CLAIMS

1. A method for producing renal progenitor cells into which pluripotent stem cells are induced to differentiate, the method comprising the steps of:

(i) culturing the pluripotent stem cells under conditions that induce differentiation into renal progenitor cells; and

(ii) sorting a cell population from the cells obtained at step (i), by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-) and at least one positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

2. The method according to claim 1, wherein at step (ii), the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-) and at least two positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

3. The method according to claim 1 or 2, wherein at step (ii), the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-), and at least three positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

4. The method according to any of claims 1 to 3, wherein at step (ii), the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-), and CD140a(+), CD140b(+) and CD271(+) as the positive selection marker.

5. A method for producing renal progenitor cells into which pluripotent stem cells are induced to differentiate, the method comprising the steps of:

(i) culturing the pluripotent stem cells under conditions that induce differentiation into renal

progenitor cells; and

(ii) sorting a cell population from the cells obtained at step (i), by using at least two cell surface marker selected from the group consisting of CD9(-), CD140a(+), CD140b(+), and CD271(+).

6. The method according to claim 5, wherein at step (ii), the sorting of a cell population is performed by using at least three cell surface markers.

7. The method according to claim 5 or 6, wherein at step (ii), CD140a(+), CD140b(+) and CD271(+) are used as the cell surface markers.

8. The method according to claim 5 or 6, wherein at step (ii), CD9(-), CD140a(+), CD140b(+) and CD271(+) are used as the cell surface markers.

9. The method according to any of claims 1 to 8, wherein the pluripotent stem cells are induced pluripotent stem (iPS) cells.

10. The method according to any of claims 1 to 8, wherein the pluripotent stem cells are human iPS cells.

11. A method for sorting a cell population from a renal progenitor cell-containing cell population by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-) and at least one positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

12. The method according to claim 11, wherein the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-) and at least two positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

13. The method according to claim 11 or 12, wherein the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-), and at least three positive selection marker selected from the group consisting of CD106(+), CD140a(+), CD140b(+), CD165(+) and CD271(+).

14. The method according to any of claims 11 to 13, wherein the sorting of a cell population is performed by using a combination of one negative selection marker selected from the group consisting of CD9(-), CD55(-) and CD326(-), and CD140a(+), CD140b(+) and CD271(+) as the positive selection marker.

15. A method for sorting a cell population from a renal progenitor cell-containing cell population by using at least two cell surface marker selected from the group consisting of CD9(-), CD140a(+), CD140b(+) and CD271(+).

16. The method according to claim 15, wherein the sorting of a cell population is performed by using at least three cell surface markers.

17. The method according to claim 15 or 16, wherein CD140a(+), CD140b(+) and CD271(+) are used as the cell surface markers.

18. The method according to claim 15 or 16, wherein CD9(-), CD140a(+), CD140b(+) and CD271(+) are used as the cell surface markers.

19. The method according to any of claims 11 to 18, wherein the renal progenitor cells are renal progenitor cells into which pluripotent stem cells are induced to differentiate.

20. The method according to claim 19, wherein the pluripotent stem cells are induced pluripotent stem (iPS) cells.

21. The method according to claim 19, wherein the pluripotent stem cells are human iPS cells.