Agilent Technologies

Agilent Multiple Affinity Removal Column Human 14

A collection of citations to advance your research

Table of contents

Clinical research

Clinical research

Setup for human sera MALDI profiling: The case of rhEPO treatment

Electrophoresis, **32**, 1715-1727 (2011)
Chiara Fania *et al.*

Tags
ZORBAX 300SB-C18, Multiple Affinity Removal Kit, Multiple Affinity Removal Column Human 14, Multiple Affinity Removal Column Human 7. mRP-C18, 1200 Infinity Series, clinical research

Abstract
Immunodepletion and quantification was achieved using an Multiple Affinity Removal Kit, with Multiple Affinity Removal columns Human 14 and Human 7, and mRP-C18 columns. Proteins were identified on an Agilent ZORBAX 300SB-C18 column fitted to an Agilent 1200 Infinity Series. Published by John Wiley & Sons Ltd.

A New Method for Isolation of Interstitial Fluid from Human Solid Tumors Applied to Proteomic Analysis of Ovarian Carcinoma Tissue

PLoS ONE, **6**, (2011)
Hanne Haslene-Hox *et al.*

Tags
ZORBAX 300SB-C18, Bio-Monolith SO3, Multiple Affinity Removal Column Human 14, mRP-C18, 1100 Series LC, LC/MSD Trap XCT Plus, HPLC-Chip Cube MS Interface, clinical research

Abstract
Major efforts have been invested in the identification of cancer biomarkers in plasma, but the extraordinary dynamic range in protein composition, and the dilution of disease specific proteins make discovery in plasma challenging. Focus is shifting towards using proximal fluids for biomarker discovery, but methods to verify the isolated sample's origin are missing. We therefore aimed to develop a technique to search for potential candidate proteins in the proximal proteome, i.e. in the tumor interstitial fluid, since the biomarkers are likely to be excreted or derive from the tumor microenvironment. Since tumor interstitial fluid is not readily accessible, we applied a centrifugation method developed in experimental animals and asked whether interstitial fluid from human tissue could be isolated, using ovarian carcinoma as a model. Exposure of extirpated tissue to 106 g enabled tumor fluid isolation. The fluid was verified as interstitial by an isolated fluid:plasma ratio not significantly different from 1.0 for both creatinine and Na+, two substances predominantly present in interstitial fluid. The isolated fluid had a colloid osmotic pressure 79% of that in plasma, suggesting that there was some sieving of proteins at the capillary wall. Using a proteomic approach, we detected 769 proteins in the isolated interstitial fluid, six fold higher than in patient plasma. We conclude that the isolated fluid represents undiluted interstitial fluid and thus a subproteome with high concentration of locally secreted proteins that may be detected in plasma for diagnostic, therapeutic and prognostic monitoring by targeted methods.

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