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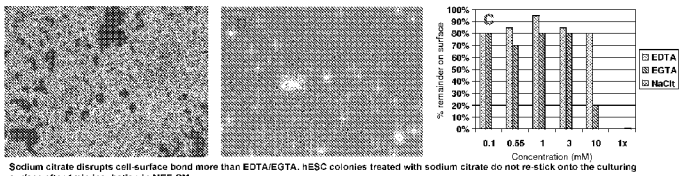
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(54) Title: PASSAGING AND HARVESTING FORMULATION AND METHOD FOR HUMAN PLURIPOTENT STEM CELLS



Sodium citrate disrupts cell-surface bond more than EDTA/EGTA. hESC colonies treated with sodium citrate do not re-stick onto the culturing surface after 1min incubation in MEF-CM.

FIGURE 2

(57) Abstract: Formulations and methods are disclosed for the harvesting and subsequent passaging of human pluripotent stem cells without the use of enzymes and/or scraping to dislodge cells from cell culture vessels. The formulations and methods permit the harvesting of cells as large clusters from the surface of various cell culture vessels including multilayer cell culture vessels. Further, the formulations and methods provide high yields of harvested cells for subsequent passaging and high post-harvest cell viability. Pluripotent stem cells passaged with the formulations according to the methods remain undifferentiated and express typical stem cell markers, while, at the same time, they retain the differentiation capability and are able to differentiate into the cells in all three germ layers and generate teratomas, even after numerous rounds of harvesting and passaging. These hPSCs also maintain normal karyotype after passaged with the formulations for extended period of time.

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