

CLAIMS

1. A stem cell comprising modulated expression of one or more MHC-I and / or MHC-II human leukocyte antigens and one or more tolerogenic factors relative to a wild-type stem cell.
2. The stem cell of claim 1, wherein the one or more MHC-I human leukocyte antigens are selected from the group consisting of HLA-A, HLA-B, and HLA-C.
3. The stem cell of claim 1 or 2, wherein the modulated expression of the one or more MHC-I human leukocyte antigens comprises reduced expression of the one or more MHC-I human leukocyte antigens.
4. The stem cell of any one of claims 1 - 3, wherein the one or more MHC-I human leukocyte antigens are deleted from the genome of the cell, thereby modulating the expression of the one or more MHC-I human leukocyte antigens.
5. The stem cell of any one of claims 1 - 4, wherein the one or more MHC-II human leukocyte antigens are selected from the group consisting of HLA-DP, HLA-DQ, and HLA-DR, and / or
wherein the modulated expression of the one or more MHC-II human leukocyte antigens comprises reduced expression of the one or more MHC-II human leukocyte antigens, and / or
wherein one or more indels were introduced into CIITA, thereby modulating the expression of the one or more MHC-II human leukocyte antigens.
6. The stem cell of any one of claims 1 - 5, wherein the cell does not express HLA-A, HLA-B, and HLA-C., and / or
wherein the cell is an HLA-A^{-/-}, HLA-B^{-/-}, HLA-C^{-/-}, and CIITA^{indel/indel} cell.

7. The stem cell of any one of claims 1 - 6, wherein the one or more tolerogenic factors are selected from the group consisting of HLA-G, PD-L1, and CD47.
8. The stem cell of any one of claims 1 - 7, wherein the modulated expression of the one or more tolerogenic factors comprises increased expression of the one or more tolerogenic factors.
9. The stem cell of any one of claims 1 - 8, wherein the one or more tolerogenic factors are inserted into a safe harbor locus.
10. The stem cell of claim 9, wherein the safe harbor locus is an *AAVSI* safe harbor locus.
11. The stem cell of any one of claims 7 - 10, wherein HLA-G, PD-L1, and CD47 are inserted into an *AAVSI* safe harbor locus.
12. The stem cell of any one of claims 1 - 11, wherein the one or more tolerogenic factors inhibit immune rejection.
13. The stem cell of any one of claims 1 - 12, wherein the stem cell is an embryonic stem cell, or
wherein the stem cell is a pluripotent stem cell, optionally an induced pluripotent stem cell, or
wherein the stem cell is hypoinmunogenic, or
wherein the stem cell is a human stem cell.
14. The stem cell of any one of claims 1 - 13, wherein the stem cell retains pluripotency, and / or wherein the stem cell retains differentiation potential, and / or wherein the stem cell exhibits reduced T cell response.
15. The stem cell of any one of claims 1 - 14, wherein the stem cell exhibits protection from NK cell response.
16. The stem cell of any one of claims 1 - 15, wherein the stem cell exhibits reduced macrophage engulfment.

17. The stem cell of any one of claims 1 - 16, wherein the stem cell contains an inducible killing switch, optionally wherein the inducible killing switch is inserted into a safe harbor locus.