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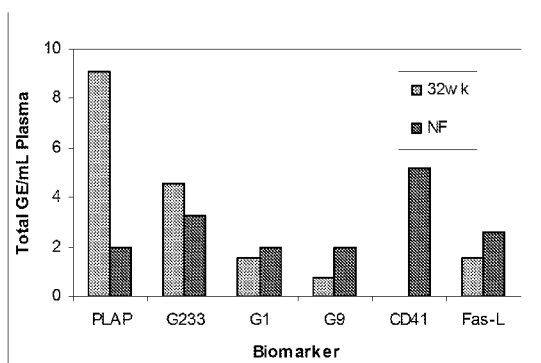
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(54) Title: METHODS FOR ENRICHING MICROPARTICLES OR NUCLEIC ACIDS USING BINDING MOLECULES

FIGURE 1



(57) **Abstract:** Methods for enriching a particular microparticle type in a biological sample are disclosed. In certain embodiments, the microparticle to be enriched is a fetal microparticle or a disease specific microparticle. In certain embodiments, the methods include combining a biological sample with a binding molecule that binds a fetal or disease specific microparticle, and separating two or more fractions of the biological sample, wherein the fraction that contains the binding molecule is enriched for fetal or disease specific microparticles, respectively. Also disclosed are methods for enriching fetal nucleic acids in a biological sample by enriching fetal microparticles in a fraction of the biological sample and then isolating nucleic acids from the enriched fraction. Methods for facilitating prenatal diagnosis of chromosomal abnormalities in a fetus are also disclosed. In certain embodiments, the methods include combining a biological sample with a binding molecule that binds a fetal microparticle, separating two or more fractions of the biological sample, isolating nucleic acids from the fraction enriched for fetal microparticles, and analyzing the nucleic acids for the presence of a mutation.

