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(71) Applicant: UNIVERSITY OF NORTH CAROLINA [US/US]; 308 Bynum Hall, CB 4105, Chapel Hill, NC 27599-4105 (US).

(72) Inventors: KUBOTA, Hiroshi; 273 Summerwalk Circle, Chapel Hill, NC 27514 (US). REID, Lola, M.; 3621 Sweeten Creek Road, Chapel Hill, NC 27516 (US).

(74) Agents: POULIQUEN, Corinne, M. et al.; Pepper Hamilton LLP, 600 Fourteenth Street, N.W., Washington, DC 20005-2004 (US).

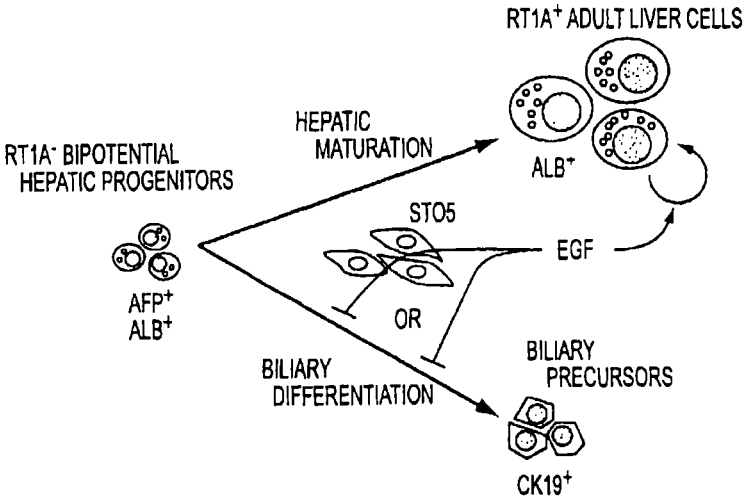
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(54) Title: PROCESSES FOR CLONAL GROWTH OF HEPATIC PROGENITOR CELLS



(57) Abstract: A method for propagating mammalian endodermally derived progenitors such as hepatic progenitors, their progeny, or mixtures thereof is developed which includes culturing mammalian progenitors, their progeny, or mixtrues thereof on a layer of embryonic mammalian feeder cells in a culture medium. The culture medium can be supplemented with one or more hormones and other growth agents. These hormones and other growth agents can include insulin, dexamethasone, transferrin, nicotinamide, serum albumin, β-mercaptoethanol, free fatty acid, glutamine, $CuSO_4$ and H_2SeO_3. The culture medium can also include antibodies. Importantly, the culture medium does not include serum. The invention includes means of inducing the differentiation of the progenitors to their adult fates such as the differentiation of hepatic progenitor cells to hepatocytes or biliary cells by adding, or excluding epidermal growth factor, respectively. The method of producing mammalian progenitors is useful in that the progenitors can be used subsequently in one or more of the following processes: identification of growth and differentiation factors, toxicological studies, drug development, antimicrobial studies, or the preparation of an extracorporeal organ such as a bioartificial liver.

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