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Author	<b>Karin Björhall</b>	
Title (English)	<b>Depletion strategies prior to proteomic analysis for biomarker discovery in human serum samples</b>	
Title (Swedish)		
Abstract	Plasma proteins may often serve as indicators of disease and is a rich source for biomarker discovery. However, proteomic analysis of plasma is very challenging because of the wide dynamic range of proteins. In this study, five different depletion columns that specifically reduce the levels of high abundance proteins in plasma/serum were investigated considering efficiency, specificity and reproducibility. Depleted serum from the most attractive depletion strategy was further evaluated by two-dimensional gel electrophoresis (2D-GE), two-dimensional liquid chromatography (2D-LC) and SELDI. Results from 2D-GE analysis indicated an increased resolution and improved intensity of low abundance proteins. Initial SELDI and 2D-LC analysis of depleted serum material was also performed, however, further evaluation and optimization are needed before comparative analysis of depleted serum can be performed using these two proteomic techniques.	
Keywords	Depletion strategies, proteome, serum, plasma, two-dimensional gel electrophoresis, two-dimensional liquid chromatography, SELDI, mass spectrometry	
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