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(54) Title: METHOD FOR SEPARATING TARGET CELLS

(57) Abstract: The invention relates to a method for separating viable target cells from a sample comprising the steps of contacting a sample comprising a suspension of viable target cells that display a molecule on the cell surface with non-porous microparticles that have a density of about 1.45 g/cm³ or greater, a diameter of about 10µm to 200µm, and a capture ligand covalently immobilized to the microparticle surface that is capable of specifically binding to said molecule; incubating said sample without substantial agitation to form a target cell/microparticle complex; separating non-bound substances in said sample from said target cell/microparticle complex by washing said non-bound substances through a filter while retaining said target cell/microparticle complex; mechanically dissociating said target cell/microparticle complex and eluting said viable target cells through said filter while retaining said microparticles with said capture ligand covalently immobilized to the microparticle surface as well as a cartridge, kit-of-parts, an apparatus configured to be used in the method and a medicament comprising viable target cells obtainable by the method.

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