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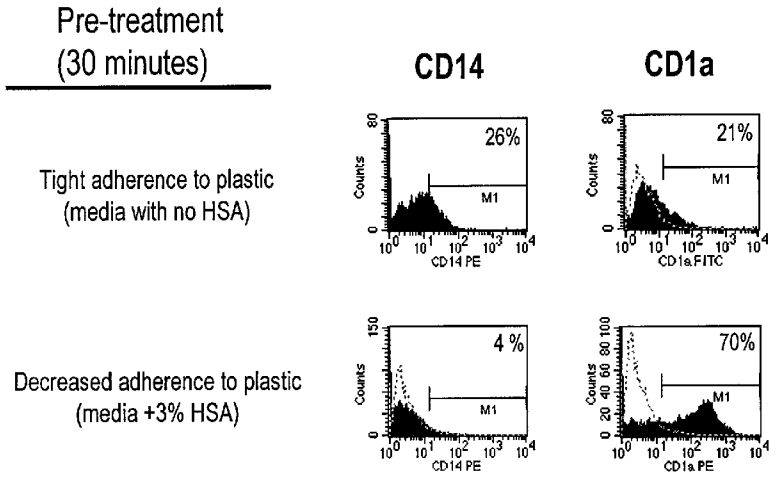
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(54) Title: GENERATION OF DENDRITIC CELLS FROM MONOCYTIC DENDRITIC PRECURSOR CELLS WITH GM-CSF IN THE ABSENCE OF ADDITIONAL CYTOKINES



(57) Abstract: The present invention it was determined that dendritic cells could be derived from various sources including peripheral blood monocytes in the presence of only GM-CSF without other cytokines if the monocytes were not activated. By preventing activation, such as by preventing binding of the cells to the surface of the culture vessel, the monocytes do not require the presence of additional cytokines, such as IL-4 or IL-13, to prevent differentiation into a non-dendritic cell lineage. The immature DCs generated and maintained in this manner were CD14$^-$ and expressed high levels of CD1a. Upon maturation by contact with an agent such as, for example, BCG and IFNγ, the cells were determined to express surface molecules typical of mature dendritic cells purified by prior methods and cultured in the presence of GM-CSF and IL-4. The mature dendritic cells produced from monoxytes without activation and cultured in GM-CSF alone are suitable for use in dendritic cell-based immunotherapy methods, such as for use in the treatment of disease, including cancer.

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