What is claimed is:

1. A method of generating hES cell-derived cell aggregates in suspension from a hES cell single cell suspension culture, comprising:

(a) culturing hES cells in an adherent growth culture condition which allows for expansion in an undifferentiated state;

(b) disassociating the adherent hES cell culture of step (a) into a hES cell single cell suspension culture; ~~and~~

(c) agitating the hES cell single cell suspension culture to form hES cell aggregates in suspension; and

(~~e~~d) contacting the ~~hES cell single cell suspension culture~~ hES cell aggregates in suspension with a differentiating culture condition ~~which allows for formation of hES cell-derived cell aggregates in suspension when agitated until such a period of time when the single cell suspension culture forms hES cell-derived cell aggregates in suspension~~,

thereby generating hES cell-derived cell aggregates in suspension.

2. The method of claim 1, wherein the hES cell single cell suspension culture is agitated for at least 30 minutes.

3. The method of claim 1, wherein the hES cell single cell suspension culture is agitated by orbital rotation of the single cell suspension culture at 80 rpm to 160 rpm.

4. The method of claim 1, wherein the hES cell single cell suspension culture is agitated by orbital rotation of the single cell suspension culture at 100 rpm to 140 rpm.

5. The method of claim 1, wherein a plurality of hES cell-derived cell aggregates in suspension are produced ~~in suspension~~ and the diameters of the hES cell-derived cell aggregates in suspension are essentially uniform in size and shape.

6. The method of claim 1, wherein the hES cell-derived cell aggregates in suspension are endoderm lineage-specific cell aggregates.

7. The method of claim 6, wherein the endoderm lineage-specific cell aggregates are selected from the group consisting of pancreatic lineage type cell aggregates, liver lineage type cell aggregates, epithelial lineage type cell aggregates, thyroid lineage cell aggregates and thymus lineage cell aggregates.

8. The method of claim 6, wherein the endoderm lineage-specific cell aggregates are pancreatic lineage type cell aggregates.

9. The method of claim 1, wherein the hES cell-derived cell aggregates are multipotent pancreatic progenitor cell aggregates or endocrine cell aggregates.

10. The method of claim 1, further comprising ~~subsequent to the step of contacting with the differentiating culture condition, an additional step of selecting or~~ purifying cells within the ~~desired~~ hES cell-derived cell aggregates in suspension by use of one or more selectable markers or agents.

11. The method of claim 10, wherein the selectable marker or agent is selected from the group consisting of CD30, CD49a, CD49e, CD55, CD98, CD99, CD142, CD165, CD200, CD318, CD334 and CD340.

12. The method of claim 10, wherein the selecting or purifying of the desired hES cell-derived cell aggregates in suspension is by use of cell-sorting.

13. The method of claim 1, further comprising subsequent to the step of contacting with the differentiating culture condition, an additional step of enriching the culture with low concentrations of growth factors selected from the group consisting of FGF10, EGF, KGF, noggin and retinoic acid, thereby enriching pancreatic endoderm cells in the culture.

14. The method of claim 1, further comprising subsequent to the step of contacting with the differentiating culture condition, an additional step of enriching the culture with high concentrations of growth factors selected from the group consisting of FGF10, EGF, KGF, noggin and retinoic acid, thereby enriching pancreatic endocrine cells in the culture.

15. The method of claim 1, further comprising adding to the hES cell single cell suspension culture an agent that promotes cell survival, wherein the agent is selected from the group consisting of Y-27632, fasudil, H-1152P, and a mixture comprising insulin/transferrin/selenium (ITS).

16. The method of claim 1, wherein the adherent culture condition is devoid of substrate or matrix, wherein the substrate or matrix is selected from the group consisting of extracellular matrix, extracellular matrix protein and human or mouse feeder layer.

17. The method of claim 1, wherein the adherent growth culture condition is xeno-free, matrix-free and feeder-free.

18. The method of claim 1, wherein the ~~first~~ differentiating culturing condition comprises a TGF-β family member which activates a TGF-β family member receptor, wherein the TGF-β family member is selected from the group consisting of Activin A, Activin B, Nodal, GDF-8 and GDF-11.

19. A method of generating hES cell-derived cell aggregates in suspension from a hES cell-derived single cell suspension culture, comprising:

(a) culturing hES cells in an adherent growth culture condition which allows for expansion in an undifferentiated state;

(b) contacting the undifferentiated hES cells with a first differentiating culturing condition suitable for differentiating the hES cells and resulting in an adherent hES cell-derived cell;

(c) disassociating the adherent hES cell-derived cell into a hES-derived ~~cell~~ single cell suspension culture; and

(d) ~~contacting the hES cell single cell suspension culture with a second differentiating culture condition which allows for formation of hES cell-derived cell aggregates in suspension when agitated until such a period of time when~~agitating the hES-derived ~~cell~~ single cell suspension culture to forms hES-~~cell~~-derived cell aggregates in suspension~~,~~;

thereby generating hES cell-derived cell aggregates in suspension.

20. The method of claim 19, wherein the hES-derived cell aggregates in suspension are contacted with a second differentiating culturing condition comprises a non-TGF-β family member selected from the group consisting of FGF10, EGF, KGF, noggin and retinoic acid.