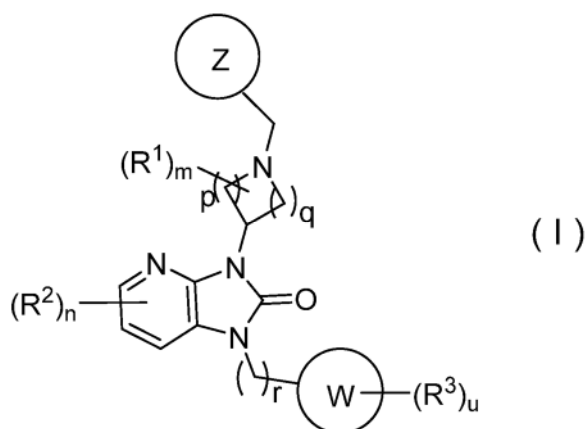


CLAIMS

1. A compound represented by the formula (I):

5 [Chem.1]

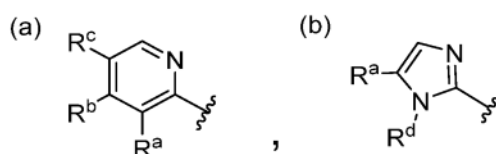


wherein

ring W is C₆₋₁₀ aryl, 5- or 6-membered heteroaryl, 9- or 10-membered heteroaryl, C₃₋₈ cycloalkyl or 3- to 8-membered heterocycloalkyl;

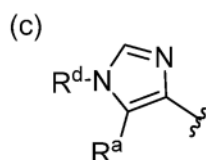
10 ring Z is a group selected from the group consisting of following (a) to (c):

[Chem.2]



and

[Chem.3]



15

wherein

R^a, R^b and R^c are each independently a hydrogen atom, a halogen atom, C₁₋₆ alkyl, cyano,

hydroxy or carboxy; and

R^d is a hydrogen atom or C_{1-6} alkyl;

R^1 is a hydrogen atom, a halogen atom, C_{1-6} alkyl, wherein when m is 2 or 3, two or more R^1 s may be different from each other;

- 5 R^2 is a hydrogen atom, C_{1-6} alkyl, halo C_{1-6} alkyl, C_{1-6} alkoxy, hydroxy, $-CO_2R^4$ or $-CONR^5R^{5'}$, wherein when n is 2 or 3, two or more R^2 s may be different from each other;

R^4 is a hydrogen atom; and

R^5 and $R^{5'}$ are each independently a hydrogen atom, C_{1-6} alkyl, carboxy C_{1-6} alkyl or 3- to 8-membered heterocycloalkyl;

- 10 R^3 is a hydrogen atom, a halogen atom, C_{1-6} alkyl, halo C_{1-6} alkyl, C_{1-6} alkoxy, halo C_{1-6} alkoxy, C_{2-6} alkenyl, C_{1-6} alkylsulfanyl, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, hydroxy, cyano, nitro, $-NR^6R^{6'}$, $-CO_2R^7$, $-CONR^8R^{8'}$ or the following group A, wherein when u is 2 or 3, two or more R^3 s may be different from each other;

R^6 and $R^{6'}$ are each independently C_{1-6} alkyl;

- 15 R^7 is a hydrogen atom or C_{1-6} alkyl;

R^8 and $R^{8'}$ are each independently a hydrogen atom or carboxy C_{1-6} alkyl

group A is a group selected from the group consisting of following (a) to (f):

(a) C_{6-10} aryl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B,

- 20 (b) 5- or 6-membered heteroaryl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B,

(c) C_{6-10} aryl C_{1-6} alkyl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B,

(d) C_{6-10} aryloxy which is unsubstituted or substituted with 1 to 3 groups selected from

- 25 substituent group B,

(e) C_{3-8} cycloalkyl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B, and

(f) 3- to 8-membered heterocycloalkyl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B,

wherein substituent group B is a group consisting of a halogen atom, C₁₋₆ alkyl, halo C₁₋₆ alkyl, C₁₋₆ alkoxy, halo C₁₋₆ alkoxy, hydroxy, cyano, -NR⁹SO₂R¹⁰, -CO₂R¹⁰ and -CONR¹¹R^{11'};

5 wherein R⁹ is a hydrogen atom; R¹⁰ is a hydrogen atom or C₁₋₆ alkyl; and

R¹¹ and R^{11'} are each independently a hydrogen atom, C₁₋₆ alkyl;

m, n and u are each independently an integer number 1 to 3;

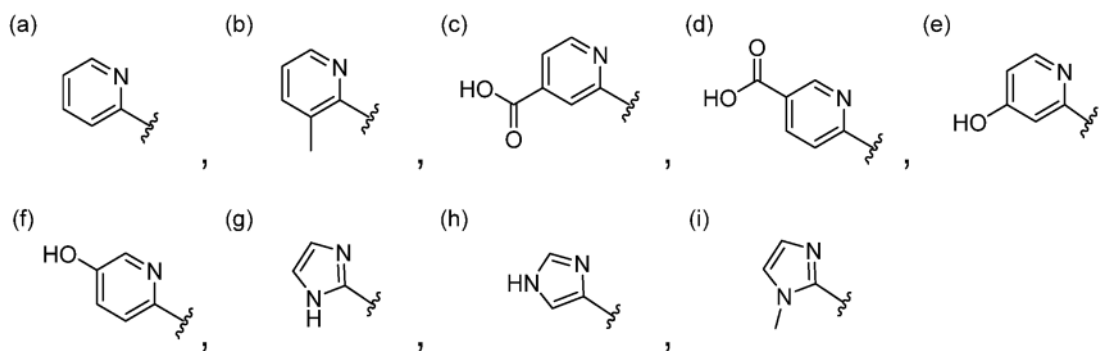
p and q are each independently 1 or 2; and

r is 0 or 1;

10 or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1, wherein ring Z is a group selected from the group consisting of following (a) to (J):

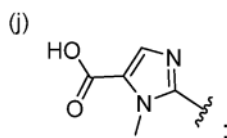
[Chem.4]



15

and

[Chem.5]



or a pharmaceutically acceptable salt thereof.

20

3. The compound according to claim 2 or a pharmaceutically acceptable salt thereof, wherein ring W is phenyl or 5- or 6-membered heteroaryl.

4. The compound according to claim 3 or a pharmaceutically acceptable salt thereof, wherein
5 r is 0.

5. The compound according to claim 4 or a pharmaceutically acceptable salt thereof, wherein p is 2 and q is 1.

10 6. The compound according to claim 5 or a pharmaceutically acceptable salt thereof, wherein R¹ is a hydrogen atom or a halogen atom.

7. The compound according to claim 6:

wherein R² is a hydrogen atom, C₁₋₆ alkyl, halo C₁₋₆ alkyl, C₁₋₆ alkoxy, carboxy or -

15 CONR⁵R^{5'};

wherein R⁵ and R^{5'} are each independently a hydrogen atom, carboxy C₁₋₆ alkyl or 3- to 8-membered heterocycloalkyl;

or a pharmaceutically acceptable salt thereof.

20 8. The compound according to claim 7:

wherein R³ is a hydrogen atom, a halogen atom, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₆ alkylsulfanyl, C₁₋₆ alkylsulfonyl, hydroxy, cyano, -CO₂R⁷, -CONR⁸R^{8'} or group A;

wherein R⁷ and u have the same meanings as those described in claim 1;

R⁸ and R^{8'} are each independently a hydrogen atom or carboxy C₁₋₆ alkyl; and

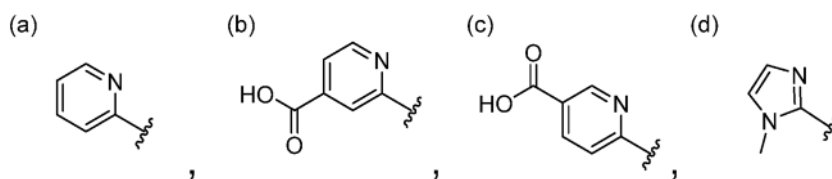
25 group A is phenyl which is unsubstituted or substituted with 1 to 3 groups selected from substituent group B or unsubstituted 5- or 6-membered heteroaryl;

wherein substituent group B is a halogen atom, C₁₋₆ alkyl, halo C₁₋₆ alkyl, C₁₋₆ alkoxy, halo

C₁₋₆ alkoxy, hydroxy, cyano or carboxy;
or a pharmaceutically acceptable salt thereof.

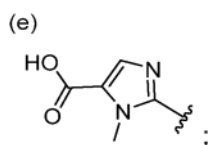
9. The compound according to claim 8, wherein ring Z is a group selected from the group
5 consisting of following (a) to (e):

[Chem.6]



and

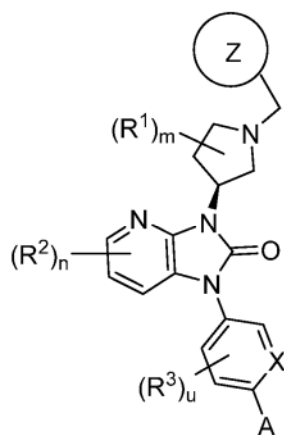
[Chem.7]



or a pharmaceutically acceptable salt thereof.

10. The compound according to claim 9 which is represented by the following formula:

[Chem.8]



wherein

X is CR³ or N;

u is 1 or 2;

R¹ has the same meanings as those described in claim 6;

R² has the same meanings as those described in claim 7;

5 R³ is a hydrogen atom, C₁₋₆ alkyl or hydroxy;

group A has the same meanings as those described in claim 8;

ring Z has the same meanings as those described in claim 9; and

m and n have the same meanings as those described in claim 1;

or a pharmaceutically acceptable salt thereof.

10

11. The compound according to claim 1:

wherein u is 2 or 3;

one R³ is group A; and

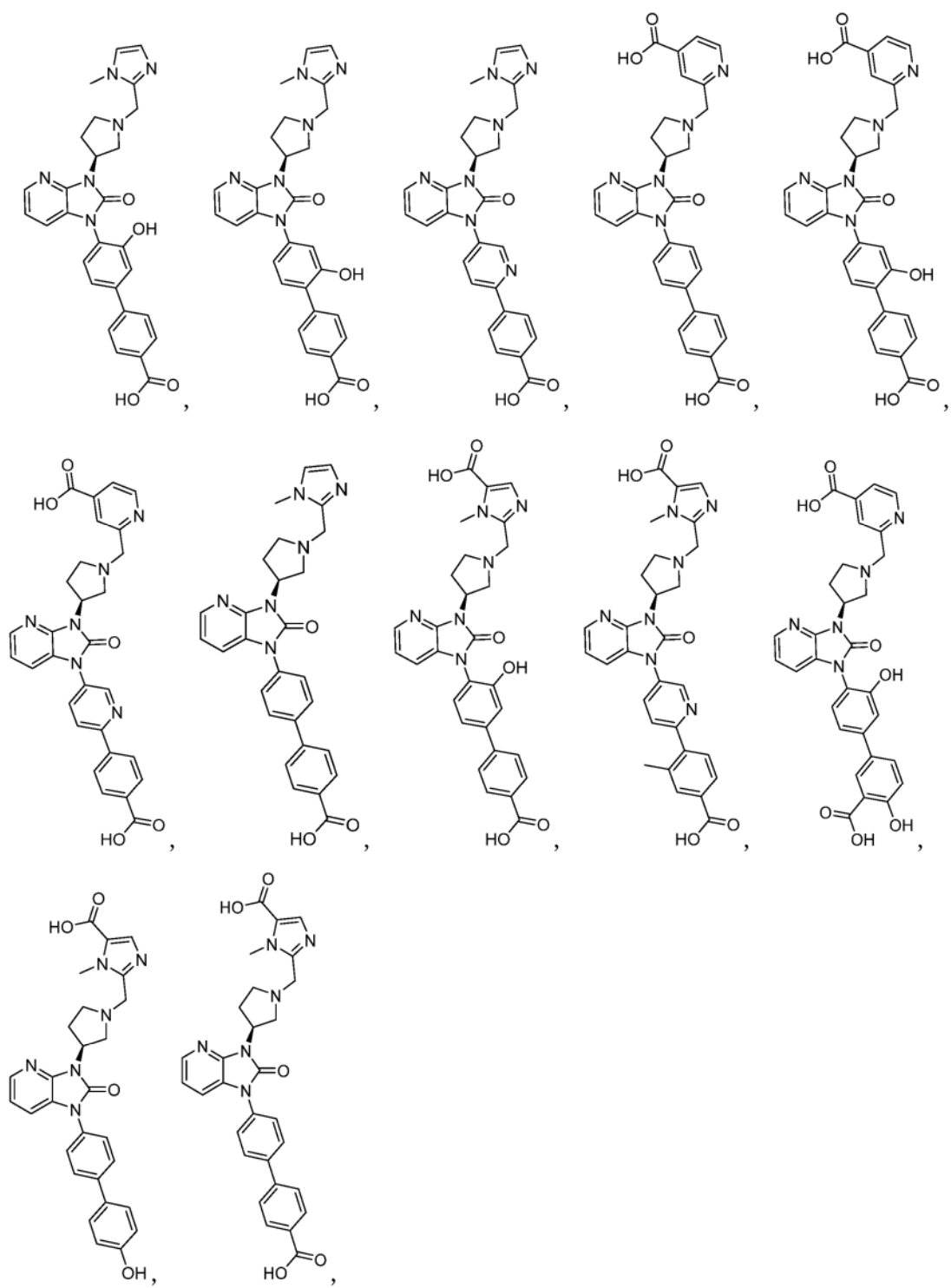
15 the other R³s are each independently a hydrogen atom, a halogen atom, C₁₋₆ alkyl, halo C₁₋₆ alkyl, C₁₋₆ alkoxy, halo C₁₋₆ alkoxy, C₂₋₆ alkenyl, C₁₋₆ alkylsulfanyl, C₁₋₆ alkylsulfonyl, hydroxy, cyano, nitro, -NR⁶R^{6'}, -CO₂R⁷ or -CONR⁸R^{8'};

wherein group A, R⁶, R^{6'}, R⁷, R⁸ and R^{8'} have the same meanings as those described in claim 1;

20 or a pharmaceutically acceptable salt thereof.

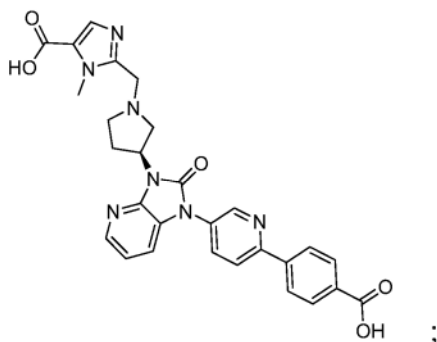
12. A compound selected from the group consisting of the following compounds:

[Chem.9]



and

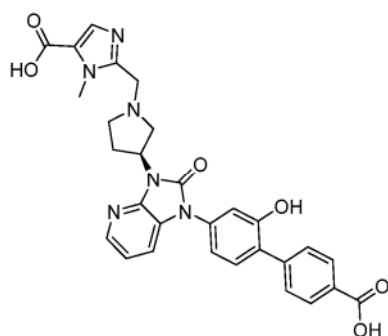
[Chem.10]



or a pharmaceutically acceptable salt thereof.

- 5 13. A compound represented by the following formula:

[Chem.11]



or a pharmaceutically acceptable salt thereof.

- 10 14. A pharmaceutical composition comprising the compound according to any one of claims 1 to 13 or a pharmaceutically acceptable salt thereof, and pharmaceutical additive.

15. The pharmaceutical composition according to claim 14 which is a pharmaceutical composition for use in the treatment of an inflammatory bowel disease.

15

16. The pharmaceutical composition according to claim 15, wherein the inflammatory bowel disease is ulcerative colitis or Crohn's disease.