CLAIMS

1. A CD106 positive kidney derived fibroblast having enhanced erythropoietin (EPO) productivity, wherein EPO production of the fibroblast is not less than 1.65 times higher than in a CD106 negative kidney derived fibroblast as a control.

2. A cell population of fibroblast comprising the fibroblast according to claim 1.

3. The cell population according to claim 2, wherein the ratio of the CD106-positive fibroblast (in terms of the cell number) is not less than 4.7% relative to the total fibroblasts contained in the cell population.

4. A method of producing kidney derived fibroblasts having enhanced EPO productivity, the method comprising:

bringing kidney derived fibroblasts into contact with TNF-α and IL-4; and

culturing, under conditions allowing enhancement of EPO productivity, the fibroblasts that have been brought into contact, wherein EPO production of the fibroblast is not less than 1.65 times higher than in a control fibroblast.

5. The method according to claim 4, wherein the kidney derived fibroblasts having enhanced EPO productivity are positive for CD106.

6. The method according to claim 5, further comprising selecting or concentrating CD106-positive fibroblasts using an anti-CD106 antibody.

7. A pharmaceutical composition comprising the fibroblast according to claim 1 or the cell population according to any of claims 2 or 3.

8. Use of the fibroblast of claim 1, the cell population of any of claims 2 or 3, or the pharmaceutical composition of claim 7 in the manufacture of a medicament for improvement of a state where EPO productivity is decreased.

9. Use of the fibroblast of claim 1, the cell population of any of claims 2 or 3, or the pharmaceutical composition of claim 7 in the manufacture of a medicament for the treatment of a renal disorder.

10. The use according to claim 9, wherein the renal disorder is chronic kidney disease.

11. Use of the fibroblast of claim 1, the cell population of any of claims 2 or 3, or the pharmaceutical composition of claim 7 in the manufacture of a medicament for the treatment of renal anemia.

12. The use according to any one of claims 8 to 11, wherein the medicament is an injectable composition.

13. The pharmaceutical composition according to claim 7 or the use according to any one of claims 8 to 11, wherein the cell population is constructed as a planar or three-dimensional cellular tissue.

14. The fibroblast of claim 1, the cell population of any of claims 2 or 3, or the pharmaceutical composition of claim 7 for use in therapy.