CLAIMS

1. A T cell expressing:

(1) a chimeric antigen receptor (CAR);

(2) interleukin-15 (IL-15); and

(3) CC chemokine ligand 19 (CCL19),

wherein the IL-15 is linked to IL-15Rα to form a fusion protein, and wherein the fusion protein is

(i) a fusion protein comprising IL-15 linked to full-length IL-15Rα ($_{mb}IL15_{RA}$), or

(ii) a fusion protein comprising IL-15Rα containing a signal peptide and a sushi domain linked to IL-15 ($_{sushi}IL15$).

2. A pharmaceutical composition comprising the T cell according to claim 1.

3. An expression vector comprising:

(1) a nucleic acid encoding a CAR;

(2) a nucleic acid encoding IL-15; and

(3) a nucleic acid encoding CCL19,

wherein the IL-15 is linked to IL-15Rα to form a fusion protein, and wherein the fusion protein is

(i) a fusion protein comprising IL-15 linked to full-length IL-15Rα ($_{mb}IL15_{RA}$), or

(ii) a fusion protein comprising IL-15Rα containing a

signal peptide and a sushi domain linked to IL-15 ($_{sushi}$IL15).

4. A method for producing a CAR-T cell, comprising a step of introducing the expression vector according to claim 3 into a T cell.

5. Use of the T cell according to claim 1 for the manufacture of a pharmaceutical composition for treating cancer.

6. The use according to claim 5, wherein the cancer is melanoma, Merkel cell cancer, colorectal cancer, kidney cancer, breast cancer, ovarian cancer, fallopian tube cancer, cervical cancer, liver cancer, lung cancer, non-small cell lung cancer, head and neck cancer, small intestine cancer, prostate cancer, bladder cancer, rectal cancer, pancreatic cancer, Ewing's sarcoma, rhabdomyosarcoma, nasopharyngeal cancer, esophageal cancer, biliary tract cancer, neuroblastoma, osteosarcoma, acute myeloid leukemia, multiple myeloma, lymphoma, or leukemia.