**What is claimed is:**

1. An isolated cell comprising a complex comprising a CRISPR from *Prevotella* and *Franciscella* 1 (Cpf1) RNA-guided nuclease and a gRNA comprising a targeting domain that is complementary to a sequence of a TRAC gene, wherein the gRNA is effective in generating one or more modifications in the TRAC gene, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 3535, SEQ ID NO: 3563, SEQ ID NO: 3514 and SEQ ID NO: 3451.

2. The isolated cell of claim 1, wherein the targeting domain is 20, 21, 22, 23, 24 or 25 nucleotides in length.

3. The isolated cell of claim 1 or 2, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs: 3538, 3566, 3517 and 3454.

4. The isolated cell of any one of claims 1-3, wherein the isolated cell is:

(a) a T cell selected from the group consisting of: a $CD8^+$ T cell, a central memory T cell, an effector memory T cell, a $CD4^+$ T cell, a natural killer T cell (NK T cell), a regulatory T cell (Treg), and a stem cell memory T cell;

(b) a lymphoid progenitor cell;

(c) a hematopoietic stem cell;

(d) a natural killer cell (NK cell);

(e) a dendritic cell; or

(f) an induced pluripotent stem (iPS) cell or a cell derived from an iPS cell.

5. The isolated cell of claim 4, wherein the T cell is a $CD8^+$ T cell.

6. The isolated cell of claim 5, wherein the $CD8^+$ T cell is a $CD8^+$ naïve T cell, a central memory T cell, or an effector memory T cell.

7. The isolated cell of any one of claims 1-6, wherein the cell is an engineered cell.

8. The isolated cell of claim 7, wherein the engineered cell is an engineered chimeric antigen receptor (CAR) T cell or an engineered TCR (T cell receptor) T cell.



°°°°

9. An *ex vivo* method of modifying a cell, comprising contacting the cell with a composition comprising:

(a) a gRNA molecule comprising a targeting domain that is complementary to a sequence of a TRAC gene, wherein the gRNA is effective in generating one or more modifications in the TRAC gene; and

(b) a Cpf1 RNA-guided nuclease or a nucleic acid capable of expressing the Cpf1 RNA-guided nuclease in the cell,

wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 3535, SEQ ID NO: 3563, SEQ ID NO: 3514 and SEQ ID NO: 3451.

10. The method of claim 9, wherein the targeting domain is 20, 21, 22, 23, 24 or 25 nucleotides in length.

11. The method of claim 9 or 10, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs: 3538, 3566, 3517 and 3454.

12. The method of any one of claims 9-11, wherein said contacting comprises introducing the composition into the cell by electroporation.

13. The method of any one of claims 9-12, wherein the composition comprises a ribonucleoprotein (RNP) complex comprising the gRNA molecule and the Cpf1 RNA-guided nuclease.

14. The method of any one of claims 9-12, wherein the composition comprises the gRNA molecule and the nucleic acid capable of expressing the Cpf1 RNA-guided nuclease in the cell.

15. A population of isolated cells, wherein the cells comprise a complex comprising a Cpf1 RNA-guided nuclease and a gRNA molecule comprising a targeting domain that is complementary to a sequence of a TRAC gene, wherein the gRNA is effective in generating one or more modifications in the TRAC gene,

wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 3535, SEQ ID NO: 3563, SEQ ID NO: 3514 and SEQ ID NO: 3451.

16. The population of claim 15, wherein the targeting domain is 20, 21, 22, 23, 24 or 25 nucleotides in length.

17. The population of claim 15 or 16, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs: 3538, 3566, 3517 and 3454.

18. The population of any one of claims 15-17, wherein the cells are selected from the group consisting of:

(a) T cells selected from the group consisting of $CD8^+$ T cells, central memory T cells, effector memory T cells, $CD4^+$ T cells, NKT cells, regulatory T cells (Tregs), and stem cell memory T cells;

(b) lymphoid progenitor cells;

(c) hematopoietic stem cells;

(d) NK cells;

(e) dendritic cells; or

(f) iPS cells or cells derived from iPS cells.

19. The population of claim 18, wherein the T cell is a $CD8^+$ T cell.

20. The population of claim 19, wherein the $CD8^+$ T cell is a $CD8^+$ naïve T cell, a central memory T cell, or an effector memory T cell.

21. The population of any one of claims 15-20, wherein the cells are engineered cells.

22. The population of claim 21, wherein the engineered cells are engineered chimeric antigen receptor (CAR) T cells or engineered TCR (T cell receptor) T cells.

23. A gRNA for use in combination with a Cpf1 RNA-guided endonuclease comprising a targeting domain that is complementary to a sequence of a TRAC gene, wherein the gRNA is effective in generating one or more modifications in the TRAC gene, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 3535, SEQ ID NO: 3563, SEQ ID NO: 3514 and SEQ ID NO: 3451.

24. The gRNA of claim 23, wherein the targeting domain is 20, 21, 22, 23, 24 or 25 nucleotides in length.

25. The gRNA of claim 23 and 24, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs: 3538, 3566, 3517 and 3454.

26. An isolated modified immune cell comprising an RNP complex comprising a Cpf1 RNA-guided endonuclease and a gRNA comprising a targeting domain that is complementary to a nucleic acid sequence of a TRAC gene, wherein the gRNA is effective in generating one or more modifications in the TRAC gene, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 3535, SEQ ID NO: 3563, SEQ ID NO: 3514 and SEQ ID NO: 3451.

27. The isolated modified immune cell of claim 26, wherein the targeting domain is 20, 21, 22, 23, 24 or 25 nucleotides in length.

28. The isolated modified immune cell of claim 26 and 27, wherein the targeting domain comprises a nucleotide sequence selected from the group consisting of SEQ ID NOs: 3538, 3566, 3517 and 3454.

29. The isolated modified immune cell of any one of claims 26-28, wherein the RNP complex is delivered into the immune cell via electroporation.