

Accepted Manuscript

Title: Capillary Electrophoresis–Mass Spectrometry for Direct Structural Identification of Serum N-Glycans

Authors: Christa M. Snyder, Xiaomei Zhou, Jonathan A. Karty, Bryan R. Fonslow, Milos V. Novotny, Stephen C. Jacobson



PII: S0021-9673(17)31310-9
DOI: <http://dx.doi.org/10.1016/j.chroma.2017.09.009>
Reference: CHROMA 358838

To appear in: *Journal of Chromatography A*

Received date: 1-5-2017
Revised date: 1-9-2017
Accepted date: 3-9-2017

Please cite this article as: Christa M.Snyder, Xiaomei Zhou, Jonathan A.Karty, Bryan R.Fonslow, Milos V.Novotny, Stephen C.Jacobson, Capillary Electrophoresis–Mass Spectrometry for Direct Structural Identification of Serum N-Glycans, Journal of Chromatography A <http://dx.doi.org/10.1016/j.chroma.2017.09.009>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Capillary Electrophoresis–Mass Spectrometry for Direct Structural Identification of Serum N-Glycans

Christa M. Snyder,^{§,1} Xiaomei Zhou,^{§,1} Jonathan A. Karty,¹ Bryan R. Fonslow,² Milos V. Novotny,¹ and Stephen C. Jacobson^{*,1}

¹ Department of Chemistry, Indiana University, Bloomington, Indiana 47405-7102

² SCIEX Separations, Brea, CA 92821

[§] C.M.S. and X.Z. contributed equally to this work.

* E-mail: jacobson@indiana.edu

Phone: +1-812-855-6620

Highlights

- Capillary electrophoresis–mass spectrometric analysis of N-glycans derived from serum. Identification of a total of 77 potential N-glycan structures in human serum.
- Determination of specific linkages on isomers featuring sialic acids.

Abstract

Through direct coupling of capillary electrophoresis (CE) to mass spectrometry (MS) with a sheathless interface, we have identified 77 potential N-glycan structures derived from human serum. We confirmed the presence of N-glycans previously identified by indirect methods, e.g.,

Download English Version:

<https://daneshyari.com/en/article/7609790>

Download Persian Version:

<https://daneshyari.com/article/7609790>

[Daneshyari.com](https://daneshyari.com)