CLAIMS

1. The method for producing an induced pluripotent stem cell, comprising:

(i) culturing the mononuclear cells derived from peripheral blood for 3 to 14 days in the presence of anti-CD3 antibody and interleukin 2; and

(ii) subjecting the cultured mononuclear cells to dedifferentiation.

2. The method for producing an induced pluripotent stem cell according to Claim 1, wherein:

one or more dedifferentiation factors are introduced into the mononuclear cells in the step (ii).

3. The method for producing an induced pluripotent stem cell according to Claim 2, wherein:

one or more recombinant expression vectors being able to express the dedifferentiation factors are introduced for the introduction of the dedifferentiation factors.

4. The method for producing an induced pluripotent stem cell according to Claim 2 or 3, wherein:

the dedifferentiation factors in said step (ii) are Sox2, Oct3/4, Klf4 and c-Myc.

5. The method for producing an induced pluripotent stem cell according to Claim 3 or 4, wherein:

the recombinant expression vector is a Sendai virus vector.

6. The method for producing an induced pluripotent stem cell according to any one of Claims 1 to 5, further comprising the step of:

(iii) culturing the dedifferentiated mononuclear cells

for 14 to 25 days in the presence of a growth factor.

7. The method for producing an induced pluripotent stem cell according to any one of Claims 1 to 6, wherein said peripheral blood is derived from human.

CLAIMS

1. The method for producing an induced pluripotent stem cell, comprising:

(i) culturing the mononuclear cells derived from peripheral blood for 3 to 14 days in the presence of anti-CD3 antibody and interleukin 2; and

(ii) subjecting the cultured mononuclear cells to dedifferentiation, wherein a Sendai virus vector being capable of expressing one or more dedifferentiation factors is introduced into the cells for expression of the dedifferentiation factor(s) in the cells.

2. The method for producing an induced pluripotent stem cell according to Claim 1, wherein:

the dedifferentiation factors in said step (ii) are Sox2, Oct3/4, Klf4 and c-Myc.

3. The method for producing an induced pluripotent stem cell according to any one of Claims 1 to 2, further comprising the step of:

(iii) culturing the dedifferentiated mononuclear cells for 14 to 25 days in the presence of a growth factor.

4. The method for producing an induced pluripotent stem cell according to any one of Claims 1 to 3, wherein said peripheral blood is derived from human.