CLAIMS

1. Use of Tbx3 (GenBank Accession Number: NM_005996.3, NP_005987.3, NM_016569.3, NP_057653.3) in a method of inducing or enhancing pluripotency in a cell such as a somatic cell.

2. A method of reprogramming a cell, the method comprising modulating, such as up-regulating, the expression and/or activity of Tbx3 (GenBank Accession Number: NM_005996.3, NP_005987.3, NM_016569.3, NP_057653.3) in the cell.

3. A method or use according to Claim 1 or 2, in which the cell becomes a pluripotent cell such as a stem cell.

4. A method of causing a cell such as a somatic cell to display one or more characteristics of a pluripotent cell, the method comprising modulating the expression and/or activity of Tbx3 (GenBank Accession Number: NM_005996.3, NP_005987.3, NM_016569.3, NP_057653.3) in the cell.

5. A use or method according to Claim 1, 2 or 3, in which the method further comprises modulating the expression and/or activity of one or more, a combination of or all of Oct4, Sox2 and Klf4 in the cell, optionally without the introduction of c-Myc into the cell.

6. A use or method according to any preceding claim, in which the cell displays one or more characteristics of a pluripotent cell, such as expression of one or more pluripotent markers, such as *Oct4*, *Nanog*, *Gdf3*, *Dppa4* and *Tbx3* (GenBank Accession Number: NM_005996.3, NP_005987.3, NM_016569.3, NP_057653.3).

7. A use or method according to any preceding claim, in which the cell is capable of contributing to chimerism such as when introduced into an embryo of different genetic background.

8. A use or method according to any preceding claim, in which the cell is able to colonise germ tissue, such as by germ cell contribution to gonads.

9. A method according to Claim 8, in which the cell colonises germ tissue with a high germ-line competency or at a high germ-line transmission frequency.

10. A use or method according to any preceding claim, in which the cell is capable of generating full-term live-born progeny via tetraploid blastocyst complementation, in which the progeny are non-human.

11. A method or use according to any of Claims 1 to 9, in which the cell comprises a mammalian cell such as a mouse cell or a human cell.

12. A method of obtaining a stem cell line, the method comprising performing a method according to any preceding claim and deriving a cell line therefrom.

13. A method of identifying a molecule capable of enhancing differentiation of a cell, the method comprising performing a method according to any of Claims 1 to 11 in the presence of a candidate molecule and detecting a reduced induction of pluripotency by the cell, reduced reprogramming of the cell or reduced expression of one or more characteristics of a pluripotent cell by the cell, compared to in the absence of the candidate molecule.

14. A method of identifying a molecule capable of enhancing differentiation of a cell, the method comprising obtaining a induced, reprogrammed, pluripotent or a stem cell by a method according to any of Claims 1 to 11, exposing the cell to a candidate molecule and detecting differentiation of the cell.

15. A method of identifying a molecule capable of enhancing or inducing the pluripotency of a cell, the method comprising performing a method according to any of Claims 1 to 11 in the presence of a candidate molecule and detecting an increased induction of pluripotency by the cell, increased reprogramming of the cell or increased expression of one or more characteristics of a pluripotent cell by the cell, compared to in the absence of the candidate molecule.

CLAIMS

1. A thing.