

CLAIMS

1. A method of producing proliferated cells, the method comprising: culturing cells, which have been seeded
5 at a cell density of 0.002 to 2000 cells/cm², through adhesion culture in a proliferation culture medium in a presence of a culture substrate selected from a laminin fragment having integrin-binding activity and a modified form thereof, thereby proliferating the cells.

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2. The method according to claim 1, wherein the culturing is performed in a proliferation culture medium containing the culture substrate.

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3. The method according to claim 1 or 2, wherein the cells are stem cells.

4. The method according to any one of claims 1 to 3, wherein the cells are mesenchymal stem cells.

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5. The method according to any one of claims 1 to 4, wherein the cells are umbilical cord-derived mesenchymal stem cells.

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6. The method according to any one of claims 1 to 5, wherein the cells are frozen cells.

7. The method according to any one of claims 1 to 6, wherein the culturing is performed until the cells reach a confluent state.

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8. The method according to any one of claims 1 to 7, wherein the culturing is performed in a culture vessel having a bottom area of 500 cm² or more.

10 9. The method according to any one of claims 1 to 8, wherein the culture substrate is a laminin fragment having integrin-binding activity.

15 10. The method according to any one of claims 1 to 8, wherein the culture substrate is a modified form of a laminin fragment having integrin-binding activity.

20 11. A method of producing a mesenchymal stem cell population having a reduced HLA-ABC positive rate, the method comprising: culturing mesenchymal stem cells in a proliferation culture medium in a presence of a culture substrate selected from a laminin fragment having integrin-binding activity and a modified form thereof, thereby obtaining proliferated cells.

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12. A mesenchymal stem cell population, comprising HLA-ABC positive mesenchymal stem cells at a ratio of 70% or less.

5 13. The mesenchymal stem cell population according to claim 12, comprising CD105 positive mesenchymal stem cells at a ratio of 50% or less.

10 14. A therapeutic agent comprising the mesenchymal stem cell population according to claim 12 or 13.