CLAIMS

1. A method for producing a γδT cell from an induced pluripotent stem cell, wherein the induced pluripotent stem cell is derived from a cell other than an αβT cell, whrein the method comprises the following steps:
(1) a step for establishing an induced pluripotent stem cell from a cell other than an αβT cell,
(2-1) a step for differentiating the induced pluripotent stem cell established in step (1) into hematopoietic progenitor cell, and
(2-2) a step of differentiating hematopoietic progenitor cell established in step (2-1) into a CD3 positive T cell without using feeder cells.

2. The method according to claim 1, wherein the cell other than an αβT cell is a mononuclear cell other than an αβT cell.

3. The method according to claim 1 or 2, wherein the cell other than an αβT cell is a monocyte.

4. The method according to any one of claim 1 to 3, comprising a step for introducing
(ii) a nucleic acid encoding γTCR and a nucleic acid encoding δTCR, and/or
(iii) a nucleic acid encoding CAR,
each of which recognizes and binds to a tumor-specific antigen or a tumor-associated antigen, into the cell obtained in any of the steps (1), (2-1) and (2-2).

5. The method according to claim 4, wherein the γTCR is Vγ9TCR and the δTCR is Vδ2TCR.

6. The method according to any one of claims 1 to 5, comprising

a step of introducing a nucleic acid encoding a fusion protein comprising IL-15 and IL-15Rα into the cell obtained in any of the steps (1), (2-1) and (2-2).

7. A γδT cell produced by the method according to any one of claims 1 to 6, wherein the γδT cell expresses CAR.

8. The cell according to claim 7, wherein the γδT cell expresses a fusion protein comprising IL-15 and IL-15Rα.

9. A cell population in which not less than 90% of all cells are γδT cells, wherein the γδT cell is a cell differentiated from an induced pluripotent stem cell derived from a cell other than an αβT cell and produced by the method according to any one of claims 1 to 6.

10. The cell according to claim 7 or 8 or the cell population according to claim 9 for use in the prevention or the treatment of tumor.

11. The cell or the cell population for use according to claim 10, wherein the tumor is selected from liver cancer, ovarian cancer, childhood cancer, lung cancer, testis cancer, soft tissue tumor, uterine cancer, melanoma, adrenal gland tumor, neurotic tumor, gastric cancer, renal cancer, breast cancer, thyroid cancer, laryngeal cancer and urinary bladder cancer.

12. A killing agent for a cell selected from cancer cell, cancer stem cell and tumor cell, comprising the cell according to claim 7 or 8 or the cell population according to claim 9.13. The cell according to claim 7 or 8 or the cell population according to claim 9 for use in the prevention or the treatment of tumor.

14. Use of the cell according to claim 7 or 8 or the cell population according to claim 9 in the manufacture of a preventive agent or therapeutic agent for tumor.