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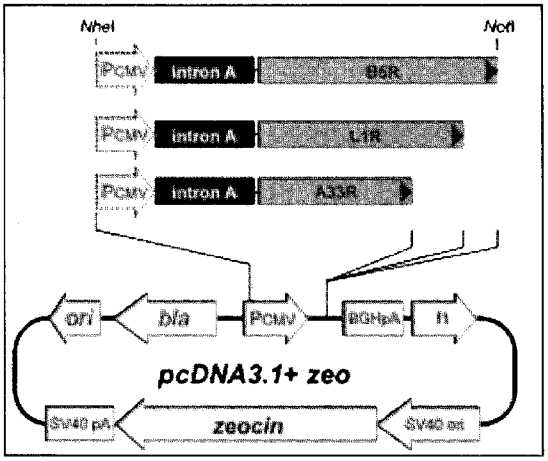
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FIGURE 1



(57) Abstract: The present invention provides materials and methods for the isolation of immune cells. In one embodiment, the present invention provides a device for the isolation and separation of antigen-specific memory B cells. Immune cells will be separated by flowing the cells along a ligand-conjugated biopolymer surface. The ligand may be distributed in a concentration gradient along the z- axis of the biopolymer surface. Cells that display receptors specific for the ligands on the biopolymer will interact with the ligands and roll along the surface in the fashion of leukocyte rolling. Additive adhesive interactions will cause differential cell separation and eventual immobilization.

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