## Claims

1. A method for deriving a multipotent $Isl1^+$ cell, comprising the step of:

   (i) culturing a mesenchymal cell in the presence of at least one laminin comprising an α5 chain, and in a medium comprising at least one agent which activates the Wnt canonical pathway.

2. The method according to claim 1, wherein the mesenchymal cell is a cardiac mesenchymal cell, an embryonic or fetal stem cell, a cord blood stem cell, a bone marrow cell, and/or an amniotic stem cell.

3. The method according to any one of the preceding claims, wherein the at least one laminin comprising an α5 chain is selected from the group comprising laminin 511, laminin 521, and a combination of laminin 511 and laminin 521, and any synthetic, natural, or recombinant part or derivative or variant thereof.

4. The method according to any one of the preceding claims, wherein the at least one agent which activates the Wnt canonical pathway is selected from the group comprising Wnt-1, Wnt-3a, Wnt-8, Wnt-8b, and any combination thereof.

5. The method according to any one of the preceding claims, wherein the at least one agent which activates the Wnt canonical pathway is present at of concentration of 10-250 ng/ml.

6. The method according to any one of the preceding claims, wherein a second step (ii) further comprises expanding the $Isl1^+$ cell population.

7. The method according to any one of the preceding claims, further comprising a differentiation step, wherein the differentiation step comprises culturing the $Isl1^+$ cell in the presence of at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof.

8. A method for self-renewal of a multipotent Isl1$^+$ cell, comprising the steps of:

   (i) culturing an Isl1$^+$ cell in the presence of at least one laminin comprising an α5 chain, and in a medium comprising at least one agent which activates the Wnt canonical pathway; and,

   (ii) maintaining and/or expanding cells obtainable from step (i) in culture.

9. The method according to claim 8, further comprising a differentiation step, wherein the differentiation step comprises culturing the Isl1$^+$ cell in the presence of at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof.

10. Cell obtainable by the method of any one of the preceding claims.

11. A composition comprising at least one laminin comprising an α5 chain and at least one agent which activates the Wnt canonical pathway.

12. The composition according to claim 11, wherein the at least one laminin comprising an α5 chain is selected from the group comprising laminin 511, laminin 521, and a combination of laminin 511 and laminin 521, and any synthetic, natural, or recombinant part or derivative or variant thereof.

13. The composition according to any one of claims 11 to 12, wherein the composition is selected from the group comprising a liquid, a solid, a dispersion, a suspension, an emulsion, a microemulsion, a gel, or a solution, and any combination thereof.

14. A kit comprising at least one laminin comprising an α5 chain and a cell culture medium comprising at least one agent which activates the Wnt canonical pathway.

15. The kit according to claim 14, wherein the at least one laminin comprising an α5 chain is coated on a surface suitable for cell culture.

16. The kit according to any one of claims 16 to 17, further comprising at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof, said at least one laminin preferably

comprised in a separate container or on a separate surface suitable for cell culture.

17. The cell according to claim 10, for use in medicine.

18. The cell according to claim 10, for use in the treatment and/or prophylaxis of heart insufficiency, heart failure, myocardial infarction, and/or congenital heart disease due to cardiac defects affecting parts derived from the second heart field (for instance right atrium, right ventricle, outflow tracts (aorta, pulmonary arteries) and/or ventricular septum).

19. A pharmaceutical composition comprising the cell according claim 10 and at least one pharmaceutically acceptable excipient.

20. Use of a combination of at least one laminin comprising an α5 chain and at least one agent which activates the Wnt canonical pathway, for deriving a multipotent $Isl1^+$ cell.

21. Use of at least one laminin selected from the group comprising laminin 111, laminin 221, laminin 211, and any combination thereof, for differentiation of $Isl1^+$ cells to cardiac cells.

**CLAIMS**

1. A method for deriving a multipotent $Isl1^+$ cell, comprising the step of:

(i) culturing a mesenchymal cell in the presence of at least one laminin comprising an α5 chain, and in a medium comprising at least one agent which activates the Wnt canonical pathway.

2. A method according to Claim 1, in which the mesenchymal cell is a cardiac mesenchymal cell, an embryonic or fetal stem cell, a cord blood stem cell, a bone marrow cell, and/or an amniotic stem cell.

3. A method according to Claim 1 or 2, in which the at least one laminin comprising an α5 chain is selected from the group comprising laminin 511, laminin 521, and a combination of laminin 511 and laminin 521.

4. A method according to Claim 1, 2 or 3, in which the at least one agent which activates the Wnt canonical pathway is selected from the group comprising Wnt-1, Wnt-3a, Wnt-8, Wnt-8b, and any combination thereof.

5. A method according to any preceding claim, in which the at least one agent which activates the Wnt canonical pathway is present at of concentration of 10-250 ng/ml.

6. A method according to any preceding claim, in which a second step (ii) further comprises expanding the $Isl1^+$ cell population.

7. A method according to any preceding claim, further comprising a differentiation step, in which the differentiation step comprises culturing the $Isl1^+$ cell in the presence of at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof.

8. A method for self-renewal of a multipotent $Isl1^+$ cell, comprising the steps of:

(i) culturing an $Isl1^+$ cell in the presence of at least one laminin comprising an α5 chain, and in a medium comprising at least one agent which activates the Wnt canonical pathway; and,

(ii) maintaining and/or expanding cells obtained from step (i) in culture.

9. A method according to Claim 8, further comprising a differentiation step, in which the differentiation step comprises culturing the $Isl1^+$ cell in the presence of at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof.

10. A composition comprising at least one laminin comprising an α5 chain and at least one agent which activates the Wnt canonical pathway.

11. A composition according to Claim 10, in which the at least one laminin comprising an α5 chain is selected from the group comprising laminin 511, laminin 521, and a combination of laminin 511 and laminin 521.

12. A composition according to Claim 10 or 11, in which the composition is selected from the group comprising a liquid, a solid, a dispersion, a suspension, an emulsion, a microemulsion, a gel, or a solution.

13. A kit comprising at least one laminin comprising an α5 chain and a cell culture medium comprising at least one agent which activates the Wnt canonical pathway.

14. The kit according to Claim 13, in which the at least one laminin comprising an α5 chain is coated on a surface suitable for cell culture.

15. A kit according to Claim 13 or 14, further comprising at least one laminin selected from the group comprising laminin 111, laminin 211, laminin 221, and any combination thereof, the at least one laminin preferably comprised in a separate container or on a separate surface suitable for cell culture.

16. Use of a combination of at least one laminin comprising an α5 chain and at least one agent which activates the Wnt canonical pathway, for deriving a multipotent $Isl1^+$ cell *ex vivo*.

17. Use of at least one laminin selected from the group comprising laminin 111, laminin 221, laminin 211, and any combination thereof, for differentiation of $Isl1^+$ cells to cardiac cells *ex vivo*.