[Scope of Patent Claims]

[Claim 1]

A compound or the pharmacologically acceptable salt thereof, wherein the compound is any compound selected from the following group:

(2S,5'R)-7-chloro-6-(5-ethyl-1,3,4-oxadiazol-2-yl)-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(5-tetrahydropyran-4-yl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-[5-(1-methyl-4-piperidyl)-1,3,4-oxadiazol-2-yl] spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-6-[5-(4-fluoro-1-methyl-4-piperidyl)-1,3,4-oxadiazol-2-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-6-[5-[(1S)-1-methoxyethyl]-1,3,4-oxadiazol-2-yl]-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-4-ethoxy-3'-methoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-4-(difluoromethoxy)-3'-methoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-6-[3-(1-methoxyethyl)-1,2,4-oxadiazol-5-yl]-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-6-[3-(1-hydroxy-1-methyl-ethyl)-1,2,4-oxadiazol-5-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(1H-pyrazol-5-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-6-[1-(2-methoxyethyl) pyrazol-3-yl]-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-6-(1,8-dioxa-2-azaspiro [4.5] dec-2-en-3-yl)-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(8-methyl-1-oxa-2,8-diazaspiro [4.5] dec-2-en-3-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-6-(2-methoxypyrimidin-5-yl)-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione;

(2S,5'R)-7-chloro-3',4-dimethoxy-6-(6-methoxy-3-pyridyl)-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione; or

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(3-pyridyl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione.

[Claim 2]

A pharmaceutical composition containing the compound or the pharmacologically acceptable salt thereof, according to claim 1, as an active ingredient.

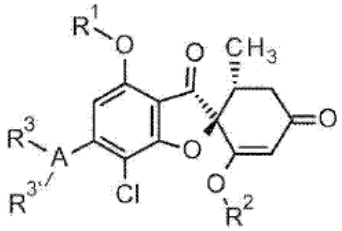
[Claim 3]

Use of the pharmaceutical composition according to claim 2 in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease.

[Claim 4]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound of a general formula (1') or a pharmacologically acceptable salt thereof:

[Chemical formula 8]



(1')

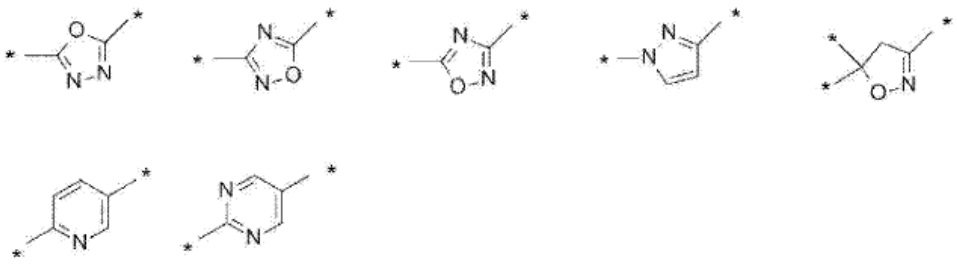
wherein:

R^1 is a methyl group, an ethyl group, or a hydroxyethyl group,

R^2 is a methyl group,

A is any ring selected from the following group, and in the case of two binding groups, $R^{3'}$ is not present:

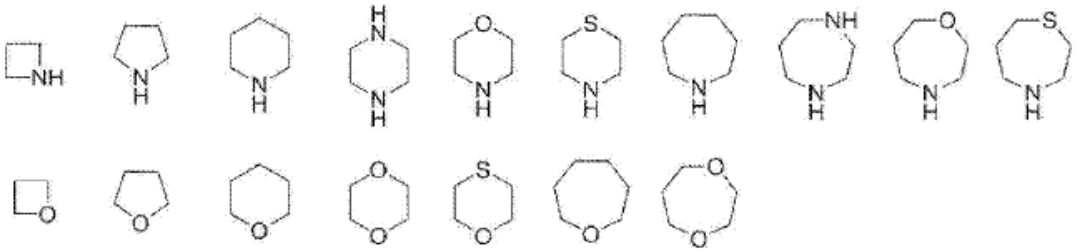
[Chemical formula 13]



wherein * indicates a binding group,

R^3 is a methyl group, an ethyl group, a hydroxy C1-C3 alkyl group, a methoxy C1-C3 alkyl group, or any one selected from the group shown below:

[Chemical formula 12]



, and

$R^{3'}$ is a hydrogen atom,

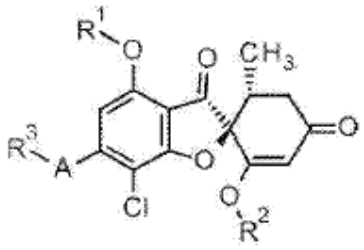
in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is anyone selected from a group consisting of:

Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington's disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke's encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 5]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound of a general formula (1'') or a pharmacologically acceptable salt thereof:

[Chemical formula 14]



(1")

wherein:
R^1 is a methyl group or an ethyl group,
R^2 is a methyl group
A is any ring selected from the following group:

[Chemical formula 15]



wherein * indicates a binding group, and
R^3 is a methyl group or an ethyl group
in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease,
wherein the central inflammatory disease is any one selected from a group consisting of:
Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington's disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke's encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 6]

The use according to claim 4, wherein the compound of the general formula (1') is any compound selected from the following group:

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(1-methylpyrazol-3-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-(1-ethylpyrazol-3-yl)-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(3-methyl-1,2,4-oxadiazol-5-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(5-methyl)-1,2,4-oxadiazol-3-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione (2S,5'R)-7-chloro-6-[5-(1-hydroxy-1-methyl-ethyl)-1,3,4-oxadiazol-2-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-[5-[(1S)-1-hydroxyethyl]-1,3,4-oxadiazol-2-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-[5-[(1R)-1-hydroxyethyl]-1,3,4-oxadiazol-2-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-4-ethoxy-6-[5-(1-hydroxy-1-methyl-ethyl)-1,3,4-oxadiazol-2-yl]-3'-methoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-4-ethoxy-6-[5-[(1S)-1-hydroxyethyl]-1,3,4-oxadiazol-2-yl]-3'-methoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-[3-(1-hydroxyethyl)-1,2,4-oxadiazol-5-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-4-(2-hydroxyethoxy)-3'-methoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-4-(2-hydroxyethoxy)-3'-methoxy-5'-methyl-6-(3-methyl-1,2,4-oxadiazol-5-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-4-(2-hydroxyethoxy)-3'-methoxy-5'-methyl-6-(5-methyl-1,2,4-oxadiazol-3-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-(5-ethyl-1,3,4-oxadiazol-2-yl)-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(5-tetrahydropyran-4-yl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-[5-(1-methyl-4-piperidyl)-1,3,4-oxadiazol-2-yl] spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5'R)-7-chloro-6-[5-(4-fluoro-1-methyl-4-piperidyl)-1,3,4-oxadiazol-2-yl]-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-6-[5-[(1S)-1-methoxyethyl]-1,3,4-oxadiazol-2-yl]-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-4-ethoxy-3’-methoxy-5’-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-4-(difluoromethoxy)-3’-methoxy-5’-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-6-[3-(1-methoxyethyl)-1,2,4-oxadiazol-5-yl]-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-6-[3-(1-hydroxy-1-methyl-ethyl)-1,2,4-oxadiazol-5-yl]-3’,4-dimethoxy-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-5’-methyl-6-(1H-pyrazol-5-yl) spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-6-[1-(2-methoxyethyl) pyrazol-3-yl]-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-6-(2-methoxypyrimidin-5-yl)-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione,

(2S,5’R)-7-chloro-3’,4-dimethoxy-6-(6-methoxy-3-pyridyl)-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione, or

(2S,5’R)-7-chloro-3’,4-dimethoxy-5’-methyl-6-(3-pyridyl) spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione.

[Claim 7]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound described below or a pharmacologically acceptable salt thereof:

(2S,5’R)-7-chloro-6-(1-ethylpyrazol-3-yl)-3’,4-dimethoxy-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione

in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is any one selected from a group consisting of:

Alzheimer’s disease, Parkinson’s disease, Lewy body dementia, multiple system atrophy, Pick’s disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington’s disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke’s encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and

postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 8]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound described below or a pharmacologically acceptable salt thereof:

(2S,5'R)-7-chloro-3',4-dimethoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione

in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is any one selected from a group consisting of:

Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington's disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke's encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 9]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound described below or a pharmacologically acceptable salt thereof:

(2S,5'R)-7-chloro-6-(5-ethyl-1,3,4-oxadiazol-2-yl)-3',4-dimethoxy-5'-methyl-spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione

in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is any one selected from a group consisting of

Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration,

Huntington’s disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke’s encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett’s syndrome.

[Claim 10]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound described below or a pharmacologically acceptable salt thereof:

(2S,5’R)-7-chloro-6-[3-(1-hydroxy-1-methyl-ethyl)-1,2,4-oxadiazol-5-yl]-3’,4-dimethoxy-5’-methyl-spiro [benzofuran-2,4’-cyclohex-2-ene]-1’,3-dione

in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is any one selected from a group consisting of:

Alzheimer’s disease, Parkinson’s disease, Lewy body dementia, multiple system atrophy, Pick’s disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington’s disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke’s encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett’s syndrome.

[Claim 11]

Use of a pharmaceutical composition, the pharmaceutical composition containing a compound described below or a pharmacologically acceptable salt thereof:

(2S,5'R)-7-chloro-4-ethoxy-3'-methoxy-5'-methyl-6-(5-methyl-1,3,4-oxadiazol-2-yl) spiro [benzofuran-2,4'-cyclohex-2-ene]-1',3-dione

in the manufacture of a medicament for the prevention and/or treatment of a central inflammatory disease, wherein the central inflammatory disease is any one selected from a group consisting of Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington's disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, Down syndrome, Niemann-Pick disease, cerebral amyloid angiopathy, HIV encephalopathy, influenza encephalopathy, hepatic encephalopathy, progressive multifocal leukoencephalopathy, anti-NMDA receptor antibody encephalitis, cerebrovascular disorders, traumatic brain injuries, spinal cord injuries, hypoxic encephalopathy, epilepsy, optic neuritis, congenital metabolic brain diseases, Wernicke's encephalopathy, autism spectrum disorders, attention deficit/hyperactivity disorders, tic disorders, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 12]

The use according to any one of claims 3 to 11, wherein the central inflammatory disease is any one selected from a group consisting of:

Alzheimer's disease, Parkinson's disease, Lewy body dementia, multiple system atrophy, Pick's disease, progressive supranuclear palsy, cerebral cortex basement degeneration, frontotemporal lobe degeneration, Huntington's disease, amyotrophic lateral sclerosis, spinal and bulbar muscular atrophy, spinal muscular atrophy, spinocerebellar degeneration, Creutzfeldt-Jakob disease, schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, obsessive compulsive disorders, emotional trauma and stress related disorders, eating disorders, circadian rhythm sleep/wake disorders, narcolepsy, substance related disorders (alcohol addiction and drug addiction), impulse control disorders, delirium, personality disorders, and Rett's syndrome.

[Claim 13]

The use according to any one of claims 3 to 11, wherein the central inflammatory disease is any one selected from a group consisting of:

schizophrenia, bipolar disorders, major depressive disorders (treatment resistant depression and postpartum depression), persistent depressive disorders (dysthymic disorder), premenstrual dysthymic disorders, anxiety disorders, focal phobia, panic disorders, and obsessive compulsive disorders.