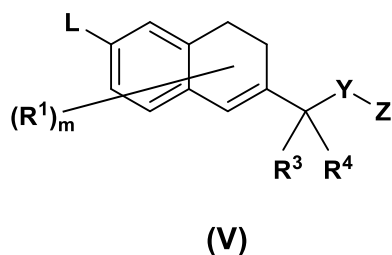


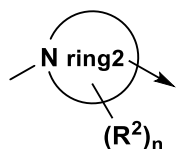
CLAIMS

1. A compound represented by the general formula (V) or a pharmaceutically acceptable salt thereof:

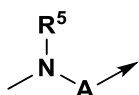


- 5 wherein L is one of the following branched or linear chain groups
- (1) -O-(C2-7 alkyl),
 - (2) -O-(C2-7 alkenyl),
 - (3) -O-(C2-7 alkynyl),
 - (4) -O-(C1-5 alkylene)-OCH₃,
 - 10 (5) -O-(C1-4 alkylene)-OCH₂CH₃,
 - (6) -CH₂O-(C1-6 alkyl),
 - (7) -CH₂O-(C2-6 alkenyl),
 - (8) -CH₂O-(C2-6 alkynyl),
 - (9) -CH₂CH₂O-(C1-5 alkyl),
 - 15 (10) -CH₂CH₂O-(C2-5 alkenyl),
 - (11) -CH₂CH₂O-(C2-5 alkynyl),
 - (12) -S-(C2-7 alkyl),
 - (13) -S-(C2-7 alkenyl),
 - (14) -S-(C2-7 alkynyl),
 - 20 (15) -NR⁶-(C2-7 alkyl),
 - (16) -NR⁶-(C2-7 alkenyl),
 - (17) -NR⁶-(C2-7 alkynyl),
 - (18) a C3-8 alkyl group,
 - (19) a C3-8 alkenyl group, or
 - 25 (20) a C3-8 alkynyl group, and
- R⁶ represents a hydrogen atom or a C1-4 alkyl group,
provided that a carbon atom in each group may be substituted with 1 to 13 halogen atoms,

Y represents



or



wherein each group is bound to Z through a bond represented by an arrow,

A represents a C3-7 cycloalkylene group which may be substituted or a C1-4 alkylene group which may be substituted,

R¹ represents a C1-4 alkyl group, a C3-6 cycloalkyl group which may be substituted with a halogen, a C1-4 alkoxy group which may be substituted with a halogen, a C1-4 haloalkyl group, a halogen atom, or a hydroxy group,

R² represents a C1-4 alkyl group, a C1-4 alkoxy group which may be substituted with a halogen, a C1-4 haloalkyl group, a halogen atom, or a hydroxy group,

R³, R⁴, and R⁵ each independently represent a hydrogen atom, a C1-4 alkyl group, a C3-6 cycloalkyl group which may be substituted with a halogen, or a C1-4 haloalkyl group,

Z represents (1) a carboxyl group which may be substituted with one C1-8 alkyl group, (2) a hydroxy group which may be substituted with one C1-8 alkyl group, (3) a hydroxamic acid group which may be substituted with one to two C1-8 alkyl groups, (4) a sulfonic acid group which may be substituted with one C1-8 alkyl group, (5) a boronic acid group which may be substituted with one to two C1-8 alkyl groups, (6) a carbamoyl group which may be substituted with (i) one to two C1-8 alkyl groups or (ii) one to two sulfonyl groups which may be substituted with a C1-4 alkyl group, (7) a sulfamoyl group which may be substituted with (i) one to two C1-8 alkyl groups or (ii) one to two C2-8 acyl groups, (8) a sulfoximine group which may be substituted with one to two C1-8 alkyl groups, or (9) a tetrazolyl group,

ring 2 represents a 3- to 7-membered nitrogen-containing heterocycle,

m represents an integer of 0 to 6,

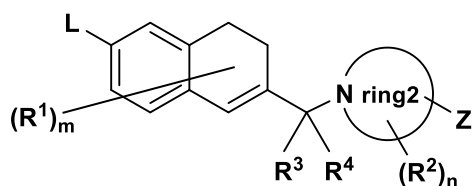
n represents an integer of 0 to 5,

when m is 2 or more, a plurality of R¹'s may be the same or different, and

when n is 2 or more, a plurality of R²'s may be the same or different,

provided that each hydrogen atom may be a deuterium atom or a tritium atom].

2. The compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein the compound is a compound represented by the general formula (V-1):



(V-1)

[wherein all the symbols represent the same meanings as described in claim 1,
provided that each hydrogen atom may be a deuterium atom or a tritium atom].

3. The compound or a pharmaceutically acceptable salt thereof according to claim 1 or claim 2,
wherein L is a branched or linear chain group in which the number of atoms in the main chain is 4 to 7.

4. The compound or a pharmaceutically acceptable salt thereof according to claim 1 or claim 2,
wherein

L is

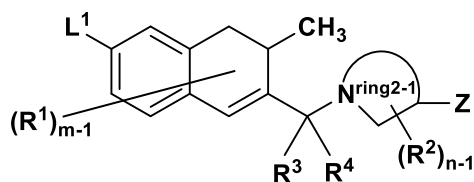
- (1) -O-(C3-6 alkyl),
- (2) -O-(C3-6 alkenyl),
- (3) -O-(C3-6 alkynyl),
- (4) -O-(C1-4 alkylene)-OCH₃,
- (5) -O-(C1-3 alkylene)-OCH₂CH₃,
- (6) -CH₂O-(C2-5 alkyl),
- (7) -CH₂O-(C2-5 alkenyl),
- (8) -CH₂O-(C2-5 alkynyl),
- (9) -CH₂CH₂O-(C1-4 alkyl),
- (10) -CH₂CH₂O-(C2-4 alkenyl),
- (11) -CH₂CH₂O-(C2-4 alkynyl),
- (12) -S-(C3-6 alkyl),
- (13) -S-(C3-6 alkenyl),
- (14) -S-(C3-6 alkynyl),
- (15) -NR⁶-(C3-6 alkyl),
- (16) -NR⁶-(C3-6 alkenyl),
- (17) -NR⁶-(C3-6 alkynyl),
- (18) a C4-7 alkyl group,
- (19) a C4-7 alkenyl group, or
- (20) a C4-7 alkynyl group, and

R⁶ represents a hydrogen atom or a C1-4 alkyl group,

provided that a carbon atom in each group may be substituted with 1 to 13 halogen atoms.

5. The compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 4,
wherein ring 2 is a 3- to 7-membered nitrogen-containing saturated heterocycle.

6. The compound or a pharmaceutically acceptable salt thereof according to claim 1 or claim 2,
wherein the compound is a compound represented by the general formula (V-2):



(V-2)

[wherein L¹ is a branched or linear chain group composed of atoms selected from a carbon atom, an oxygen atom, a nitrogen atom, and a sulfur atom, in which the number of atoms in the main chain thereof is 4 to 7, and the chain group may contain 1 to 3 heteroatoms selected from an oxygen atom, a nitrogen atom, and a sulfur atom,

provided that a carbon atom in L¹ may be substituted with 1 to 13 halogen atoms,
 ring 2-1 represents a 3- to 7-membered nitrogen-containing saturated heterocycle,
 m-1 represents an integer of 0 to 2,
 n-1 represents an integer of 0 to 2,
 when m-1 is 2, a plurality of R¹'s may be the same or different,
 when n-1 is 2, a plurality of R²'s may be the same or different, and
 the other symbols represent the same meanings as describe in claim 1,
 provided that each hydrogen atom may be a deuterium atom or a tritium atom].

7. The compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 6, wherein Z is a carboxyl group which may be substituted with one C1-8 alkyl group, or a tetrazolyl group.

8. The compound or a pharmaceutically acceptable salt thereof according to claim 6 or claim 7, wherein

L¹ is

- (1) -O-(C3-6 alkyl),
- (2) -O-(C3-6 alkenyl),
- (3) -O-(C3-6 alkynyl),
- (4) -O-(C1-4 alkylene)-OCH₃,
- (5) -O-(C1-3 alkylene)-OCH₂CH₃,
- (6) -CH₂O-(C2-5 alkyl),
- (7) -CH₂O-(C2-5 alkenyl),
- (8) -CH₂O-(C2-5 alkynyl),
- (9) -CH₂CH₂O-(C1-4 alkyl),
- (10) -CH₂CH₂O-(C2-4 alkenyl),

- (11) -CH₂CH₂O-(C2-4 alkynyl),
 (12) -S-(C3-6 alkyl),
 (13) -S-(C3-6 alkenyl),
 (14) -S-(C3-6 alkynyl),
 5 (15) -NR⁶-(C3-6 alkyl),
 (16) -NR⁶-(C3-6 alkenyl),
 (17) -NR⁶-(C3-6 alkynyl),
 (18) a C4-7 alkyl group,
 (19) a C4-7 alkenyl group, or
 10 (20) a C4-7 alkynyl group, and
 R⁶ represents a hydrogen atom or a C1-4 alkyl group,
 provided that a carbon atom in each group may be substituted with 1 to 13 halogen atoms.

9. The compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 8,
 15 wherein R¹ is a C1-4 alkyl group or a halogen atom.

10. The compound or a pharmaceutically acceptable salt thereof according to any one of claims 6 to 9,
 wherein ring 2-1 is azetidine, pyrrolidine, piperidine, or perhydroazepine.

20 11. The compound or a pharmaceutically acceptable salt thereof according to claim 1 or claim 2,
 wherein the compound is

- (1) 1-(((3R)-6-butoxy-3-methyl-3,4-dihydronaphthalen-2-yl)methyl] azetidine-3-carboxylic acid,
 (2) 1-(((3S)-6-butoxy-3-methyl-3,4-dihydro naphthalen-2-yl) methyl]azetidine-3-carboxylic acid,
 (3) 1-(((3S)-3-methyl-6-pentoxy-3,4-di hydronaphthalen-2-yl)methyl]azetidine-3-carboxylic acid,
 25 (4) 1-(((3S)-3-methyl-6-(4,4,4-tri fluorobutoxy)-3,4-dihydronaphthalen-2-yl)methyl]azetidine -3-
 carboxylic acid,
 (5) 3-fluoro-1-(((3S)-3-methyl-6-(3,4,4-trifluorobut-3-enoxy)-3,4-dihydronaphthalen-2-yl]
 methyl]azetidine-3-carboxylic acid,
 (6) 1-(((3S)-3-methyl-6-(1,1,2,2,3,3,4,4,4-nonadeuteriobutoxy)-3,4-dihydro naphthalen-2-yl]
 30 methyl]azetidine-3-carboxylic acid,
 (7) (3R)-1-(((3S)-3-methyl-6-(4,4,4-tri fluorobutoxy)-3,4-dihydronaphthalen-2-yl)methyl] pyrrolidine-
 3-carboxylic acid,
 (8) 1-(((3S)-3-methyl-6-((R)-3,3,3-trifluoro-2-methylpropoxy)-3,4-dihydronaphthalen-2-yl] methyl]
 azetidine-3-carboxylic acid,
 35 (9) 1-(((3S)-3-methyl-6-((S)-3,3,3-trifluoro-2-methylpropoxy)-3,4-dihydronaphthalen-2-yl]
 methyl]azetidine-3-carboxylic acid,

(10) 3-fluoro-1-[[[(3S)-3-methyl-6-[(E)-4,4,4-trifluoro but-2-enoxy]-3,4-dihydronaphthalen-2-yl)methyl]azetidine-3-carboxylic acid,

(11) 3-fluoro-1-{[(3S)-3-methyl-6-(3,3,3-trifluoropropoxy)-3,4-dihydro-2-naphthalenyl] methyl}-3-azetidine carboxylic acid,

5 (12) cis-3-({1-[(3S)-3-methyl-6-(4,4,4-tri fluorobutoxy)-3,4-dihydro-2-naphthalenyl]ethyl} amino)cyclobutanecarboxylic acid, or

(13) 1-{[(3S)-3-methyl-6-(propoxy methyl)-3,4-dihydro-2-naphthalenyl]methyl}-3-azetidine carboxylic acid.

10 12. A pharmaceutical composition comprising the compound represented by the general formula (V) or a pharmaceutically acceptable salt thereof according to claim 1.

13. The pharmaceutical composition according to claim 12, which is an S1P₅ agonist.

15 14. The compound represented by the general formula (V) or a pharmaceutically acceptable salt thereof according to claim 1 for use in the prevention and/or treatment of a S1P₅-mediated disease.

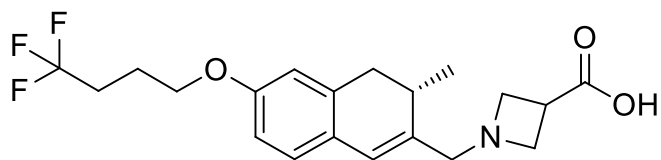
15. Use of the compound represented by the general formula (V) or a pharmaceutically acceptable salt thereof according to claim 1 in the manufacture of a prophylactic and/or therapeutic agent for treating
20 a S1P₅-mediated disease, wherein the S1P₅-mediated disease is a neurodegenerative disease, an autoimmune disease, an infectious disease, or cancer.

16. Use of the compound a pharmaceutically acceptable salt thereof according to claim 15, wherein the S1P₅-mediated disease is a neurodegenerative disease, and the neuro- degenerative
25 disease is schizophrenia, Binswanger's disease, multiple sclerosis, neuromyelitis optica, Alzheimer-type dementia, cognitive impairment, amyotrophic lateral sclerosis, spino- cerebellar degeneration, multiple system atrophy, Parkinson's disease, or Lewy body dementia.

17. A compound of formula 1-[[[(3S)-3-methyl-6-(4,4,4-trifluorobutoxy)-3,4-dihydro-
30 naphthalen-2-yl]methyl]azetidine-3-carboxylic acid, or a pharmaceutically acceptable salt thereof.

18. A compound of formula 1-[[[(3S)-3-methyl-6-(4,4,4-trifluorobutoxy)-3,4-dihydro-
naphthalen-2-yl]methyl]azetidine-3-carboxylic acid.

35 19. A compound having the following structure,



20. A pharmaceutically acceptable salt having the following structure.

