use in preparing a preservation solution for mammalian cells.

[0014a] In one aspect, the disclosure describes a method of preserving a platelet or a megakaryocyte, wherein the method comprises preserving the platelet or the megakaryocyte for 1 to 15 days at 0 to 40°C in a preservation solution, wherein the preservation solution comprises 10 to 5000 mg/L of niacin or a salt of niacin, and 10 to 8000 mg/L of ascorbic acid or a salt of ascorbic acid, and does not comprise vitamin B2 or a salt of vitamin B2.

[0014b] In another aspect, the disclosure describes a method of preserving a stem cell or an immunocyte, wherein the method comprises preserving the stem cell or the immunocyte for 1 to 63 days at 0 to 40°C in a preservation solution, wherein the preservation solution comprises 10 to 5000 mg/L of niacin or a salt of niacin, 10 to 8000 mg/L of ascorbic acid or a salt of ascorbic acid, and trehalose in an isotonic solution.

CLAIMS

1. A method of preserving a platelet or a megakaryocyte, wherein the method comprises preserving the platelet or the megakaryocyte for 1 to 15 days at 0 to 40°C in a preservation solution, wherein the preservation solution comprises 10 to 5000 mg/L of niacin or a salt of niacin, and 10 to 8000 mg/L of ascorbic acid or a salt of ascorbic acid, and does not comprise vitamin B2 or a salt of vitamin B2.

2. The method according to claim 1, wherein the concentration of niacin or the salt of niacin is 30 to 3000 mg/L.

3. The method according to claim 1, wherein the concentration of niacin or the salt of niacin is 120 to 1200 mg/L.

4. The method according to claims 1 to 3, wherein the concentration of ascorbic acid or the salt of ascorbic acid is 30 to 6000 mg/L.

5. The method according to any one of claims 1 to 3, wherein the concentration of ascorbic acid or the salt of ascorbic acid is 300 to 3000 mg/L.

6. The method according to any one of claims 1 to 5, wherein the platelet is a purified platelet obtained by a method comprising the following (A) and (B):

(A) a condensation step of condensing a culture product of megakaryocytes; and
(B) a centrifugation step of centrifuging a platelet from the obtained condensed product.

7. The method according to any one of claims 1 to 6, wherein the preservation solution further comprises albumin.

8. The method according to claim 7, wherein the concentration of albumin is 1.25 to 10% (w/v).

9. The method according to any one of claims 1 to 8, wherein the preservation solution further comprises sugar.

10. The method according to claim 9, wherein the sugar is glucose.

11. The method according to any one of claims 1 to 10, comprising preserving a platelet or a megakaryocyte for 5 to 10 days.

12. A method of preserving a stem cell or an immunocyte, wherein the method comprises preserving the stem cell or the immunocyte for 1 to 63 days at 0 to 40°C in a preservation solution, wherein the preservation solution comprises 10 to 5000 mg/L of niacin or a salt of niacin, 10 to 8000 mg/L of ascorbic acid or a salt of ascorbic acid, and trehalose in an isotonic solution.

13. The method according to claim 12, wherein the stem cell is a mesenchymal stem cell.

14. The method according to claim 12, wherein the immunocyte is a T cell.

15. The method according to any one of claims 12 to 14, wherein the isotonic solution is a lactated Ringer's solution.

16. The method according to any one of claims 12 to 15, wherein the isotonic solution further comprises dextran.