

**Supplemental Figures for**

**Off-line mixed-mode liquid chromatography coupled with reversed phase high-performance liquid chromatography-high resolution mass spectrometry to improve coverage in lipidomics analysis**

Mónica Narváez-Rivas<sup>a</sup>, Ngoc Vu<sup>b</sup>, Guan-Yuan Chen<sup>a</sup>, Qibin Zhang<sup>a,b\*</sup>

<sup>a</sup> Center for Translational Biomedical Research, University of North Carolina at Greensboro, North Carolina Research Campus, Kannapolis, NC 28081, USA

<sup>b</sup> Department of Chemistry & Biochemistry, University of North Carolina at Greensboro, Greensboro, NC 27412, USA

\* Correspondence to: Qibin Zhang, PhD, UNCG Center for Translational Biomedical Research, North Carolina Research Campus, 500 Laureate Way, Suite 4226, Kannapolis, NC 28081, United States.

Email: q\_zhang2@uncg.edu

Telephone: +1-704-250-5803 Fax: +1-704-250-5809

Figure A.1: Gas-chromatogram of the fatty acid profile rat liver and plasma; annotation of peaks is listed in Table A.1.

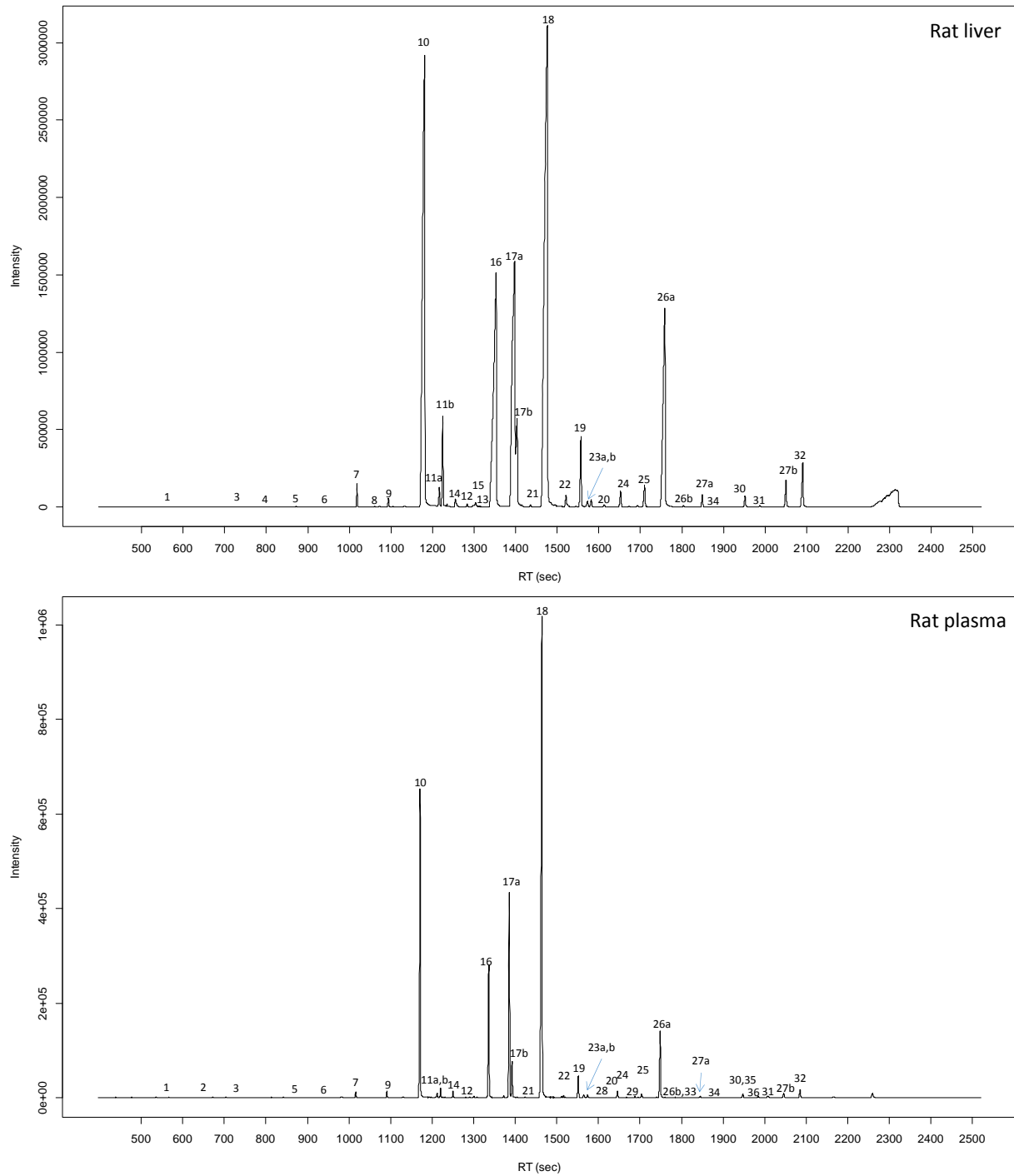


Figure A.2: Blanks (chloroform) injected between samples in mixed mode LC-ELSD separation.

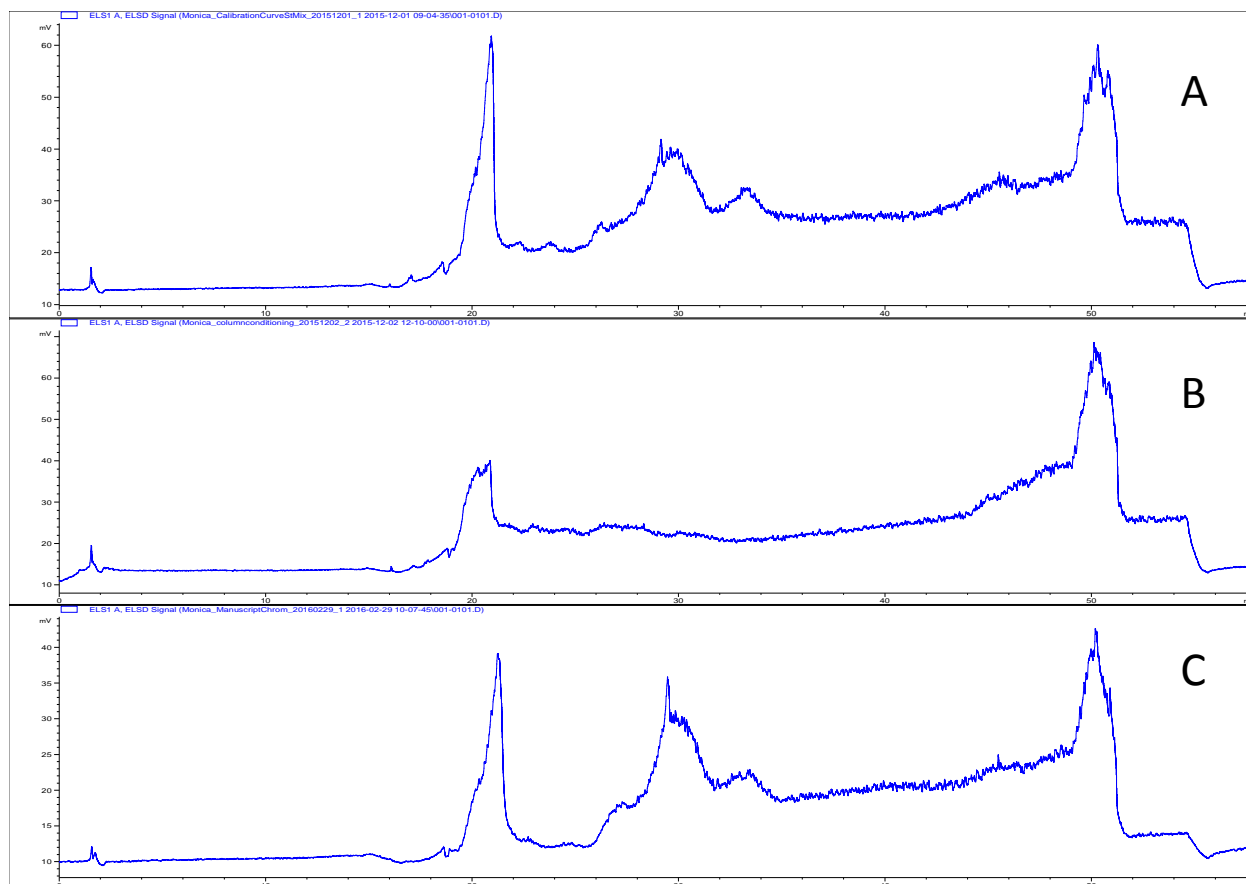


Figure A.3: Five different injections (A-E) of a standard lipid mixture at different concentrations using the optimized mixed mode LC-ELSD method.

