use in preparing a preservation solution for mammalian cells.

[0014a] In one aspect, the disclosure describes ~~the use~~a method of ~~a preservation solution~~ 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 ~~comprising~~ comprises 10 to 5000 mg/L of niacin ~~or a derivative thereof~~ or a salt of niacin~~ or the derivative~~, 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~~and an antioxidant for preserving a mammalian cell~~.

[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 ~~Use of a preservation solution~~ preserving the platelet or the megakaryocyte for 1 to 15 days at 0 to 40°C in a preservation solution, wherein the preservation solution ~~comprising~~ comprises 10 to 5000 mg/L of niacin ~~or a derivative thereof~~ or a salt of niacin ~~or the derivative~~, 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~~and an antioxidant for preserving a mammalian cell~~.

~~2. The use according to claim 1, wherein the antioxidant is ascorbic acid or a derivative thereof or a salt of ascorbic acid or the derivative.~~

~~3~~2. The ~~use~~ method according to claim 1 ~~or 2~~, wherein ~~a~~ the concentration of niacin ~~or the derivative thereof~~ or the salt of niacin ~~or the derivative~~ is ~~1~~ 30 to ~~10000~~ 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 ~~use~~ method according to claims ~~2~~ 1 ~~or~~ to 3, wherein ~~a~~ the concentration of ascorbic acid ~~or the derivative thereof~~ or the salt of ascorbic acid ~~or the derivative~~ is ~~1~~ 30 to ~~10000~~ 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.

~~5. The use according to any one of claims 1 to 4, for preserving a mammalian cell at 0 to 40°C.~~

~~6. The use according to any one of claims 1 to 5, wherein the preservation solution does not comprise vitamin B2 or a derivative thereof or a salt of vitamin B2 or the derivative.~~

~~7. The use according to any one of claims 1 to 6, wherein the mammalian cell is a platelet or a megakaryocyte.~~

~~8~~6. The ~~use~~ method according to any one of claims ~~7~~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.

~~9~~7. The ~~use~~ method according to any one of claims 1 to 6 ~~7 or 8~~, wherein the preservation solution further comprises albumin.

~~10~~8. The ~~use~~ method according to claim ~~9~~7, wherein ~~a~~ the concentration of albumin is 1.25 to 10% (w/v).

~~11~~9. The ~~use~~ method according to any one of claims ~~7~~ 1 to ~~10~~8, wherein the preservation solution further comprises sugar.

~~12~~10. The ~~use~~ method according to claim ~~11~~9, wherein the sugar is glucose.

~~13~~11. The ~~use~~ method according to any one of claims ~~7~~ 1 to ~~12~~10, ~~for~~ 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.

~~14. The use according to any one of claims 1 to 6, wherein the mammalian cell is a stem cell or an immunocyte, and~~
~~wherein niacin or the derivative thereof or the salt of niacin or the derivative, and the antioxidant are contained in an isotonic solution, the isotonic solution further comprising trehalose.~~

~~15~~13. The ~~use~~ method according to claim ~~14~~12, wherein the stem cell is a mesenchymal stem cell.

~~16~~14. The ~~use~~ method according to claim ~~14~~12, wherein the immunocyte is a T cell.

~~17~~15. The ~~use~~ method according to any one of claims ~~14~~ 12 to ~~16~~14, wherein the isotonic solution is a lactated Ringer's solution.

~~18~~16. The ~~use~~ method according to any one of claims ~~14~~ 12 to ~~17~~15, wherein the isotonic solution further comprises dextran.

~~19. The use according to any one of claims 14 to 18, for preserving a stem cell for 1 to 63 days.~~