CLAIMS

1. A human pluripotent stem cell (PSC) comprising a transgene inserted at a RPL13A locus in the genome, wherein the transgene is expressed at a detectable level in the PSC and cells differentiated from the PSC, wherein the cells differentiated from the PSC include dopaminergic neurons, microglial cells, and cardiomyocytes.

2. The human PSC of claim 1, wherein the transgene has a mean normalized expression of more than 3.75 in the PSC and cells differentiated from the PSC.

3. The human PSC of claim 1 or 2, wherein the transgene has a mean normalized expression of more than 4.00 in the PSC and cells differentiated from the PSC.

4. The human PSC of any one of claims 1-3, wherein the expression level of the transgene does not change more than 40%, more than 30%, more than 20%, or more than 10% (i) over five or more, ten or more, or 15 or more passages, or (ii) as the cell state changes, wherein the cell state is optionally state of pluripotency and/or differentiation.

5. The human PSC of any one of claims 1-4, wherein the PSC is a human embryonic stem cell (ESC) or a human induced PSC (iPSC).

6. The human PSC of any one of the preceding claims, wherein the transgene is inserted into the 3' untranslated region of the RPL13A locus.

7. The human PSC of any one of the preceding claims, wherein a transgene sequence is linked in frame to a RPL13A gene sequence through a coding sequence for a self-cleaving peptide, or linked to a RPL13A gene sequence through an internal ribosomal entry site (IRES).

8. The human PSC of any one of the preceding claims, wherein the transgene encodes a therapeutic protein, an immunomodulatory protein, a reporter protein, or a safety switch signal.

9. The human PSC of any one of the preceding claims, wherein the genome of the cell further comprises an exogenous suicide gene, optionally in a RPL13A locus in the genome, wherein the exogenous suicide gene, once activated, causes apoptosis of the cell.

10. The human PSC of claim 9, wherein the exogenous suicide gene is Herpes simplex virus (HSV) thymidine kinase (TK) gene.

11. A pharmaceutical composition comprising the dopaminergic neurons, microglial cells, or cardiomyocytes that are derived from human PSC of any one of claims 1-10 and a pharmaceutically acceptable carrier.

12. Use of the human PSC of any one of claims 1-10 or the pharmaceutical composition of claim 11 for the manufacture of a medicament for treating a human patient that has a graft translation or inflammation.

13. The use according to claim 12, wherein the inflammation is selected from neuroinflammation, an autoimmune disease, or cancer.

14. A method of generating the human PSC of any one of claims 1-10, comprising
providing a cultured human cell, and
introducing said transgene into the RPL13A locus in the genome of the cultured human cell, wherein the introducing step is performed through CRISPR gene editing.

15. The method of claim 14, wherein the introducing step comprises contacting the human cell with a first nucleic acid encoding a Cas protein, a second nucleic acid encoding a guide RNA (gRNA) that targets the RPL13A locus proximal to a stop codon, and a third nucleic acid encoding the transgene.

16. The method of claim 15, wherein the Cas protein is a Cas9 protein derived from *S. pyogenes*.

17. The method of claim 16, wherein the third nucleic acid further comprises a self-cleaving peptide sequence.

18. The method of claim 17, wherein the third nucleic acid further comprises homology arms targeting the RPL13A locus flanking the transgene and the self-cleaving peptide sequence.

19. The method of claim 18, wherein the self-cleaving peptide sequence is a PQR sequence encoded by an amino acid sequence as set forth in SEQ ID NO: 11.

20. The method of claim 19, wherein the method further comprises clonally expanding the cultured human cell.

21. The method of claim 20, wherein the method further comprises differentiating the cultured human cell into dopaminergic neurons, microglial cells, or cardiomyocytes.

22. The method of claim 21, wherein the transgene encodes a protein selected from the group consisting of: a protein deficient in lysosomal storage disorders, a protein deficient in hemophilia, an antibody or antibody fragment thereof targeting a pathogenic protein, an antibody or antibody fragment thereof targeting a tumor antigen, a protein involved in immune regulation, an immunomodulatory protein, and a safety switch signal protein.