 1.01 (d, 3H, J=6.8Hz), 1.05 (t, 6H, J=7.1Hz), 1.1-1.6 (m, 7H), 1.79 (t, 3H, J=2.4Hz), 1.7-2.5 (m, 15H), 2.55 (q, 4H, J=6.5Hz), 3.7-3.9 (m, 1H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H)
40	(1S,2R,3R,5S)-7-[(E)-4-carboxybutylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxy bicyclo[3.3.0]octane	pyrrolidine	(1S,2R,3R,5S)-7-[(E)-5-(1-pyrrolidinyl)pentylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxy bicyclo[3.3.0]octane	42	0.96 and 1.01 (d, 3H, J=6.7Hz), 1.1-1.7 (m, 11H), 1.7-2.7 (m, 22H), 3.7-3.9 (m, 1H), 3.9-4.2 (m, 1H), 5.2-5.3 (m, 1H), 5.4-5.6 (m, 2H)

[Reference example 17]

Preparation of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(4-N,N-dimethylaminobutyl)-1H-cyclopenta[b]benzofuran

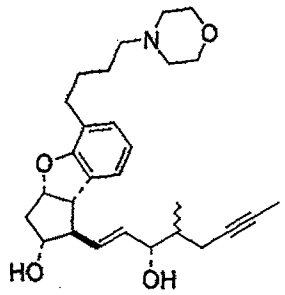


10mg of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-carboxypropyl)-1H-cyclopenta[b]benzofuran was taken and was dissolved in 2mL of dimethylformamide. After addition of 8.1mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was then cooled to ambient temperature, 6.8mg of imidazole was added, 8.2mg dimethylamine hydrochloride was further added. After stirring at 50°C for 1 hour, an aqueous solution saturated with ammonium chloride was added and extraction was performed with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 2mL of tetrahydrofurane was added. While stirring on ice, 9.5mg of lithium aluminium hydride was added, and stirring continued at 0°C for 15minutes, and at 50°C for 1 hour. While stirring at ambient temperature, 100μL of an aqueous solution saturated with sodium sulfate was added, 400mg of anhydrous sodium sulfate was added, and stirred for 1 hour. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 7.5mg of the compound presented in the title (73% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.9-1.1 (m, 3H), 1.2-1.7 (m, 7H), 1.79 (brs, 3H), 1.9-2.7 (m, 9H), 2.24 (s, 6H), 3.49 (t, 1H, J=8.5Hz), 3.9-4.3 (m, 2H), 5.0-5.2 (m, 1H), 5.5-5.8 (m, 2H), 6.7-6.85 (m, 1H), 6.9-7.05 (m, 2H).

[Example 41]

Preparation of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(4-morpholinobutyl)-1H-cyclopenta[b]benzofuran



10mg of (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-carboxypropyl)-1H-cyclopenta[b]benzofuran was taken and was dissolved in 2mL of dimethylformamide. After addition of 8.1mg of 1,1'-carbonyldiimidazole, it was stirred at 50°C for 1 hour. It was cooled to ambient temperature, and 50mg morpholine was added. After stirring at 50°C for 1 hour, an aqueous solution saturated with ammonium chloride was added and extracted with ethyl acetate. The organic layer was washed with a saturated saline solution, and dried with anhydrous sodium sulfate. After filtration and concentration, 2mL of tetrahydrofurane was added. While stirring on ice, 9.5mg of lithium aluminium hydride was added and stirring continued at 0°C for 15 minutes, then at 50°C for 1 hour. While stirring at ambient temperature, 100µL of an aqueous solution saturated with sodium sulfate was added, then 400mg of anhydrous sodium sulfate was added, and stirred for 1 hour. A filtration was performed over celite, and after washing the residue with ethyl acetate, the filtrate was concentrated and subjected to a silicagel column chromatography, to obtain 5.3mg of the compound presented in the title (48% yield).

1H-NMR(270MHz, $CDCl_3$):δ 0.9-1.1 (m, 3H), 1.2-1.7 (m, 7H), 1.78 (brs, 3H), 1.9-2.7 (m, 13H), 3.3-3.6 (m, 1H), 3.6-4.3 (m, 6H), 5.0-5.2 (m, 1H), 5.5-5.8 (m, 2H), 6.7-6.85 (m, 1H), 6.9-7.05 (m, 2H).

[Examples 42-43]

The compounds shown in Table 11 were obtained with a method identical to Example 41.

Table 11

Example No.	starting material	product	Yield %	NMR data δ
42	(1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-carboxypropyl)-1H-cyclopenta[b]benzofuran	(1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(4-piperidinobutyl)-1H-cyclopenta[b]benzofuran	54	0.9-1.1 (m, 3H), 1.2-1.7 (m, 13H), 1.79 (brs, 3H), 1.8-2.7 (m, 13H), 3.3-3.6 (m, 1Hz), 3.9-4.3 (m, 2H), 5.0-5.2 (m, 1H), 5.5-5.8 (m, 2H), 6.7-6.85 (m, 1H), 6.9-7.05 (m, 2H)
43	(1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(3-carboxypropyl)-1H-cyclopenta[b]benzofuran	(1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-[4-(1-pyrrolidinyl)butyl]-1H-cyclopenta[b]benzofuran	43	0.9-1.1 (m, 3H), 1.2-1.7 (m, 13H), 1.80 (brs, 3H), 1.8-2.7 (m, 11H), 3.3-3.6 (m, 1Hz), 3.9-4.3 (m, 2H), 5.0-5.2 (m, 1H), 5.5-5.8 (m, 2H), 6.7-6.85 (m, 1H), 6.9-7.05 (m, 2H)

[Reference example 18]

Method for measuring the ability of learning and memory in a rat by the step-through passive avoidance test

A step-through passive avoidance instrument made of two chambers separated by a guillotine door was used as the experimental apparatus. One chamber is an illuminated chamber made of transparent acrylic boards (floor: 15cm x 25cm, height: 15cm), the other chamber is a dark chamber made of black acryl boards (same dimensions). In addition, the floor of the dark chamber was equipped with a grid made of 4mm diameter stainless steel pieces separated by 15mm spacing. The grid was connected to an apparatus for delivering electric shocks (shock generator scrambler).

First, the guillotine door was opened for one minute to let a rat freely explore the interior of the apparatus. Then, for acquisition trials, the door was closed and the rat was put into the illuminated chamber. 30 seconds later, the door was opened and immediately after the four legs of the rat were put inside the dark chamber, the door was closed and an electric shock was delivered. The strength of the electric shock was 0.5mA for 5 seconds. The training was repeated until the rat remained in the illuminated chamber for more than 120 seconds when the rat was placed in the illuminated chamber immediately after the electric shock and the door was opened in a similar way. 24 hours after the acquisition trials, the rat was put into the illuminating chamber for retention trials, 30 seconds after, the guillotine door was opened, and the time taken for the four legs of the rat to enter the dark chamber was measured (step-through latency). The maximum observation time during retention trials was set to 300 seconds.

[Reference example 19]

Method for measuring the ability of learning and memory in a rat by the Y-maze test (spontaneous alternation behavior test)

A Y-shaped maze made by connecting three arms having a length of 35cm each, a wall height of 25cm and a floor width of 10cm at an angle of 120° with respect to each other. The apparatus was settled on the laboratory floor.

A rat was placed at the extremity of one of the arms, was allowed to freely explore the maze for 8 minutes, and a record was taken of the order in which the arms were explored by the rat. By calling (A) the "Total arm entries", and among them, by calling (B) the "Number of spontaneous alternations" which is the number of cases where 3 different arms were selected in sequence, the "Percentage of spontaneous alternations" was calculated with: (B/(A-2))×100.

[Reference example 20]

Preparation of a model for Alzheimer's disease by the continuous intracerebroventricular administration of β-amyloid proteins

7 week old Wistar male rats (weight 220 to 250g) were used (N=5 to 10).

β-amyloid protein (1-42) was dissolved in 35% acetonitrile- 0.1% trifluoroacetic acid in water, injected in a mini-osmotic pump, which had been set to deliver 300pmol/day (volume: 230μL, flow: 0.5μL/hour), and connected to a dental syringe needle through a polyethylene tube. Animals in control group were connected to a pump to which β-amyloid protein (40-1) orvehicleonly was injected. After anesthetizing the rats with pentobarbital (50mg/Kg, i.p.), an incision was performed in each of their scalps, and following the brainatlas, holes were drilled in the cranium. The syringe needle was inserted sothat the tip of the needle was inside the lateral ventricle (A=-0.3mm, L=1.2mm, H=4.5mm), and fixed with dental cement. The osmotic pump was then implanted under the dorsal skin.

Taking the day when the mini-osmotic pump was implanted as day 0, on day 5, a Y-maze test was performed following the method indicated in Reference example 2, on day 13 and day 14, a passive avoidance test was performed following the method indicated in Reference example 1, and a decrease in the ability of learning and memory was observed in the group which was administered β-amyloid protein(1-42) in comparison to the group which was administered β-amyloid protein(40-1) or the group which was administered vehicle only.

[Reference example 21]

Method for evaluating the promotion activity on the neurite outgrowth (1)

Mouse neuroblastoma Neuro2A cells (obtained from DAINIPPON PHARMACEUTICAL CO., LTD.) were suspended with a density of 2.5×10^4cells/mL in DMEM containing 10% FCS and 2mM of Gln, and were plated on commercially available 24-well tissue culture plates with a quantity of 400μL/well. After an overnight culture under the conditions where the temperature was 37°C, and the carbon dioxide content of the air was 5%, the media was exchanged to an identical media containing the test compound, and the culture was further continued for 24 hours. Then microscope photographs were taken with a 20 x lens. Using the photographs, by counting the total number of cells in the field of view and the number of cells with extended neurite, the proportion of cells with extended neurite is calculated.

[Reference example 22]

Method for evaluating the promotion activity on the neurite outgrowth (2)

The cells used and the performed culture method were identical to those in Reference example (1). After being cultured in a media containing the test compound for 24 hours,

microscope photographs were taken with a 20 x lens. Transparent sheets were used to cover the latter photographs, in order to copy neural projections with a uniform thickness. The copied sheets were imported into a personal computer as image data, using a scanner. Using image processing software, the area covered by the neurites were calculated, and, since the thickness used to mark the neurite was uniform, the analysis was performed considering that the area was proportional to the length, and allowing to compute the length of neurite per cell.

[Reference example 23]

Method for measuring the activity of decreasing blood pressure

A catheter for monitoring the blood pressure was inserted and placed in the femoral artery, and a catheter for the administration of drug solution was inserted and placed in the femoral vein of male Wistar rats (10-11 weeks old, Charles River) under ether anesthesia. The animals were placed in a Ballman cage, and awakened. After the blood pressure stabilized, a solvent containing ethanol and Tween80 adjusted to the same amount as those in each administered solution was injected by bolus administration. After monitoring blood pressure and heart rate for 60 minutes to verify the absence of effects, the test compound was administered and the blood pressure and the heart rate were further monitored for 60 minutes. The doses of the solvent and the test compound were all 1mL/Kg. The measurements of the blood pressure and the heart rate were performed immediately before administration (0 minutes), at 3, 5, 10, 15, 30 and 60 minutes after administration. For each animal, the blood pressure value measured at each time point was normalized by defining the blood pressure at 0 minute as 100.

The test compound was used once it had been dissolved with ethanol and diluted in physiological saline containing Tween80, with, the quantity of test compound, the concentration of ethanol and Tween80 in the administration solution for each group as indicated in Table 12 below.

Table 12

Dose (mg/kg)	Concentration of Ethanol (%)	Concentration of Tween80 (%)
0.1	1	0.198
1	10	0.18

[Reference example 24]

Measurement of the permeability of the compound through the blood brain barrier

Bovine cerebral capillary endothelial cells were cultured on a 100mm diameter plate

(coated with collagen I) to obtain confluency. The cells were cultured for 15 minutes in an incorporation media (141mM NaCl, 4mM KCl, 2mM $CaCl_2$, 1mM H_2SO_4, 10mM HEPES, 10mM D-glucose) containing the test compound (1μM), to incorporate the test compound into the cells. Then, the test compound incorporated into the cells was extracted with ethanol extraction, and quantified by HPLC. The rate of incorporation was calculated with the equation below.

amount of test compound in the ethanol-extracted fraction/amount of test compound in the incorporation solution × 100(%)

[Example 44]

Measurement of the ameliorating effect on learning and memory deficit (1)

Test compound: (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 18 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 13 below.

Table 13

	Time taken to move into the dark chamber during retention trials mean value ± standard error (unit: seconds)
β-amyloid protein(40-1) 300pmol/day group	207.3 ± 51.5(n=6)
β-amyloid protein(1-42) 300pmol/day group	140.2 ± 53.8(n=5)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	217.8 ± 44.9(n=6)

The time taken to move into the dark chamber was extended for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate the learning and memory deficit.

[Example 45]

Measurement of the ameliorating effect on learning and memory deficit (2)

Test compound: (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 18 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 14 below.

Table 14

	Time taken to move into the dark chamber during retention trials mean value ± standard error (unit: seconds)
β-amyloid protein(40-1) 300pmol/day group	263.3 ± 36.7(n=3)
β-amyloid protein(1-42) 300pmol/day group	132.8 ± 58.1(n=5)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	212.2 ± 58.5(n=5)

The time taken to move into the dark chamber was extended for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 46]

Measurement of the ameliorating effect on learning and memory deficit (3)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 18 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 15 below.

Table 15

	Time taken to move into the dark chamber during retention trials mean value ± standard error (unit: seconds)
β-amyloid protein(40-1) 300pmol/day group	263.3 ± 36.7(n=3)
β-amyloid protein(1-42) 300pmol/day group	132.8 ± 58.1(n=5)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	242.0 ± 36.3(n=4)

The time taken to move into the dark chamber was extended for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to amliorate learning and memory deficit.

[Example 47]

Measurement of the ameliorating effect on learning and memory deficit (4)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 18 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 16 below.

Table 16

	Time taken to move into the dark chamber during retention trials mean value ± standard error (unit: seconds)
Vehicle only group	286.7 ± 13.3(n=6)
β-amyloid protein(1-42) 300pmol/day group	191.7 ± 49.0(n=6)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	300.0 ± 0.0(n=5)

The time taken to move into the dark chamber was extended for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 48]

Measurement of the ameliorating effect on learning and memory deficit (5)

Test compound: (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 19 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 17 below.

Table 17

	Occurrence of spontaneous alternation behavior mean value ± standard error (unit: %)
β-amyloid protein(40-1) 300pmol/day group	72.2 ± 2.9(n=6)
β-amyloid protein(1-42) 300pmol/day group	65.6 ± 3.4(n=6)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	74.1 ± 2.5(n=6)

The occurrence of spontaneous alternation behavior increased for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 49]

Measurement of the ameliorating effect on learning and memory deficit (6)

Test compound: (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 19 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 18 below.

Table 18

	Occurrence of spontaneous alternation behavior mean value ± standard error (unit: %)
β-amyloid protein (40-1) 300pmol/day group	76.3 ± 4.9(n=6)
β-amyloid protein (1-42) 300pmol/day group	66.5 ± 4.7(n=6)
β-amyloid protein (1-42) 300pmol/day and test compound 12fmol/day group	72.1 ± 3.7(n=6)

The occurrence of spontaneous alternation behavior increased for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 50]

Measurement of the ameliorating effect on learning and memory deficit (7)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 19 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 19 below.

Table 19

	Occurrence of spontaneous alternation behavior mean value ± standard error (unit: %)
β-amyloid protein (40-1) 300pmol/day group	76.3 ± 4.9(n=6)
β-amyloid protein (1-42) 300pmol/day group	66.5 ± 4.7(n=6)
β-amyloid protein(1-42) 300pmol/day and test compound 12fmol/day group	73.2 ± 5.1(n=6)

The occurrence of spontaneous alternation behavior increased for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 51]

Measurement of the ameliorating effect on learning and memory deficit (8)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The ameliorating effect on learning and memory deficit was evaluated with the evaluation methods of Reference examples 19 and 20. The test compound was dissolved in the β-amyloid protein solution, and injected at the same time as the β-amyloid protein, using an osmotic pump. The results are shown in Table 20 below.

Table 20

	Occurrence of spontaneous alternation behavior mean value ± standard error (unit: %)
Vehicle only group	68.2 ± 2.3(n=6)
β-amyloid protein (1-42) 300pmol/day group	59.1 ± 3.0(n=6)
β-amyloid protein (1-42) 300pmol/day and test compound 12fmol/day group	71.7 ± 4.0(n=6)

The occurrence of spontaneous alternation behavior increased for the test compound group when compared to the β-amyloid protein(1-42) only group. In other words, in the present experiment, the test compound displayed an activity to ameliorate learning and memory deficit.

[Example 52]

Evaluation of the promotion activity on the neurite outgrowth (1)

Test compound: (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurite outgrowth was evaluated with the method of Reference example 21.

In addition to the test compound, PGE_1, whose promotion activity on the neurite outgrowth is known in other neuroblastoma cell strain (Miki *et al.*, Drugs and treatments, Vol.21, No.1, p93), was administered to an additional group for comparison. The results are shown in Table 21 below.

Table 21

Compound	Proportion of cells with neurite (%) mean value ± standard error
Test compound not added	8.8 ± 1.3
PGE_1 (10nM)	26.0 ± 3.0
Test compound(10nM)	40.3 ± 3.5

This experiment shows that a promotion activity on the neurite outgrowth was detected for the test compound (level of significance: $p<0.01$). In addition, test compound showed a strong promotion activity when compared to PGE_1 which is known to have a promotion activity on the neurite outgrowth (level of significance: $p<0.05$).

[Example 53]

Evaluation of the promotion activity on the neurite outgrowth (2)

Test compound: (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurite outgrowth was evaluated with the method of Reference example 22.

In addition to the test compound, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 22 below.

Table 22

Compound	Length of neurite per single cell (pixel/cell) mean value ± standard error
Test compound not added	6.1 ± 0.9
PGE_1 (1nM)	14.2 ± 1.5
Test compound (1nM)	22.6 ± 3.0

This experiment shows that a promotion activity on the neurite outgrowth was detected for the test compound.(level of significance: $p<0.01$). In addition, test compound showed a strong promotion activity when compared to PGE_1 which is known to have a promotion activity on the neurite outgrowth (level of significance: $p<0.05$).

[Example 54]

Evaluation of the promotion activity on the neurite outgrowth (3)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurite outgrowth was evaluated with the method of Reference example 21.

In addition to the test compound, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 23 below.

Table 23

Compound	Proportion of cells with neurite (%) mean value ± standard error
Test compound not added	6.1 ± 0.9
PGE_1 (10nM)	19.5 ± 1.9
Test compound (10nM)	38.7 ± 6.6

This experiment shows that a promotion activity on the neurite outgrowth was detected for the test compound.(level of significance: $p<0.01$). In addition, test compound showed a strong promotion activity when compared to PGE_1 which is known to have a promotion activity on the neurite outgrowth (level of significance: $p<0.05$).

[Example 55]

Evaluation of the promotion activity on the neurite outgrowth (4)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurite outgrowth was evaluated with the method of Reference example 22.

In addition to the test compound, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 24 below.

Table 24

Compound	Length of neurite per single cell (pixel/cell) mean value ± standard error
Test compound not added	1.2 ± 0.13
PGE_1 (100nM)	5.7 ± 1.03
Test compound (100nM)	8.0 ± 1.37

This experiment shows that a promotion activity on the neurite outgrowth was detected for the test compound.(level of significance: $p<0.01$).

[Example 56]

Evaluation of the promotion activity on the neurite outgrowth (5)

Test compound A: (1R,2R,3aS,8bS)-2,3,3a,8b-tetrahydro-2-hydroxy-1-[(3S,1E)-3-hydroxy-4-methyl-1-octene-6-ynyl]-5-(4-N,N-dimethylaminobutyl)-1H-cyclopenta[b]benzofuran

Test compound B: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound C: (1S,2R,3R,5S)-7-[(E)-5-N,N-dimethylaminopentylidene]-2-[(3S,1E)-3-hydroxy-4-methyl-6-octyne-1-enyl]-3-hydroxybicyclo[3.3.0]octane

Test compound D: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(3S,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound E: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurite outgrowth was evaluated with the method of Reference example 21.

In parallel to the test compounds, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 25 below.

Table 25

Compound	Concentration of test compound (μM)	Promotion activity on the neurite outgrowth (value relative to PGE_1)
Vehicle	-	0.79
PGE_1	10	1.00
Test compound A	10	1.17
Test compound B	10	1.63
Test compound C	10	1.15
Test compound D	10	1.31
Test compound E	10	1.58

[Example 57]

Evaluation of the promotion activity on the neurneurite outgrowth (6)

Test compound A: (1S,5S,6R,7R)-3-(5-morpholinopentyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound B: (1S,5S,6R,7R)-3-[5-N,N-diisopropylaminopentyl]-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound C: (1S,5S,6R,7R)-3-[5-(1-pyrrolidinyl)pentyl]-6-[(3R,1E)-3-hydroxy-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurneurite outgrowth was evaluated using the method of Reference example 21.

In parallel to the test compounds, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 26 below.

Table 26

Compound	Concentration of compound (μM)	Promotion activity on the neurite outgrowth (value relative to PGE1)
Vehicle	-	0.45
PGE_1	10	1.00
Test compound A	10	1.15
Test compound B	0.1	1.12
Test compound C	10	1.25

[Example 58]

Evaluation of the promotion activity on the neurneurite outgrowth (7)

Test compound A: (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound B: (1S,5S,6R,7R)-3-(4-N,N-dimethylcarbamoylbutyl)-6-[(E)-4-(m-tolyl)-1-butenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The promotion activity on the neurneurite outgrowth was evaluated with the method of Reference example 21.

In parallel to the test compounds, as in Example 52, PGE_1 was administered to an additional group for comparison. The results are shown in Table 27 below.

Table 27

Compound	Concentration of compound (μM)	Promotion activity on the neurite outgrowth (value relative to PGE1)
Vehicle	-	0.53
PGE_1	10	1.00
Test compound A	10	1.39
Test compound B	10	1.50

[Example 59]

Measurement of the blood pressure decreasing activity (1)

Test compound: (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The effect on the blood pressure was evaluated with the method of Reference example 23. The variation in the blood pressure after administration of the test compound was as indicated in Table 28 below.

Table 28

	Dose		Blood pressure (values normalized to 100 at 0 minute) (± standard error)					
	mg/kg	0min	3min	5min	10min	15min	30min	60min
Solvent only	0	100	98.4 (2.0)	97.5 (0.9)	102.6 (2.3)	100.6 (1.1)	102.2 (4.8)	98.8 (3.6)
Test compound	0.1	100	102.2 (1.0)	101.1 (0.4)	100.0 (1.9)	101.5 (1.9)	97.3 (1.9)	101.1 (2.8)
Solvent only	0	100	101.8 (1.1)	99.2 (0.5)	98.5 (1.5)	100.0 (1.2)	99.8 (1.7)	97.0 (1.2)
Test compound	1	100	93.7 (5.6)	95.7 (5.7)	101.0 (4.8)	100.9 (3.2)	101.1 (2.0)	104.8 (3.2)

In the 1mg/Kg group, the test compound exerted a decrease in blood pressure immediately after administration. However, it was observed that recovery was fast, only a slight decrease existed after 3 minutes, and after 10 minutes, the blood pressure returned to normal values. No significant variations were observed in the 0.1mg/Kg group. In other words, it is clear that the test compound is a compound having an extremely small activity on the circulatory system.

[Example 60]

Measurement of the blood pressure decreasing activity (2)

Test compound: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

The effect on the blood pressure was evaluated with the method of Reference example 23. The variation in the blood pressure after administration of the test compound was as indicated in Table 28 below.

Table 29

	Dose		Blood pressure (values normalized to 100 at 0 minute) (± standard error)					
	mg/kg	0min	3min	5min	10min	15min	30min	60min
Solvent only	0	100	101.1	99.7	103.7	105.2	101.4	98.3
			(0.8)	(1.8)	(3.0)	(3.2)	(3.0)	(2.7)
Test compound	0.1	100	100.8	99.7	102.1	101.7	101.2	101.5
			(2.2)	(2.9)	(1.7)	(2.8)	(1.3)	(3.7)
Solvent only	0	100	101.7	98.5	97.8	98.7	98.2	94.0
			(1.0)	(1.1)	(1.0)	(1.5)	(2.8)	(3.5)
Test compound	1	100	108.1	105.1	105.9	105.9	105.0	99.9
			(1.6)	(1.1)	(0.8)	(1.8)	(1.8)	(2.5)

In other words, it is clear that, since no significant variations were observed in the 0.1mg/Kg dose and the 1mg/Kg dose, the test compound is a compound having an extremely small activity on the circulatory system.

[Example 61]

Measurement of the permeability through the blood brain barrier (1)

Test compound A: (1S,5S,6R,7R)-3-(4-carbamoylbutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound B: (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Permeability through the blood brain barrier was measured with the method of Reference example 24. As a reference, measurements were also performed for the well-known isocarbacyclin derivative (test compound B), and compared. The results are shown in Table 30 below.

Table 30

Compound	Rate of incorporation into bovine capillary endothelial cells (mean value of two experiments)
Test compound A	5.09%
Test compound B	below detection limit

It is clear from this experiment that the test compound has a high permeability through the blood brain barrier.

[Example 62]

Measurement of the permeability through the blood brain barrier (2)

Test compound A: (1S,5S,6R,7R)-3-(5-N,N-dimethylaminopentyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Test compound B: (1S,5S,6R,7R)-3-(4-carboxybutyl)-6-[(4S,1E)-4-hydroxy-4-methyl-1-octenyl]-7-hydroxybicyclo[3.3.0]-2-octene

Permeability through the blood brain barrier was measured with the method of Reference example 24. As a reference, measurements were also performed for the well-known isocarbacyclin derivative (test compound B), and compared. The results are shown in Table 31 below.

Table 31

Compound	Rate of incorporation into bovine capillary endothelial cells (mean value of two experiments)
Test compound A	15.8%
Test compound B	below detection limit

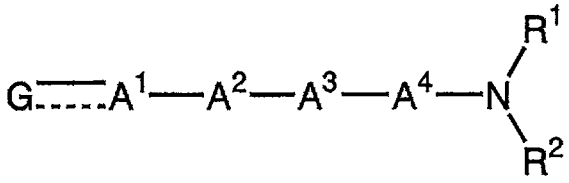
In other words, it is clear that the test compound A has a high permeability through the blood brain barrier.

Usability in the industry

The nitrogen-containing compound of the present invention represented by the above equation (1) has an activity for the remedy of nerve damage. Therefore, the compound of the present invention can be used as a therapeutic agent for diorders due to nerve damage or nerve lesions due to external injuries.

CLAIMS

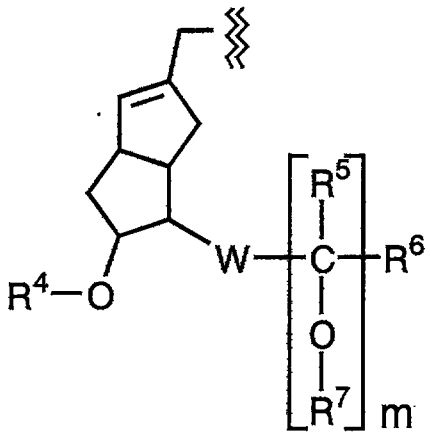
Claim 1. An agent for the remedy of neural damage wherein the active ingredient is a nitrogen-containing compound described in Formula (1) shown below.



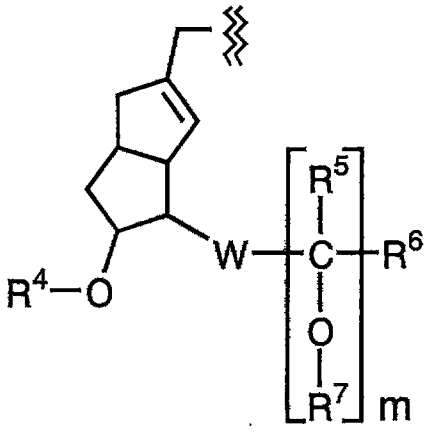
(1)

[In Formula (1), the symbol ⎯⎯ represents a single bond or a double bond.

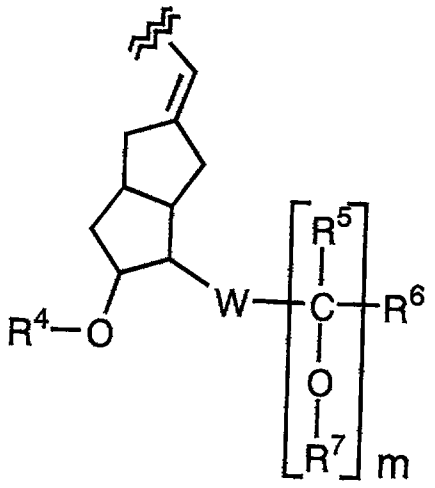
G represents one functional group chosen from the group consisting of the Formulae (G1), (G2), (G3), (G4), (G5), (G6), (G7), (G8), (G9), (G10), (G11) and (G12) shown below.



(G1)



(G2)



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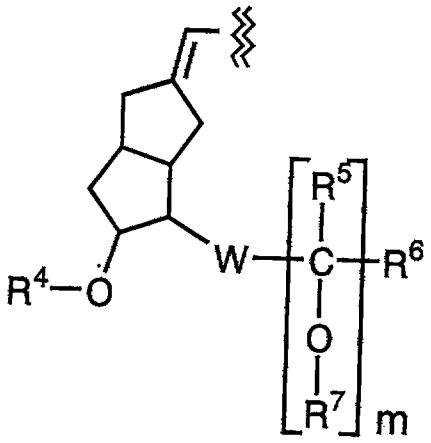

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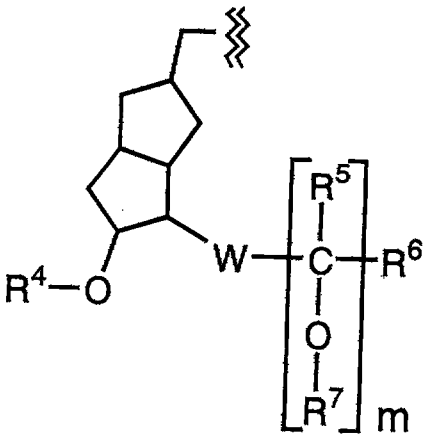

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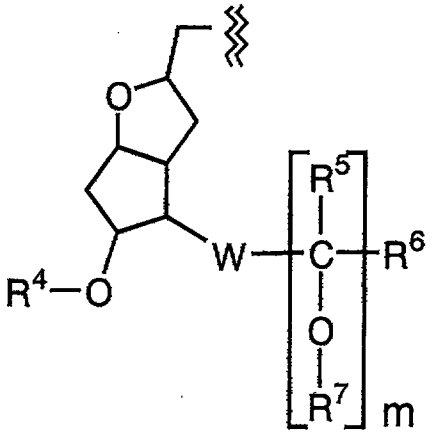
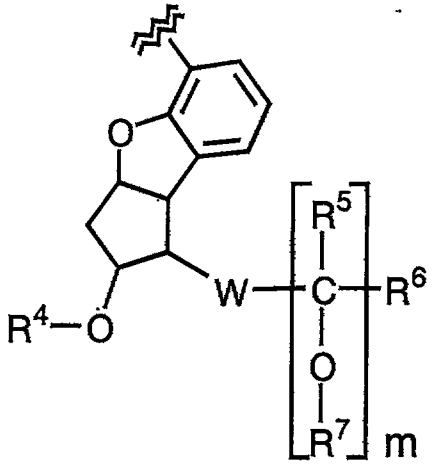
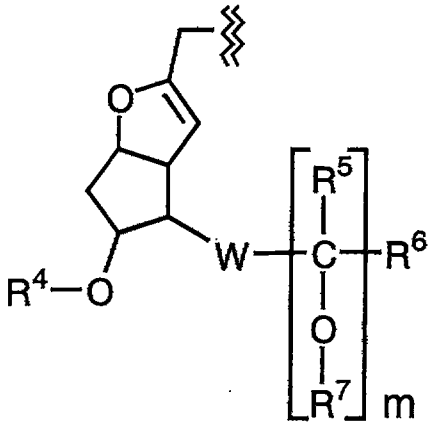


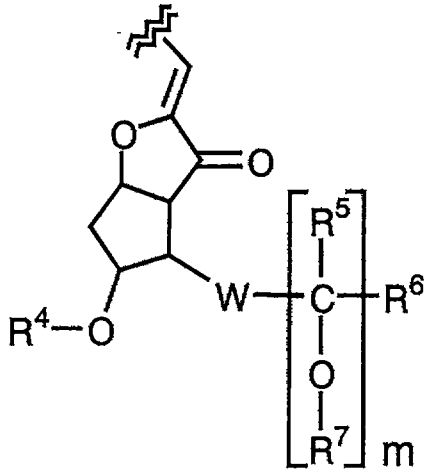
(G6)



(G7)



(G8)



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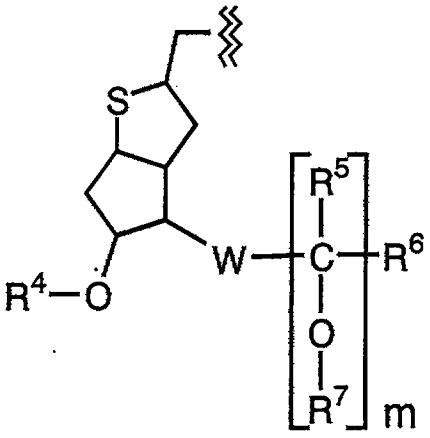
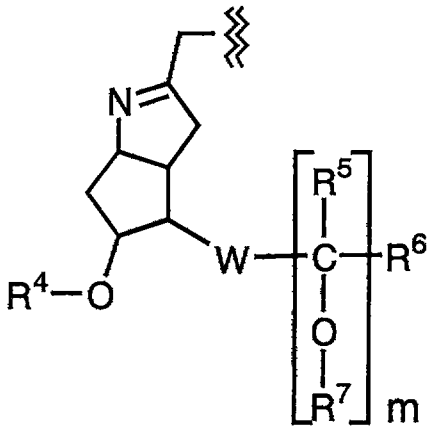


(G10)



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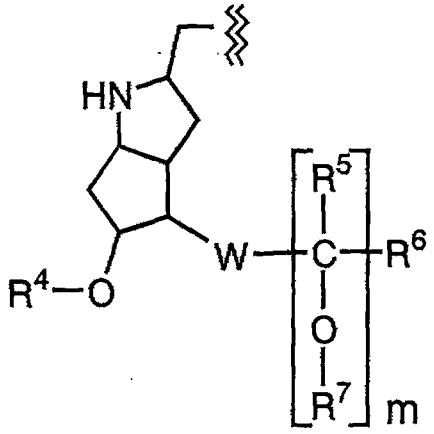


(G12)

(In Formula (G1), Formula (G2), Formula (G3), Formula (G4), Formula (G5), Formula (G6), Formula (G7), Formula (G8), Formula (G9), Formula (G10), Formula (G11) and Formula (G12),

the symbol ≋ represents the site of linkage with A^1.

R^4 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group or a functional group forming the acetal bond together with the oxygen atom bonded to R^4.

W represents a single bond, $-CH_2-$, $-(CH_2)_2-$, $-(CH_2)_3-$, $-CH=CH-$, $-CH=CHCH_2-$, $-C\equiv C-$ or $-C\equiv CCH_2-$.

m may be either 0 or 1. However, when W is a single bond, m is equal to 1.

R^5 and R^6 are either identical or different and, either represents one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms,

fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, an acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10

carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

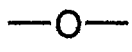
5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

or, when R^5 and R^6 are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms,

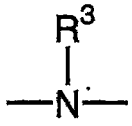
sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

R^7 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms,a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^7, or, when R^7 and R^5 are bonded to each other, it represents one portion of the bond forming the carbonyl group together with the carbon atom bonded to R^5 and the oxygen atom bonded to R^7.

A^2 represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

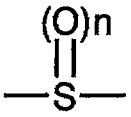


(A2A)



(A2B)

(In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.)



(A2C)

(In the formula, n represents 0, 1, or 2.)

A^1 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges G and A^2 through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^3 represents the items 1) or 2) below

1) a single bond

2) a functional group which bridges A^2 and A^4 through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an

alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^4 represents either of the items 1) to 4) below

1) a single bond

2) a carbonyl group

3) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^1 and R^2, and A^3 through an identical atom or through different atoms.

4) when A^4 and R^1 are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^4 or R^1 and the nitrogen atom they are bonded to are bonded through a double bond, R^2 represents the bond between A^4 or R^1 and the nitrogen atom.)

However, in the combination of A^1, A^2, A^3 and A^4, A^1, A^2, A^3 and A^4 may not simultaneously represent bonds. In addition, when A^2 represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^2 and the nitrogen atom bonded to R^1 and R^2 must be bonded with more than two carbon atoms in between.

R^1 and R^2 are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group

having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

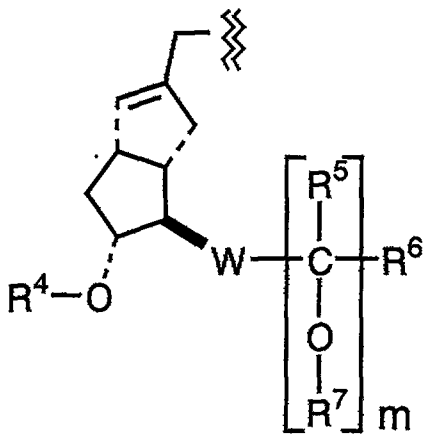
6) an acyl group having 1 to 10 carbon atoms when A^4 is not a carbonyl group,

7) a sulfonyl group having 1 to 8 carbon atoms when A^4 is not a carbonyl group (however, when either R^1 or R^2 represents a sulfonyl group having 1 to 8 carbon atoms, the other may neither be an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

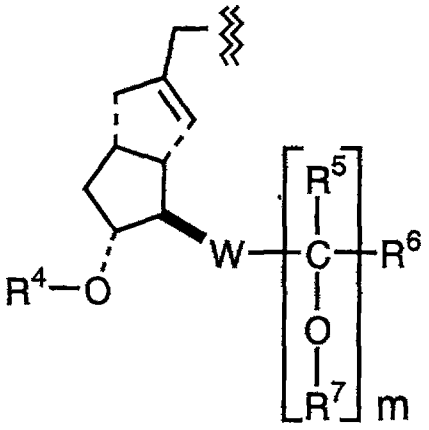
or, when R^1 and R^2 are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9

carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)]

Claim 2. An agent for the remedy of neural damage of Claim 1 wherein G in the above Formula (1) is one functional group chosen from the group consisting of the Formulae (G1E), (G2E), (G3E), (G4E), (G5E), (G6E), (G7E), (G8E), (G9E), (G10E), (G11E) and (G12E) shown below.



(G1E)



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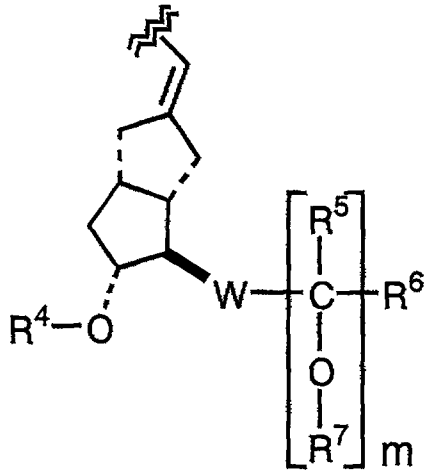

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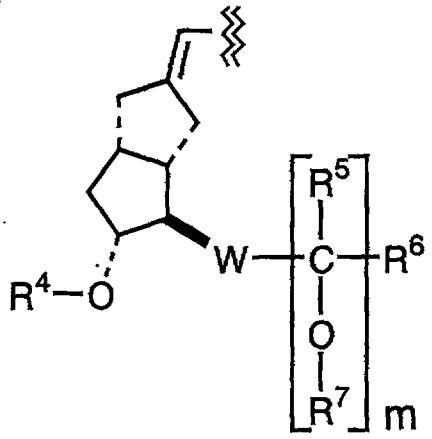

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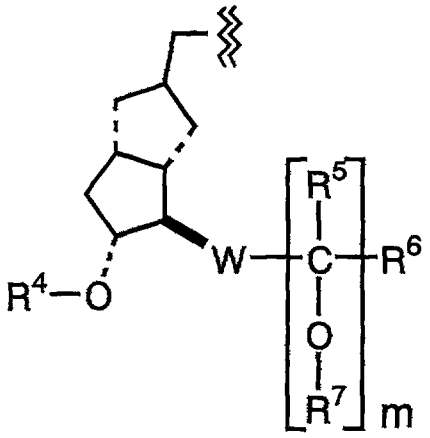

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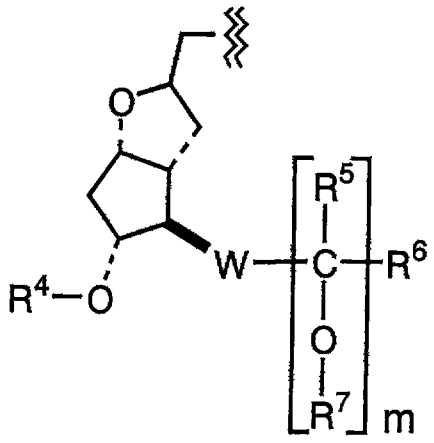

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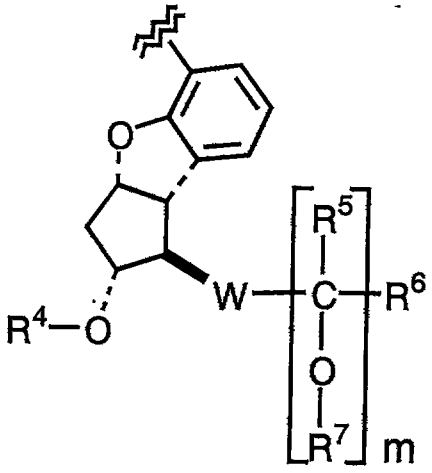

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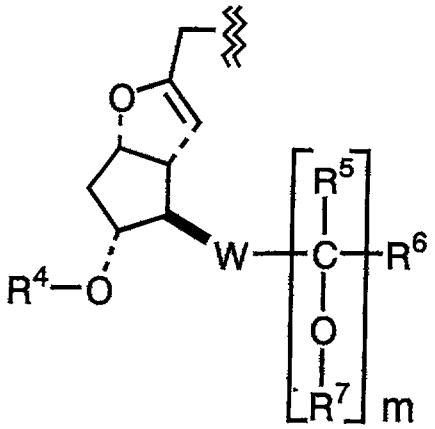

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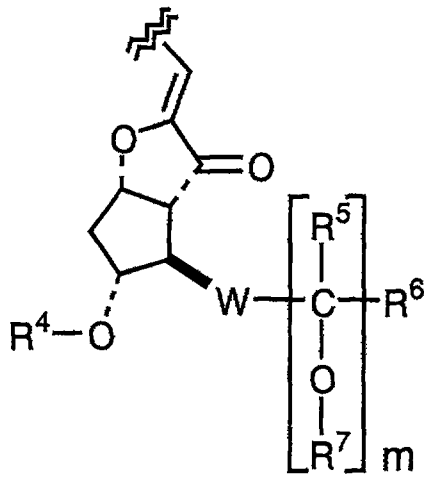

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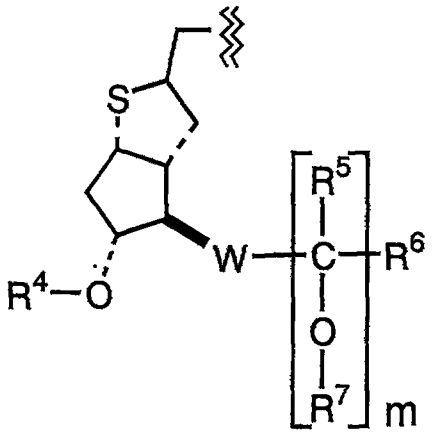

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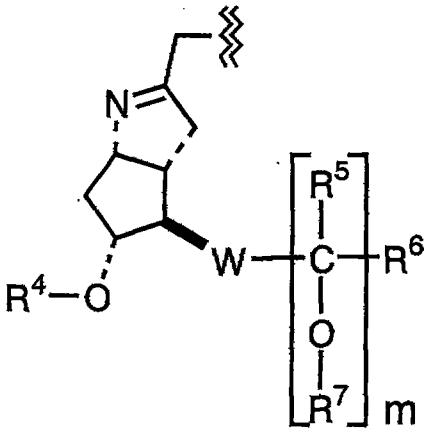

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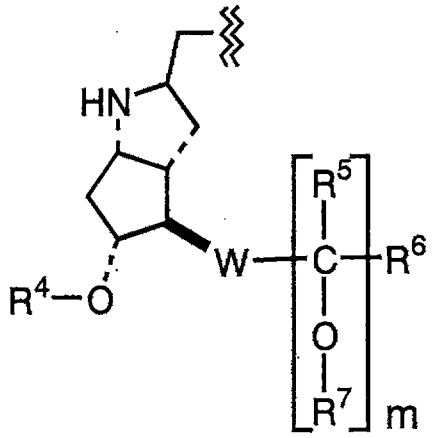


(G12E)

[In the above Formula (G1E), Formula (G2E), Formula (G3E), Formula (G4E), Formula (G5E), Formula (G6E), Formula (G7E), Formula (G8E), Formula (G9E), Formula (G10E), Formula (G11E) and Formula (G12E), the symbol ≋, R^4, R^5, R^6, R^7, m, and W have the same definition as in the above Formula (1). The symbol ▬ indicates that the bond is in the β position with respect to the carbon atom forming the cyclic structure it is bonded to. The symbol ----- indicates that the bonds are in the α position with respect to the carbon atoms forming the cyclic structure they are bonded to.]

Claim 3. An agent for the remedy of neural damage of Claim 1, wherein G in the above Formula (1) is a functional group having the Formula (G1E).

Claim 4. An agent for the remedy of neural damage of Claim 1, wherein G in the above Formula (1) is one functional group chosen from the group consisting of the above Formulae (G2E), (G3E), (G4E), (G5E), (G6E), (G7E), (G8E), (G9E), (G10E), (G11E) and (G12E).

Claim 5. An agent for the remedy of neural damage of Claim 1, wherein G in the above Formula (1) is one functional group chosen from the group consisting of the above Formulae (G2E), (G3E), (G4E), (G5E), (G6E) and (G7E).

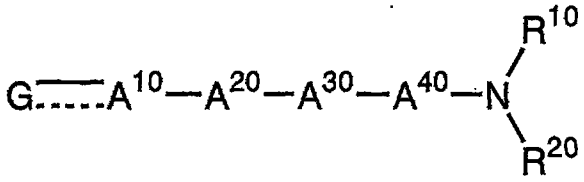
Claim 6. An agent for the remedy of neural damage of Claim 1, wherein G in the above Formula (1) is a functional group having the Formula (G3E).

Claim 7. An agent for the remedy of neural damage of Claim 1, wherein G in the above Formula (1) is a functional group having the Formula (G7E).

Claim 8. An agent for the remedy of neural damage as claimed in anyone of Claim 1 to Claim 7, wherein A^4 in the above Formula (1) is a carbonyl group.

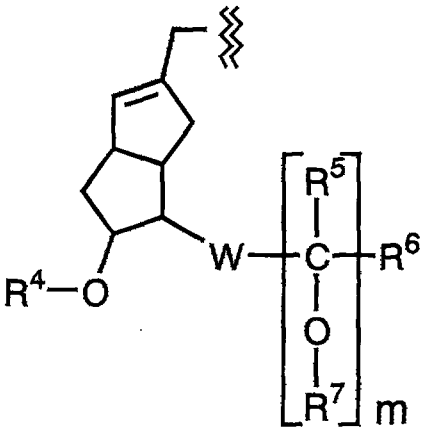
Claim 9. An agent for the remedy of neural damage as claimed in anyone of Claim 1 to Claim 7, wherein A^4 in the above Formula (1) is a methylene group.

Claim 10. A nitrogen-containing compound represented by Formula (2) shown below or a salt thereof.



(2)

[In Formula (2), the symbol ----- represents a single bond or a double bond.
G represents one functional group chosen from the group consisting of the Formulae (G1), (G2), (G3), (G4), (G5), (G6), (G7), (G8), (G9), (G10), (G11) and (G12) shown below.



(G1)

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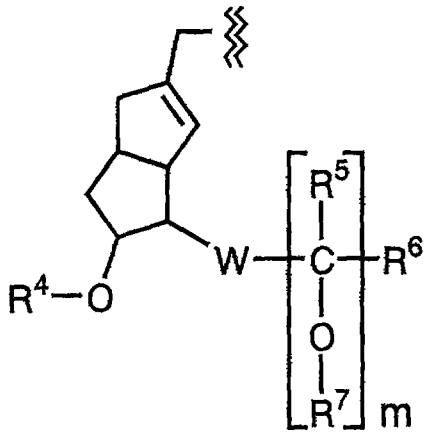

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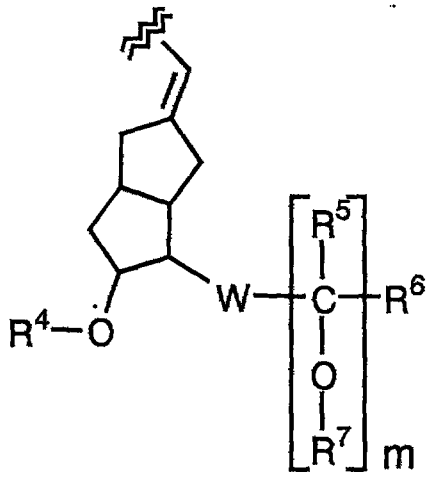

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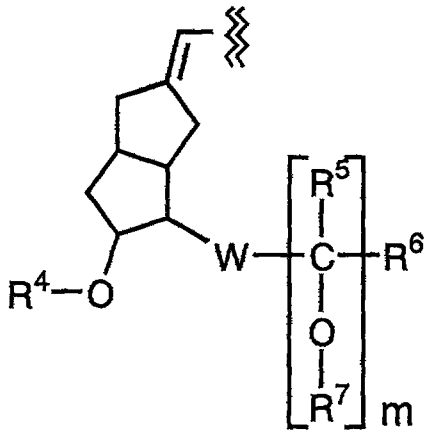

(G4)

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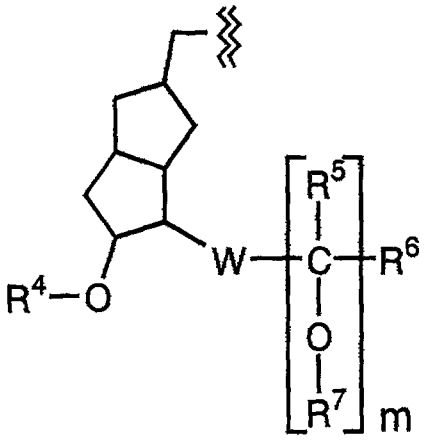

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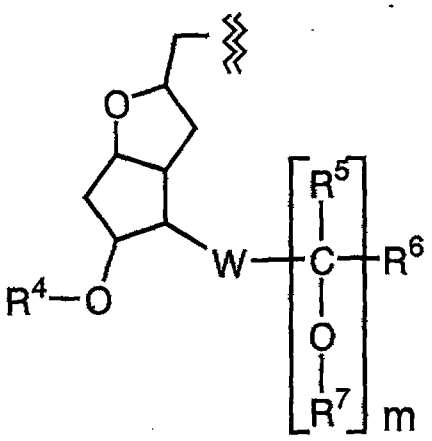

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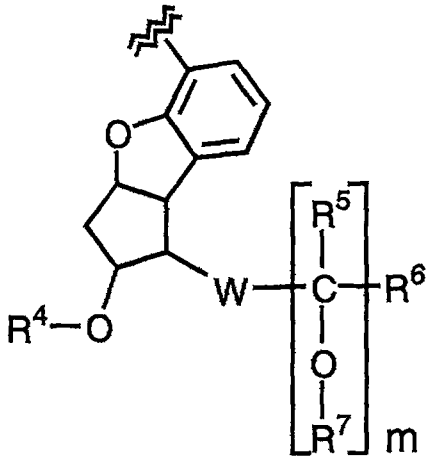

(G7)

5

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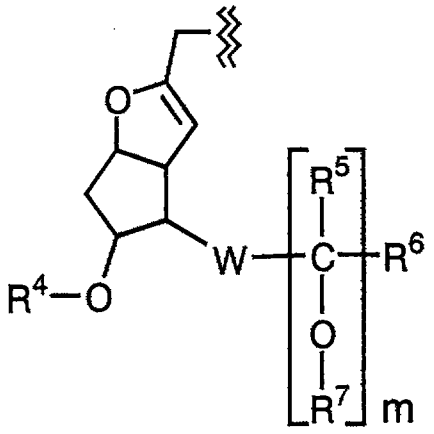

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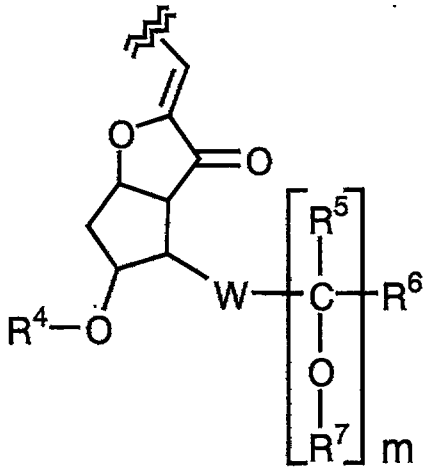

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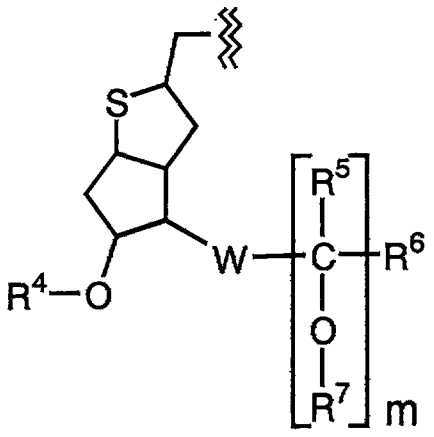

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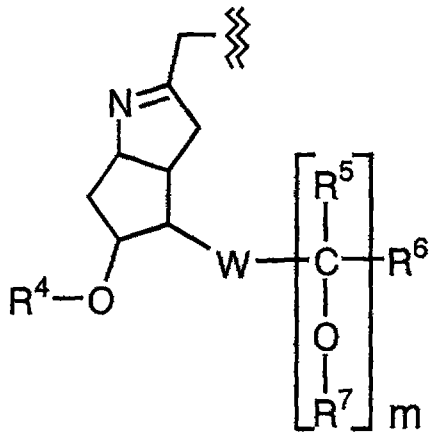
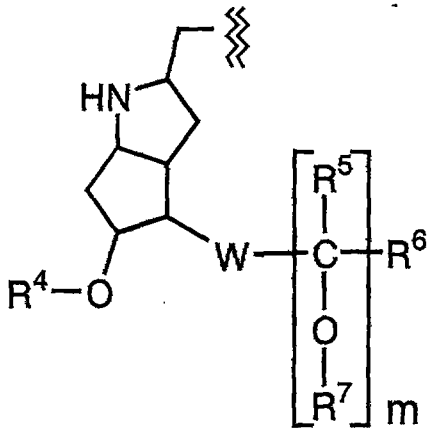


(G11)



(G12)

(In Formula (G1), Formula (G2), Formula (G3), Formula (G4), Formula (G5), Formula (G6), Formula (G7), Formula (G8), Formula (G9), Formula (G10), Formula (G11) and Formula (G12), the symbol ≋ represents the site of linkage with A^{10}.

R^4 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group or a functional group forming the acetal bond together with the oxygen atom bonded to R^4.

W represents a single bond, $-CH_2-$, $-(CH_2)_2-$, $-(CH_2)_3-$, $-CH=CH-$, $-CH=CHCH_2-$, $-C\equiv C-$ or $-C\equiv CCH_2-$.

m may be either 0 or 1. However, when W is a single bond, m is equal to 1.

R^5 and R^6 are either identical or different and, either represent one functional group chosen from the following items 1) to 5), i.e.,

1) a hydrogen atom,

2) a substituted or an unsubstituted aliphatic hydrocarbon group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having

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1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents, substituted or unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (aliphatic hydrocarbon group having 1 to 6 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), substituted or unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents), and, substituted or unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms,

acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents) may be cited as substituents),

3) a substituted or an unsubstituted alicyclic hydrocarbon group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) a substituted or an unsubstituted aromatic hydrocarbon group having 6 to 10 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

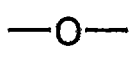
5) a substituted or an unsubstituted heterocyclic group having 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms in the cycle (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group

* C L M S *

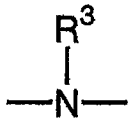
having 1 to 6 carbon atoms may be cited as substituents),
or, when R^5 and R^6 are bonded to each other, they represent a substituted or an unsubstituted alicyclic hydrocarbon chain having 4 to 7 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents).

R^7 represents a hydrogen atom, an acyl group having 2 to 10 carbon atoms, a tri(hydrocarbon group having 1 to 7 carbon atoms) silyl group, an alkoxycarbonyl group having 2 to 5 carbon atoms,a sulfonyl group having 1 to 8 carbon atoms, a functional group forming the acetal bond together with the oxygen atom bound to R^7, or, when R^7 and R^5 are bonded to each other, it represents one portion of the bond forming the carbonyl group together with the carbon atom bonded to R^5 and the oxygen atom bonded to R^7.

A^{20} represents a single bond, a Formula (A2A) shown below, a Formula (A2B) shown below or a Formula (A2C) shown below.

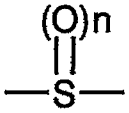


(A2A)



(A2B)

(In the formula, R^3 represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an acyl group having 1 to 10 carbon atoms.)



(A2C)

(In the formula, n represents 0, 1, or 2.)

A^{10} represents the items 1) or 2) below

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1) a single bond

2) a functional group which bridges G and A^{20} through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{30} represents the items 1) or 2) below:

1) a single bond.

2) a functional group which bridges A^{20} and A^{40} through an identical atom or through different atoms, and chosen from: an aliphatic hydrocarbon group having 1 to 3 carbon atoms, an alicyclic hydrocarbon group having 3 to 8 carbon atoms, a heterocyclic group having 1 or 2 oxygen atoms, nitrogen atoms, or sulfur atoms, and a phenylene group.

A^{40} represents any of the items 1) to 3) below

1) a single bond

2) an aliphatic hydrocarbon group having 1 to 3 carbon atoms, which bridges the nitrogen atom, bonded to R^{10} and R^{20}, and A^{30} through an identical atom or through different atoms.

3) when A^{40} and R^{10} are bonded to each other, a functional group forming a 5 to 8 membered ring together with the nitrogen atom they are bonded to (when A^{40} or R^{10} and the nitrogen atom they are bonded to are bonded through a double bond, R^{20} represents the bond between A^{40} or R^{10} and the nitrogen atom.)

However, in the combination of G, A^{10}, A^{20}, A^{30}, and A^{40}, when G represents the Formula (G1) and either of A^{10} or A^{30} is a phenylene group, A^{20} may not be a single bond. In addition, when A^{20} represents one of the Formula (A2A), Formula (A2B) or Formula (A2C), A^{20} and the nitrogen atom bonded to R^{10} and R^{20} must be bonded with more than two carbon atoms in between.

R^{10} and R^{20} are either identical or different, and either represent one functional group chosen from the following items 1) to 7), i.e.,

1) a hydrogen atom (however, when R^{10} and R^{20} both represent a hydrogen atom, only in the case where G is equal to Formula (G1)),

2) when G is not equal to Formula (G7), a substituted or an unsubstituted alkyl group having 1 to 10 carbon atoms (fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8

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carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, sulfonyl group having 1 to 6 carbon atoms, cycloalkyl group having 3 to 8 carbon atoms, phenyl group, and, heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms) may be cited as substituents),

3) when G is not equal to Formula (G7), a substituted or an unsubstituted cycloalkyl group having 3 to 8 carbon atoms (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, an acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

4) when G is not equal to Formula (G7), a substituted or an unsubstituted phenyl group (alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

5) a substituted or an unsubstituted heterocyclic group (containing 1 to 4 oxygen atoms, nitrogen atoms, or sulfur atoms, and, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group

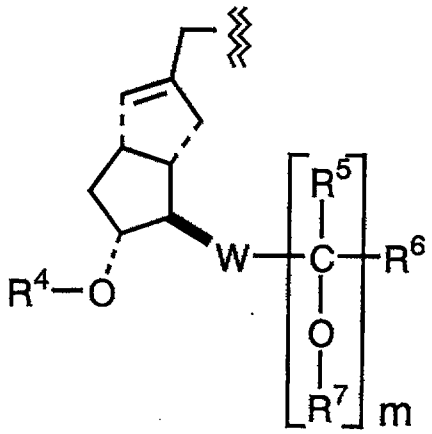
having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents),

6) when G is not equal to Formula (G7), an acyl group having 1 to 10 carbon atoms,

7) when G is not equal to Formula (G7), a sulfonyl group having 1 to 8 carbon atoms (however, when either R^{10} or R^{20} represents a sulfonyl group having 1 to 8 carbon atoms, the other may neither be an acyl group having 1 to 10 carbon atoms nor a sulfonyl group having 1 to 8 carbon atoms),

or, when R^{10} and R^{20} are bonded together, they represent a functional group forming a cyclic amino group having 4 to 8 carbon atoms together with the nitrogen atom they are bonded to (for said cyclic amino group having 4 to 8 carbon atoms, alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, iodine atom, hydroxyl group, alkoxy group having 1 to 4 carbon atoms, aryloxy group having 6 to 10 carbon atoms, aralkoxy group having 7 to 9 carbon atoms, acyloxy group having 2 to 10 carbon atoms, sulfonyloxy group having 1 to 8 carbon atoms, oxo group, acyl group having 1 to 10 carbon atoms, carboxyl group, alkoxycarbonyl group having 2 to 10 carbon atoms, carbamoyl group having 1 to 15 carbon atoms, amino group having 0 to 14 carbon atoms, acylamino group having 1 to 10 carbon atoms, sulfonylamino group having 1 to 8 carbon atoms, imino group having 1 to 10 carbon atoms, cyano group, nitro group, sulfide group having 1 to 6 carbon atoms, sulfinyl group having 1 to 6 carbon atoms, and, sulfonyl group having 1 to 6 carbon atoms may be cited as substituents)]

Claim 11. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is one functional group chosen from the group consisting of the Formulae (G1E), (G2E), (G3E), (G4E), (G5E), (G6E), (G7E), (G8E), (G9E), (G10E), (G11E) and (G12E) shown below.



(G1E)

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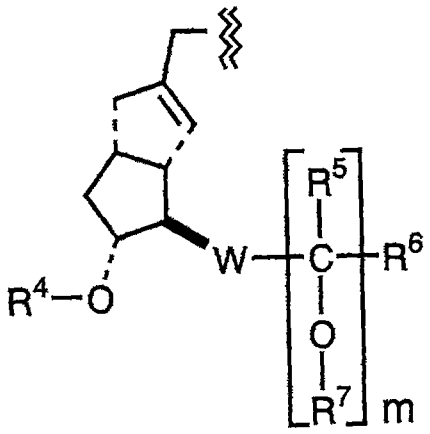
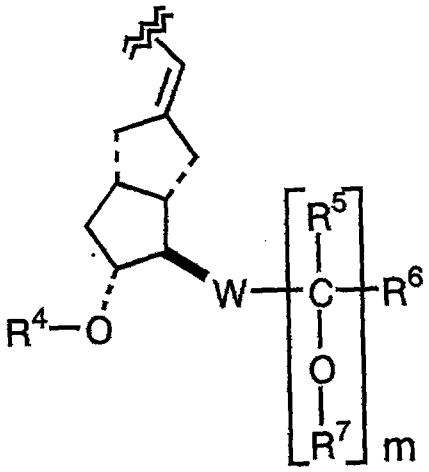
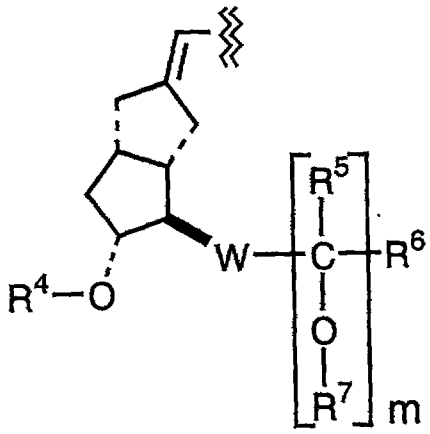


(G2E)



(G3E)



(G4E)

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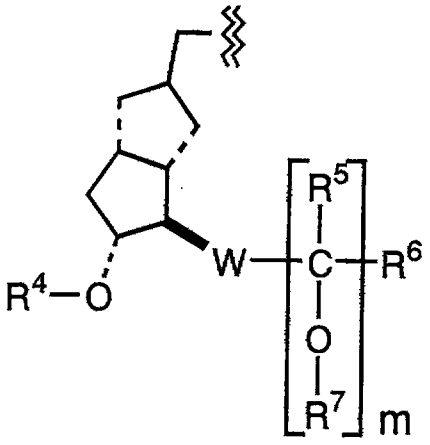
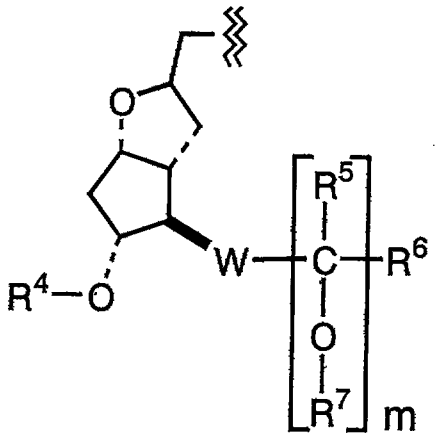
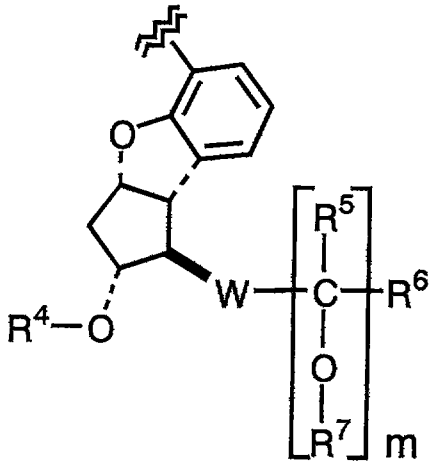


(G5E)



(G6E)



(G7E)

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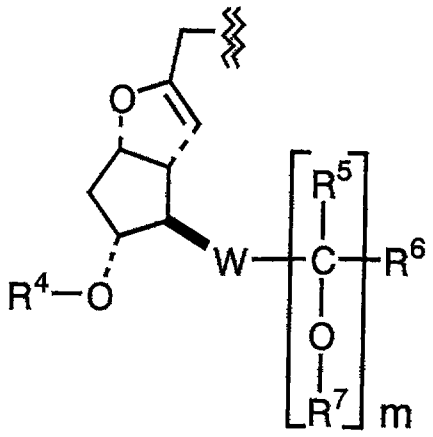

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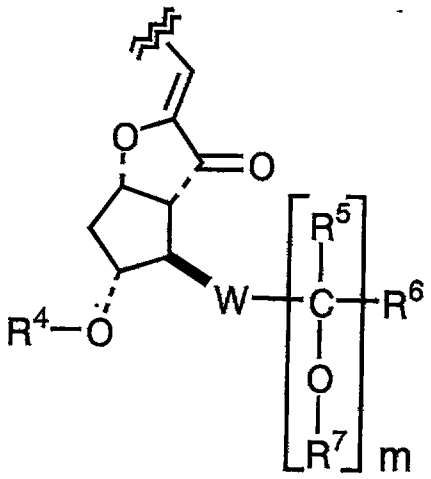

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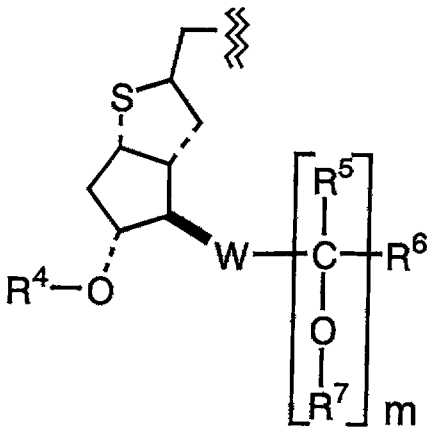

(G10E)

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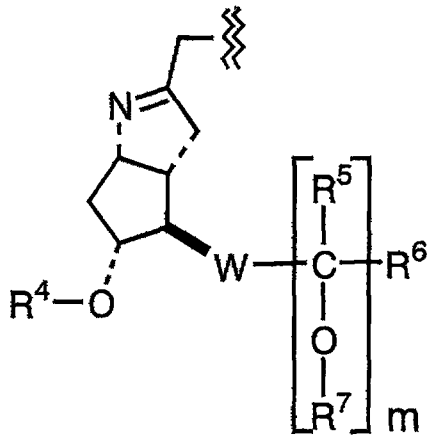
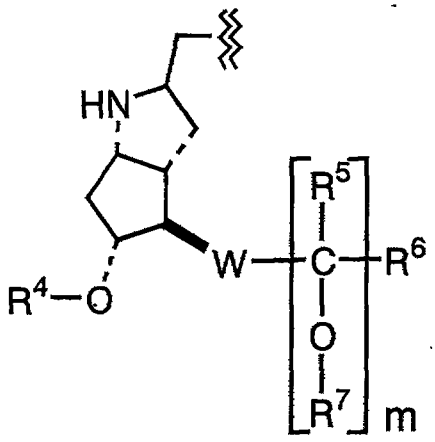


(G11E)



(G12E)

[In the above Formula (G1E), Formula (G2E), Formula (G3E), Formula (G4E), Formula (G5E), Formula (G6E), Formula (G7E), Formula (G8E), Formula (G9E), Formula (G10E), Formula (G11E) and Formula (G12E), the symbol ≋, R^4, R^5, R^6, R^7, m, and W have the same definition as in the above Formula (2). The symbol ▬ indicates that the bond is in the β position with respect to the carbon atom forming the cyclic structure it is bonded to. The symbol ----- indicates that the bonds are in the α position with respect to the carbon atoms forming the cyclic structures they are bonded to.]

12. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is a functional group having the Formula (G1).

13. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is a functional group having the Formula (G1E).

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* C L M S *

14. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is one functional group chosen from the group consisting of the above Formulae (G2E), (G3E), (G4E), (G5E), (G6E), (G7E), (G8E), (G9E), (G10E), (G11E) and (G12E).

15. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is one functional group chosen from the group consisting of the above Formulae (G2E), (G3E), (G4E), (G5E), (G6E) and (G7E).

16. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is a functional group having the Formula (G3E).

17. A nitrogen-containing compound or a salt thereof of Claim 10, wherein G in the above Formula (2) is a functional group having the Formula (G7E).

18. A pharmaceutical composition formed by a nitrogen-containing compound indicated by Formula (1) and a pharmaceutically accepted carrier.

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