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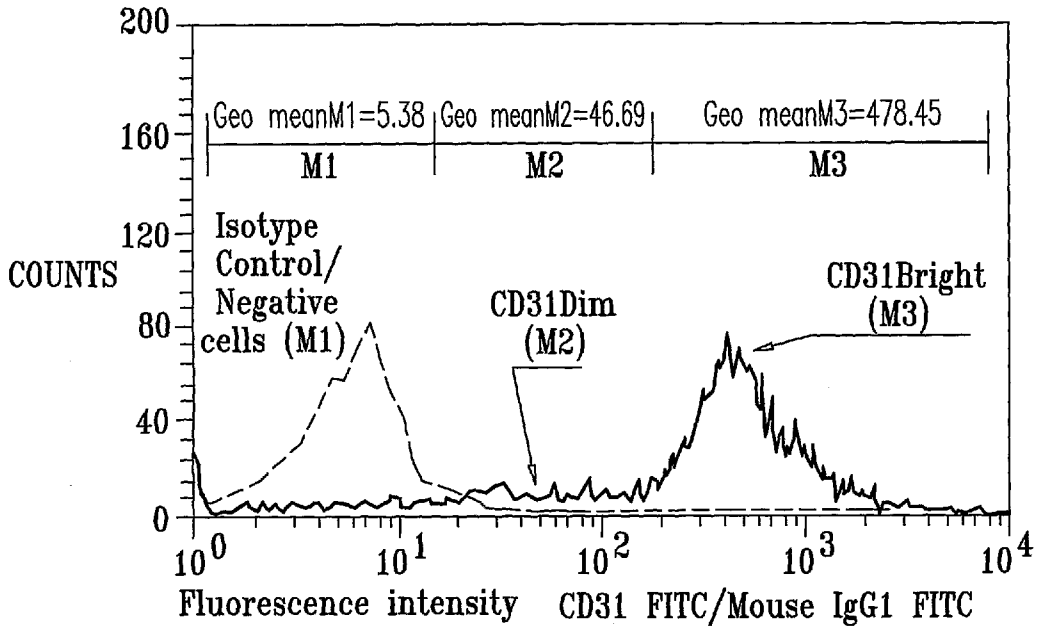
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(54) **Title:** REGULATING STEM CELLS



(57) **Abstract:** A composition of matter is provided, comprising a population of cultured cells that comprises a sub-population of cells that both stain as CD31Bright and demonstrate uptake of Ac-LDL+, and secrete IL-8. A method is also provided, comprising stimulating in vitro an initiating cell population (ICP) of at least 5 million cells that have a density of less than 1.072 g/ml, wherein at least 1% of the cells of the ICP is CD34+CD45-/Dim, and at least 25% of the cells of the ICP are CD31Bright, to differentiate into a progenitor/precursor cell population (PCP). Other embodiments are also described.

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