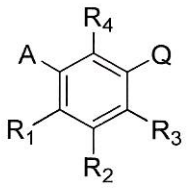
CLAIMS:

1. Use of a compound represented by Formula I or a pharmaceutical acceptable salt thereof for the preparation of a medicament for preventing and/or treating diabetes, wherein said compound or said pharmaceutical acceptable salt thereof is to be administered at a dose of 0.1 to 5 mg/kg per day, and wherein the Formula I is :



Formula I

wherein

A is C_5 alkyl, C_6 alkyl, C_5 alkenyl, C_6 alkenyl, $C(O)-(CH_2)_n-CH_3$ or $CH(OH)-(CH_2)_n-CH_3$ wherein n is 3 or 4;

R_1 is H, F or OH;

R_2 is C_5 alkyl, C_6 alkyl, C_5 alkenyl, C_6 alkenyl, $C(O)-(CH_2)_n-CH_3$ or $CH(OH)-(CH_2)_n-CH_3$ wherein n is 3 or 4;

R_3 is H, F, OH or CH_2Ph;

R_4 is H, F or OH;

Q is

1) $(CH_2)_mC(O)OH$ wherein m is 1 or 2,
2) $CH(CH_3)C(O)OH$,
3) $C(CH_3)_2C(O)OH$,
4) CH(F)-C(O)OH,
5) CF_2-C(O)OH, or
6) C(O)-C(O)OH.

2. The use of claim 1, wherein the dose is between 0.1 to 1.0 mg/kg per day.

12. The use of any one of claims 1 to 11, wherein the pharmaceutically acceptable salt is a base addition salt comprising a metal counterion selected from the group consisting of sodium, potassium, calcium, magnesium, lithium, ammonium, manganese, zinc, iron, or copper.

13. The use of claim 12, wherein the pharmaceutically acceptable salt is sodium.

14. The use of any one of claims 1-13, wherein said diabetes is Type I diabetes, Type II diabetes, Type III diabetes (Alzheimer), maturity-onset diabetes of the young, latent autoimmune diabetes of adults (LADA), gestational diabetes, obesity, hyperglycemia, glucose intolerance, insulin resistance, hyperinsulinemia, hypercholesterolemia, hyperlipoproteinemia, hyperlipidemia, hypertriglyceridemia, dyslipidemia, syndrome X, diabetic neuropathy, diabetic retinopathy, atherosclerosis, sexual dysfunction, and metabolic syndrome.

15. The use of claim 14, wherein said diabetes is Type II diabetes.

16. The use of claim 14, wherein said diabetes is Type I diabetes.

17. The use of any one of claims 1-16, wherein medicament is also for:

- increasing insulin secretion;
- increasing insulin sensitivity;
- decreasing insulin resistance;
- decreasing blood glucose level; or
- decreasing blood triglyceride level.

18. The use of claim 17, wherein the medicament reduces blood glucose level.

19. The use of claim 17, wherein the medicament maintains or increases insulin level in a subject requiring protection and/or regeneration of pancreatic islets.

20. Use of a compound represented by Formula I or a pharmaceutical acceptable salt thereof as defined in any one of claims 1 to 13, for the preparation of a medicament for modulating glucose, insulin and/or triglyceride levels in a subject in need thereof, wherein said medicament is

to be administered at a dose of 0.1 to 5 mg/kg per day.

21. The use of claim 20, wherein the dose is between 0.1 to 1.0 mg/kg per day.

22. Use of a compound represented by Formula I or a pharmaceutical acceptable salts thereof as defined in any one of claims 1 to 13, for the preparation of a medicament for increasing insulin secretion and/or increasing insulin sensitivity and/or decreasing insulin resistance in a subject in need thereof, wherein said medicament is to be administered at a dose of 0.1 to 5 mg/kg per day.

23. The use of claim 22, wherein the dose is between 0.1 to 1.0 mg/kg per day.

24. The use of any one of claims 1-23, wherein the subject is afflicted by hyperglycemia, glucose intolerance, insulin resistance, hyperinsulinemia, dyslipidemia and/or loss of pancreatic function.

25. The use of any one of claims 1-24, further comprising a second therapeutic agent.

26. The use of claim 25, wherein the second therapeutic agent is a compound for lowering or modulating blood glucose level.

27. The use of claim 25, wherein the second therapeutic agent is metformin or is a thiazolidinedione.

28. A use of a compound represented by Formula I or a pharmaceutical acceptable salts thereof as defined in any one of claims 1 to 13, for reducing blood triglyceride in a subject in need thereof, wherein said medicament is to be administered at a dose of 0.1 to 5 mg/kg per day.

29. The use of claim 28, wherein the dose is between 0.1 to 1.0 mg/kg per day.

30. The use of claim 28 or 29, wherein the subject is afflicted by diabetic dyslipidemia and/or metabolic syndrome.

31. The use of any one of claims 1-30, wherein the medicament is for oral administration.