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(54) Title: REPROGRAMMING A CELL BY INDUCING A PLURIPOTENT GENE THROUGH USE OF AN HDAC MODULATOR

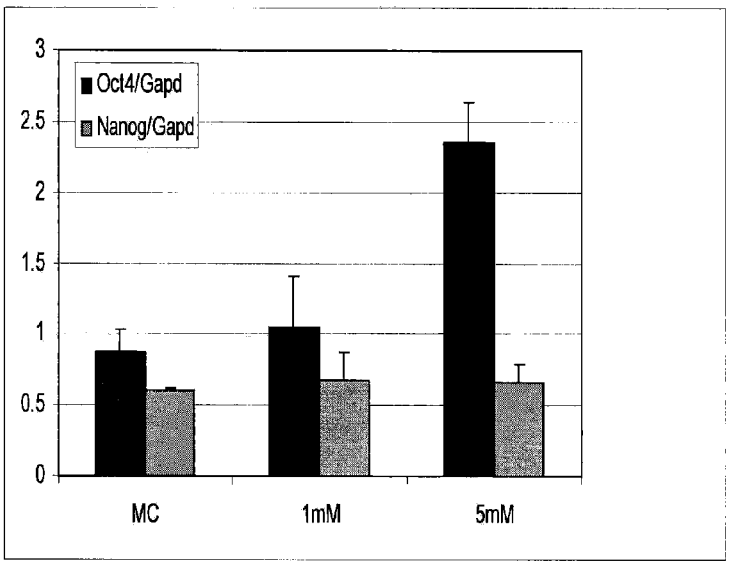

FIG. 1

(57) Abstract: The invention relate to methods, compositions, and kits for reprogramming a cell. In one embodiment, the invention relates to a method comprising inducing the expression of at least one gene that contributes to a cell being pluripotent or multipotent. In yet another embodiment, the method comprises inhibiting the activity of an HDAC with an HDAC inhibitor and inducing the expression of at least one gene that contributes to a cell being pluripotent or multipotent. In still another embodiment, the invention relates to a method for reprogramming comprising exposing a cell to more than one agent to inhibit more than ore type of regulatory protein. In yet another embodiment, the invention relates to a reprogrammed cell or an enriched population of reprogrammed cells that can have characteristics of an ES-like cell, which can be re- or trans-differentiated into various differentiated cell types.

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