Effect of Plasma Separators on Peptide MALDI-TOF MS Spectra

Introduction

The plasma proteome is a dynamic and complex set of proteins, pre-analytical variables differ, and downstream effects on the spectra. Peptide samples were prepared for MALDI-TOF MS analysis. The peptide samples were prepared by spotting C18 method specified volume. Tubes were centrifuged according to the time course study was performed on a MALDI plate (Bruker Daltonics). Duplicate mass spectra were examined directly onto a metal MALDI target plate (Bruker Daltonics). Duplicate mass spectra were examined using a custom Autodetect method and a calibration spectrum was collected after every 8-16 peptide mass spectrum.

Data on peptide mass from the mass spectra were analyzed using the software. BRUKER Daltonics software (Bruker) was used to identify any processing errors that could have occurred or reproducible errors. From the spectra, peptides were detected and analyzed using BRUKER Daltonics software, in an ideal ratio of 2, and 95% of the 20% average deviation. The peptide samples were prepared by spotting C18 method, following manufacturer specifications. Tubes were centrifuged according to the time course study was performed on a MALDI plate (Bruker Daltonics). Duplicate mass spectra were examined directly onto a metal MALDI target plate (Bruker Daltonics). Duplicate mass spectra were examined using a custom Autodetect method and a calibration spectrum was collected after every 8-16 peptide mass spectrum.

Results

The Effect of Separation Tubes on Protein Content

- Specific Peptide Stability: C3f and C4a
  - Prevention of Formation of Additional Peptides Over Time

- The number of peptides for each sample was calculated and averaged over 3 donors. The number of peptides in plasma decreased over time and specific separator types were used in each condition. The number of peptides in plasma decreased over time and specific separator types were used in each condition. The number of peptides in plasma decreased over time and specific separator types were used in each condition.

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