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(54) **Title**: DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS

(57) **Abstract**: The present invention provides methods to promote the differentiation of pluripotent stem cells and the products related to or resulting from such methods. In particular, the present invention provides an improved method for the formation of pancreatic hormone expressing cells and pancreatic hormone secreting cells. In addition, the present invention also provides methods to promote the differentiation of pluripotent stem cells without the use of a feeder cell layer and the products related to or resulting from such methods. The present invention also provides methods to promote glucose-stimulated insulin secretion in insulin-producing cells derived from pluripotent stem cells.