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(54) **Title:** A HIGH-THROUGHPUT AND MASS-SPECTROMETRY-BASED METHOD FOR QUANTITATING ANTIBODIES

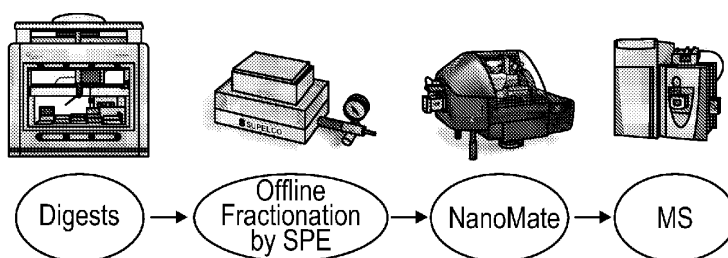


FIG. 1

(57) **Abstract:** Liquid chromatography-free methods for quantitating a target protein in a sample are provided. One embodiment provides a liquid chromatography-free method for quantifying target antibodies in a sample including the steps of spiking the sample with a labeled internal standard antibody, digesting the antibodies in the sample to produce peptides, fractionating the peptides; and quantifying the target antibodies using a direct infusion MS² system containing one or more ion traps and two or more quadrupole mass filters and an electrospray ionizer, wherein the method is liquid chromatography-free.



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