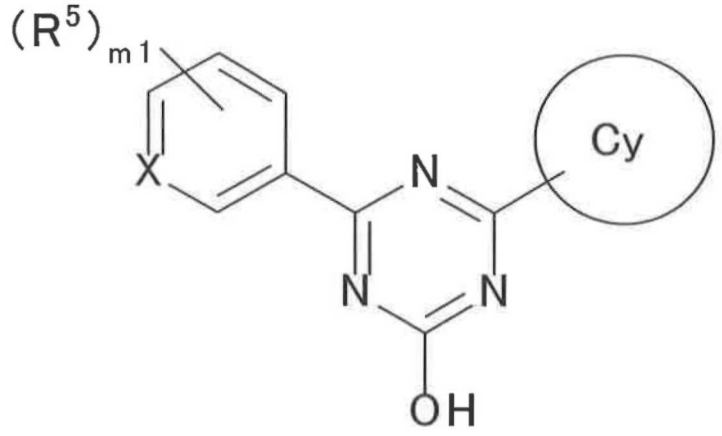
CLAIMS

1. A compound represented by the formula [I] or a pharmaceutically acceptable salt thereof:



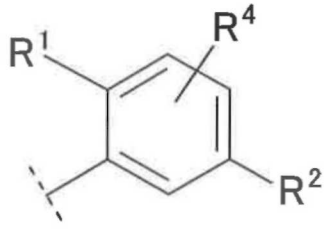
[I]

wherein

X is CH or N,

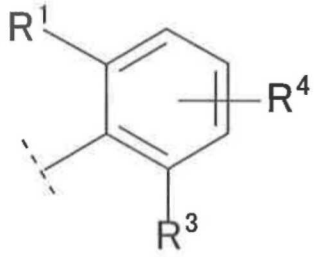
ring Cy is

the formula:



or

the formula:



wherein R^1 is

(1) halogen,

(2) C_{1-6} alkyl,

(3) cyano or

(4) haloC$_{1-4}$ alkyl,

R^2 is

(1) halogen,

(2) hydroxy,

(3) carboxy,

(4) C$_{1-6}$ alkyl,

(5) C$_{1-6}$ alkoxy,

(6) haloC$_{1-4}$ alkoxy,

(7) haloC$_{1-4}$ alkyl,

(8) C$_{1-6}$ alkyl-carbonyl,

(9) -C(O)NR^{a1}R^{a2},where R^{a1} and R^{a2} are each independently hydrogen or C$_{1-6}$ alkyl or

(10) -(C$_n$H$_{2n}$)-R^b,

where n is 1, 2, 3 or 4, -(C$_n$H$_{2n}$)- may be straight or branched chain, and

R^b is

(a) hydroxy,

(b) carboxy,

(c) C$_{1-6}$ alkoxy,

(d) C$_{1-6}$ alkyl-carbonyloxy,

(e) -C(O)NR^{b1}R^{b2}, where R^{b1} and R^{b2} are each independently hydrogen or C$_{1-6}$ alkyl,

(f) -OC(O)NR^{b3}R^{b4}, where R^{b3} and R^{b4} are each independently hydrogen or C$_{1-6}$ alkyl,

(g) -NR^{b5}C(O)NR^{b6}R^{b7}, where R^{b5}, R^{b6} and R^{b7} are each independently hydrogen or C$_{1-6}$ alkyl,

(h) -NR^{b8}R^{b9}, where R^{b8} and R^{b9} are each independently hydrogen, C$_{1-6}$ alkyl or haloC$_{1-4}$ alkyl,

(i) -NR^{b10}S(O)$_2$R^{b11}, where R^{b10} and R^{b11} are each independently hydrogen, C$_{1-6}$ alkyl or C$_{3-7}$ cycloalkyl,

(j) -NR^{b12}C(O)OR^{b13}, where R^{b12} is hydrogen or C$_{1-6}$ alkyl, and R^{b13} is C$_{1-6}$ alkyl,

(k) -NR^{b14}C(O)R^{b15}, where R^{b14} is hydrogen or C$_{1-6}$ alkyl, and

R^{b15} is

(i) C$_{6-10}$ aryl,

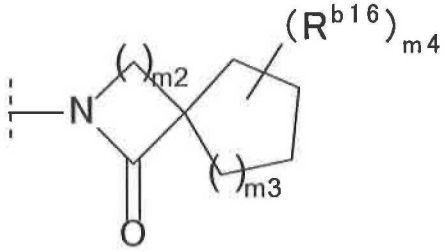
(ii) C_{1-8} alkyl, where said C_{1-8} alkyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of hydroxy, haloC_{1-4} alkyl, C_{1-6} alkoxy and C_{6-10} aryl,

(iii) adamantyl or

(iv) C_{3-7} cycloalkyl, where said C_{3-7} cycloalkyl is optionally substituted by 1, 2, 3 or 4 substituents selected from the group consisting of C_{1-6} alkyl, halogen, hydroxyl C_{1-6} alkyl and halo C_{1-4} alkyl, and/or optionally form a fused ring with a benzene ring, or

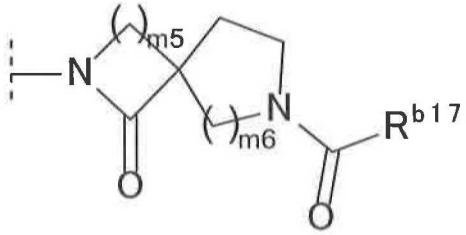
R^{b14} and R^{b15} optionally form a 4-, 5- or 6-membered lactam together with the nitrogen atom that R^{b14} is bonded to and the carbon atom that R^{b15} is bonded to, where said lactam is optionally substituted by 1, 2 or 3 C_{1-6} alkyls, and/or optionally form a fused ring with a benzene ring,

(l) the formula:



wherein m2 and m3 are each independently 1, 2 or 3, m4 is 0, 1, 2, 3 or 4, R^{b16} is C_{1-6} alkyl or C_{1-6} alkoxy, and when m4 is 2, 3 or 4, each R^{b16} is selected independently,

or (m) the formula:



wherein m5 and m6 are each independently 1, 2 or 3, and R^{b17} is C_{1-6} alkyl or C_{1-6} alkoxy,

R^3 is

(1) halogen,

(2) hydroxy,

(3) C_{1-6} alkyl or

(4) $-OR^c$, where R^c is C_{1-6} alkyl optionally substituted by 1, 2 or 3 substituents selected from the group consisting of the following (a) to (f);

(a) halogen,

(b) hydroxy,

(c) C_{1-6} alkoxy,

(d) $-C(O)NR^{c1}R^{c2}$, where R^{c1} and R^{c2} are each independently hydrogen or C_{1-6} alkyl,

(e) C_{6-10} aryl, where said C_{6-10} aryl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of

(i) halogen,

(ii) hydroxy,

(iii) C_{1-6} alkyl,

(iv) C_{1-6} alkoxy, and

(v) haloC_{1-4} alkyl, and

(f) 5- or 6-membered heteroaryl containing 1, 2 or 3 nitrogen atoms, oxygen atoms or sulfur atoms, where said heteroaryl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of

(i) halogen,

(ii) hydroxy,

(iii) C_{1-6} alkyl,

(iv) C_{1-6} alkoxy, and

(v) haloC_{1-4} alkyl, and

R^4 is

(1) hydrogen,

(2) halogen,

(3) C_{1-6} alkyl or

(4) C_{1-6} alkoxy,

R^5 is

(1) halogen,

(2) hydroxy,

(3) C_{1-6} alkylsulfanyl,

(4) C_{1-6} alkyl, where said C_{1-6} alkyl is optionally substituted

by 1, 2 or 3 substituents selected from the group consisting of halogen, C_{6-10} aryl and C_{1-6} alkoxy,

(5) C_{3-7} cycloalkyl,

(6) $-OR^d$, where R^d is

(a) C_{2-6} alkynyl,

(b) C_{3-7} cycloalkyl optionally substituted by 1, 2 or 3 C_{1-6} alkyls or

(c) C_{1-8} alkyl, where said C_{1-8} alkyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of the following (i) to (v);

(i) halogen,

(ii) C_{6-10} aryl,

(iii) C_{1-6} alkoxy,

(iv) C_{3-7} cycloalkyl, where said C_{3-7} cycloalkyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of C_{1-6} alkyl and haloC_{1-4} alkyl, and

(v) 4-, 5- or 6-membered saturated heterocyclyl containing 1, 2 or 3 nitrogen atoms, oxygen atoms or sulfur atoms, where said saturated heterocyclyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of C_{1-6} alkyl and haloC_{1-4} alkyl or

(7) the formula:



wherein R^e is

(a) C_{1-6} alkyl,

(b) C_{3-7} cycloalkyl,

(c) 5- or 6-membered heteroaryl containing 1, 2 or 3 nitrogen atoms, oxygen atoms or sulfur atoms, or

(d) C_{6-10} aryl, where said C_{6-10} aryl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of

(i) halogen,

(ii) C_{1-6} alkyl,

(iii) haloC_{1-4} alkyl,

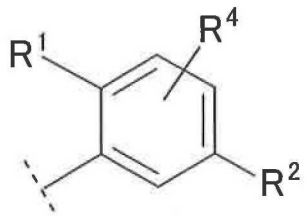
(iv) C_{1-6} alkoxy, and

(v) haloC_{1-4} alkoxy, and

m1 is 0, 1, 2 or 3 and, when m1 is 2 or 3, each R^5 is selected independently,

excluding 4,6-bis-(2,5-dimethyl-phenyl)-1,3,5-triazin-2-ol.

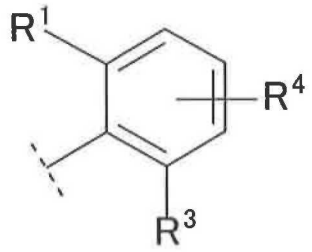
2. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein ring Cy is the formula:



,

wherein R^1, R^2 and R^4 are as defined in claim 1.

3. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein ring Cy is the formula:



,

wherein R^1, R^3 and R^4 are as defined in claim 1.

4. The compound according to any one of claims 1 to 3 or a pharmaceutically acceptable salt thereof, wherein X is CH.

5. The compound according to any one of claims 1 to 3 or a pharmaceutically acceptable salt thereof, wherein X is N.

6. The compound according to any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof, wherein R^1 is

(1) chloro,

(2) methyl,

(3) cyano or

(4) trifluoromethyl.

7. The compound according to any one of claims 1 to 6 or a pharmaceutically acceptable salt thereof, wherein R^4 is hydrogen.

8. The compound according to any one of claims 1, 2 and 4 to 7 or a pharmaceutically acceptable salt thereof, wherein R^2 is $-(C_nH_{2n})-R^b$, where n is 1 or 2, $-(C_nH_{2n})-$ may be straight or branched chain, and R^b is

(a) $-C(O)NR^{b1}R^{b2}$,

(b) $-NR^{b5}C(O)NR^{b6}R^{b7}$,

(c) $-NR^{b10}S(O)_2R^{b11}$ or

(d) $-NR^{b14}C(O)R^{b15}$,

where R^{b1}, R^{b2}, R^{b5}, R^{b6}, R^{b7}, R^{b10}, R^{b11}, R^{b14}, and R^{b15} are as defined in claim 1.

9. The compound according to claim 8 or a pharmaceutically acceptable salt thereof, wherein R^2 is $-CH_2-R^b$, where R^b is as defined in claim 8.

10. The compound according to any one of claims 1 and 3 to 9 or a pharmaceutically acceptable salt thereof, wherein R^3 is

(1) halogen,

(2) hydroxy,

(3) C_{1-6} alkyl or

(4) $-OR^c$, where R^c is C_{1-6} alkyl optionally substituted by 1, 2 or 3 substituents selected from the group consisting of the following (a) to (f)

(a) halogen,

(b) hydroxy,

(c) C_{1-6} alkoxy,

(d) $-C(O)NR^{c1}R^{c2}$, where R^{c1} and R^{c2} are each independently hydrogen or C_{1-6} alkyl,

(e) phenyl, where said phenyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of

(i) halogen,

(ii) hydroxy,

(iii) C_{1-6} alkyl,

(iv) C_{1-6} alkoxy, and

(v) haloC_{1-4} alkyl, and

(f) pyridyl, where said pyridyl is optionally substituted by 1, 2 or 3 substituents selected from the group consisting of

(i) halogen,

(ii) hydroxy,

(iii) C_{1-6} alkyl,

(iv) C_{1-6} alkoxy, and

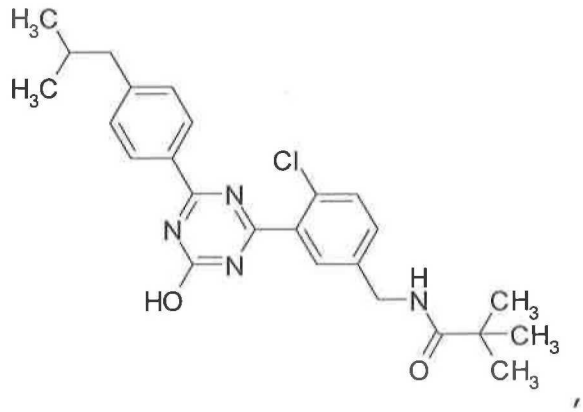
(v) haloC_{1-4} alkyl.

11. The compound according to any one of claims 1 to 10 or a pharmaceutically acceptable salt thereof, wherein m1 is 1, and R^5 is the formula:



wherein R^e is as defined in claim 1.

12. A compound selected from the following formulas:



,

and



or a pharmaceutically acceptable salt thereof.

13. A pharmaceutical composition comprising the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

14. An mPGES-1 inhibitor comprising the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof.

15. A therapeutic or prophylactic agent for pain, rheumatism, fever, osteoarthritis, arteriosclerosis, Alzheimer's disease, multiple sclerosis, glaucoma, ocular hypertension, ischemic retinal disease, systemic scleroderma or cancer, comprising the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof.

16. A therapeutic or prophylactic agent for glaucoma or ocular hypertension, comprising the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof, and one or more kinds of other therapeutic agents for glaucoma in combination.

17. Use of the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof for the production of an mPGES-1 inhibitor.

18. Use of the compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof for the production of a therapeutic or prophylactic agent for pain, rheumatism, fever, osteoarthritis, arteriosclerosis, Alzheimer's disease, multiple sclerosis, glaucoma, ocular hypertension, ischemic retinal disease, systemic scleroderma or cancer.