CLAIMS

1. A method for inducing cell death of undifferentiated stem cells by performing cell culture in a cell culture medium that has less than 10% of glutamine in the amino acid profile.

2. The method according to claim 1, wherein the undifferentiated stem cells are pluripotent stem cells or multipotent stem cells.

3. The method according to claim 1 or claim 2, wherein the cell culture medium has less than 10% of serine and glycine in the amino acid profile.

4. The method according to any one of claims 1-3, wherein the cell culture medium has less than 10% of arginine in the amino acid profile.

5. The method according to any one of claims 1-4, wherein the cell culture is continued for 12-360 hours under any of the above particular amino acid-free conditions.

6. A cell culture medium which is supplemented with lactate, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

7. A cell culture medium which is supplemented with pyruvate, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

8. A cell culture medium which is supplemented with a fatty acid, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

9. The cell culture medium according to any one of claims 6-8, which has less than 10% of serine and glycine in the amino acid profile.

10. The cell culture medium according to any one of claims 6-9, which has less than 10% of arginine in the amino acid profile.

11. The cell culture medium according to any one of claims 6-10, which is supplemented with ascorbate or albumin.

12. A method for selecting cardiomyocytes, comprising culturing a mixture of cardiomyocytes and non-cardiomyocytes in a cell culture medium which is supplemented with lactate, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

13. A method for selecting cardiomyocytes, comprising culturing a mixture of cardiomyocytes and non-cardiomyocytes in a cell culture medium which is supplemented with pyruvate, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

14. A method for selecting cardiomyocytes, comprising culturing a mixture of cardiomyocytes and non-cardiomyocytes in a cell culture medium which is supplemented with a fatty acid, wherein the cell culture medium has less than 10% of sugar and less than 10% of glutamine in the amino acid profile.

15. The method according to any one of claims 12-14, wherein the non-cardiomyocytes are undifferentiated stem cells, differentiated non-cardiomyocytes, or established cells.

16. The method according to any one of claims 12-15, wherein the cell culture medium has less than 10% of serine and glycine in the amino acid profile.

17. The method according to any one of claims 12-16, wherein the cell culture medium has less than 10% of arginine in the amino acid profile.

18. The method according to any one of claims 12-17, wherein the cell culture is continued for 12-360 hours under any of the above particular amino acid-free conditions.

19. The method according to any one of claims 12-18, wherein the cell culture medium is supplemented with ascorbate or albumin.