

Figure S1: Effect of mass resolution setting in QEHF on differentiation of isobaric lipids. Data was obtained from separation of rat plasma lipid extract using Accucore C30 column.

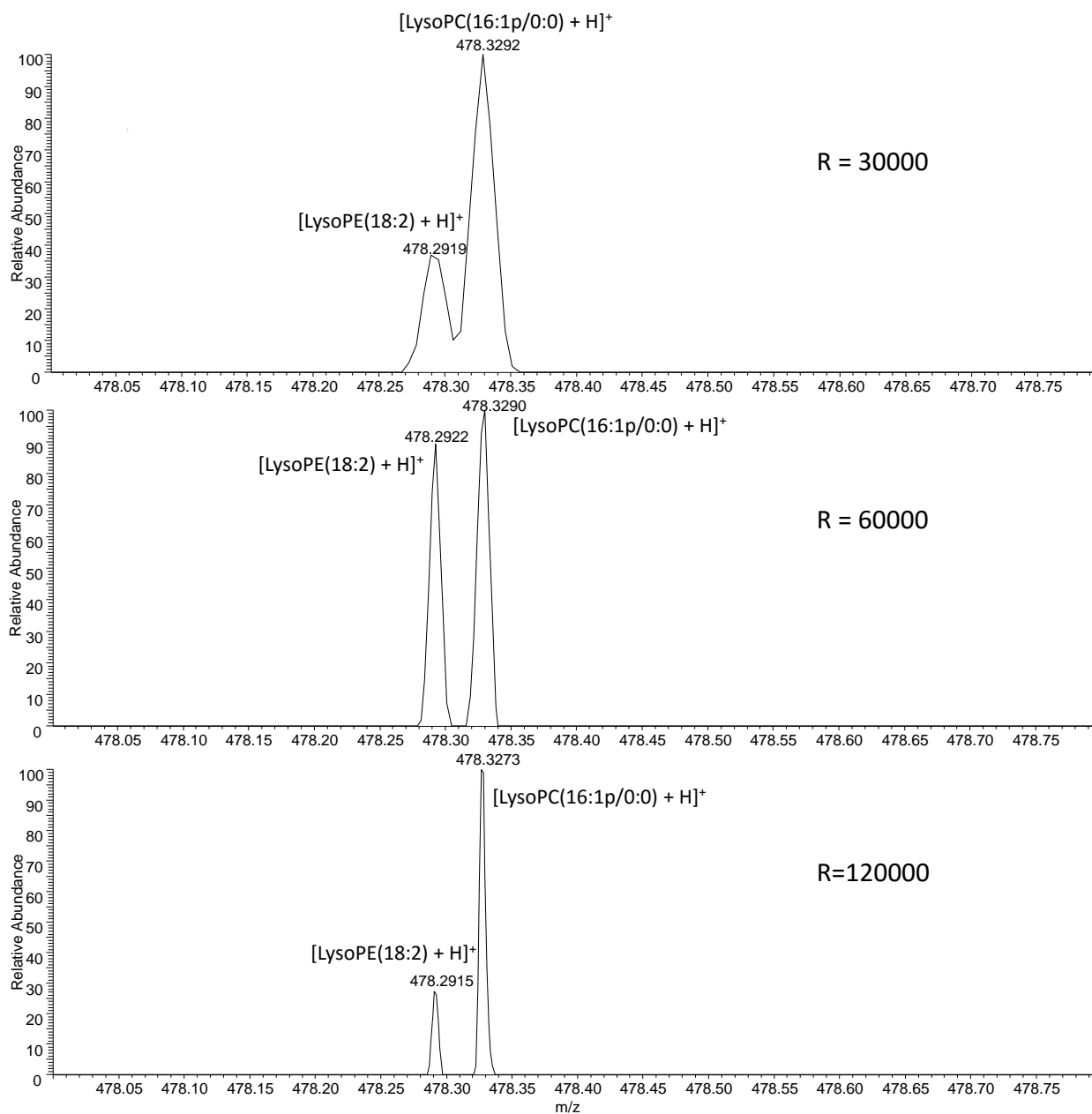


Figure S2: Total ion chromatograms from positive (A) and negative (B) ion modes of rat liver lipid extract.

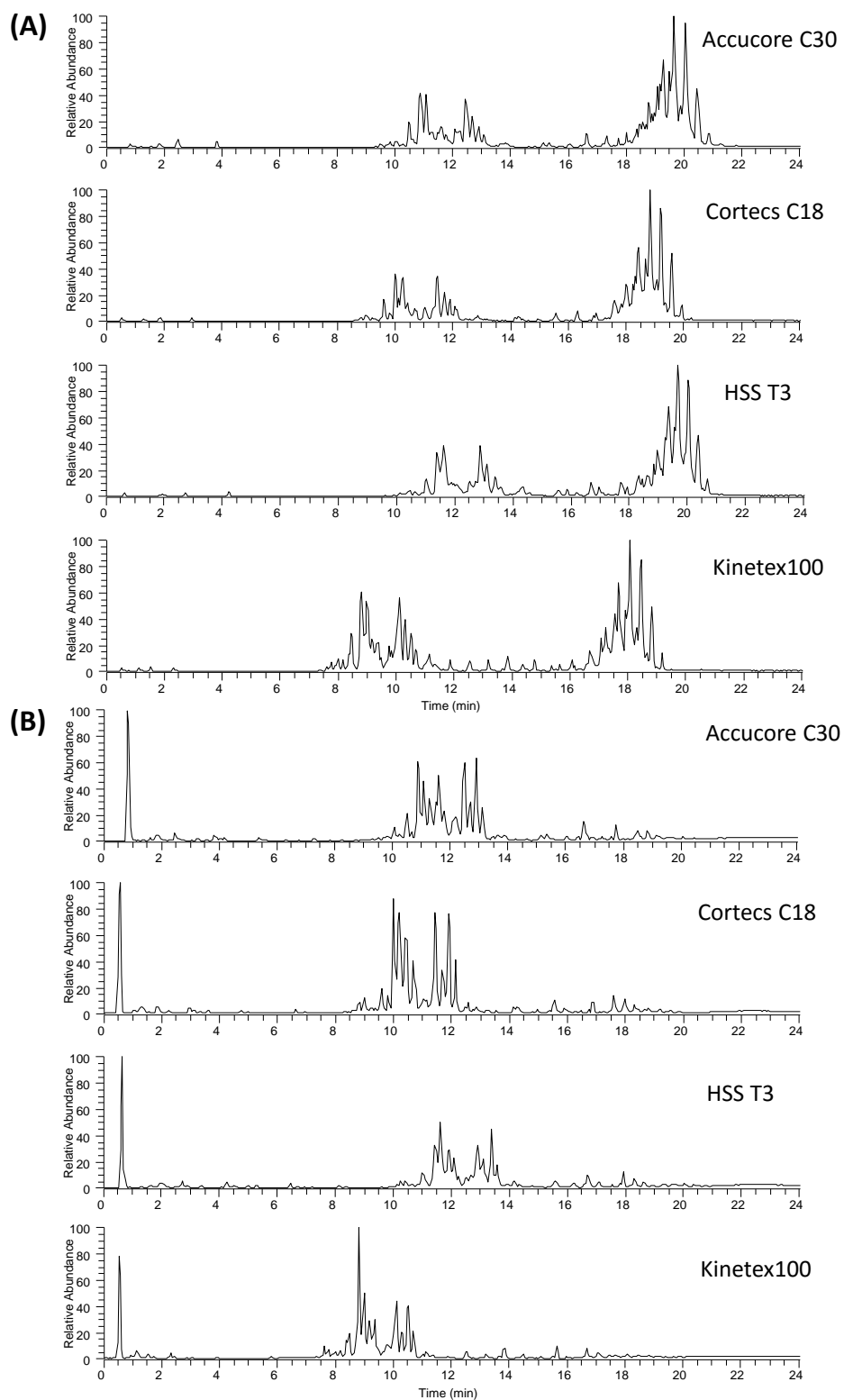


Figure S3: Total ion chromatograms from positive (A) and negative (B) ion modes of rat plasma lipid extract.

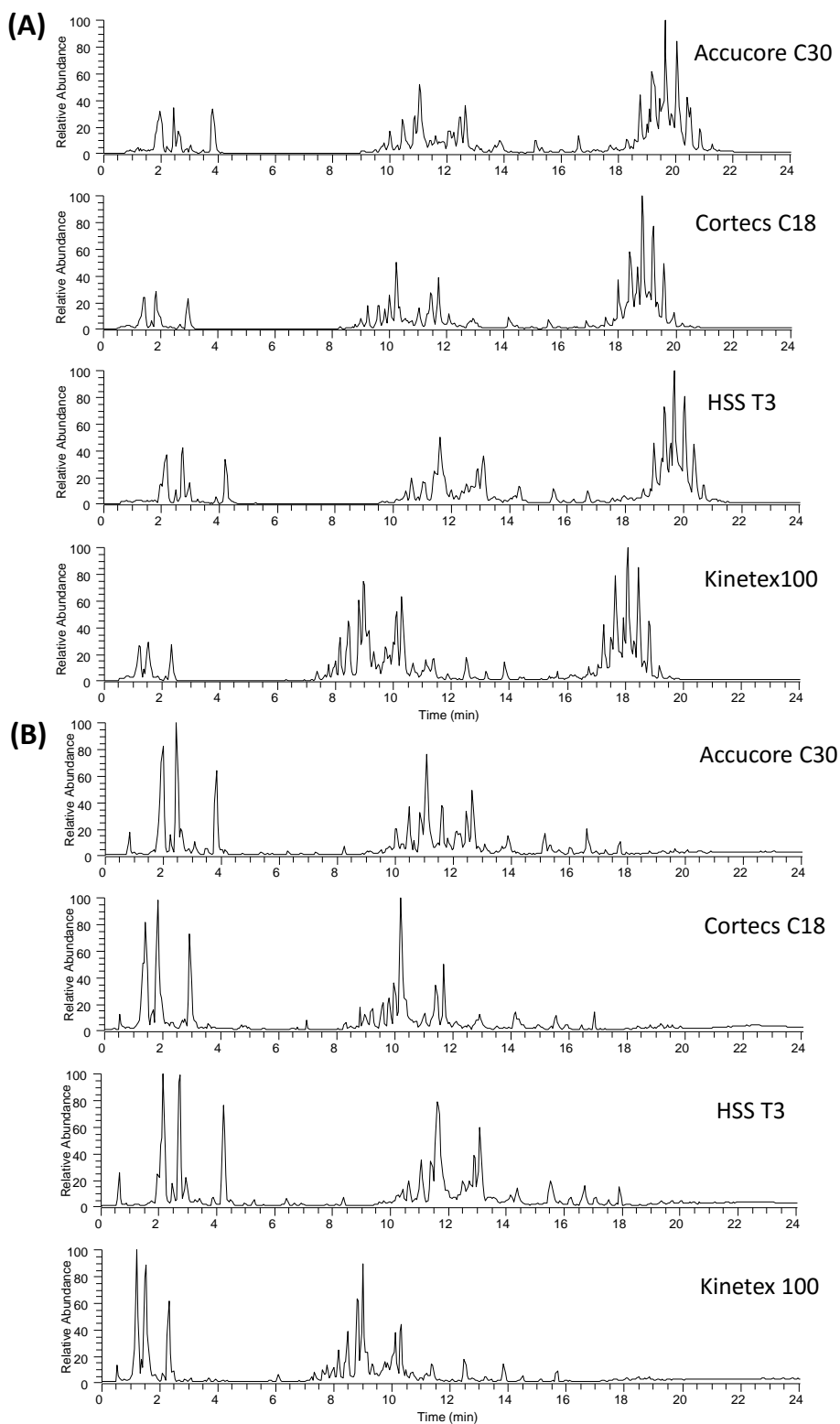


Figure S4: Example of MS/MS spectrum of a ceramide from a real sample (rat liver) obtained using HCD fragmentation in positive and negative ion modes.

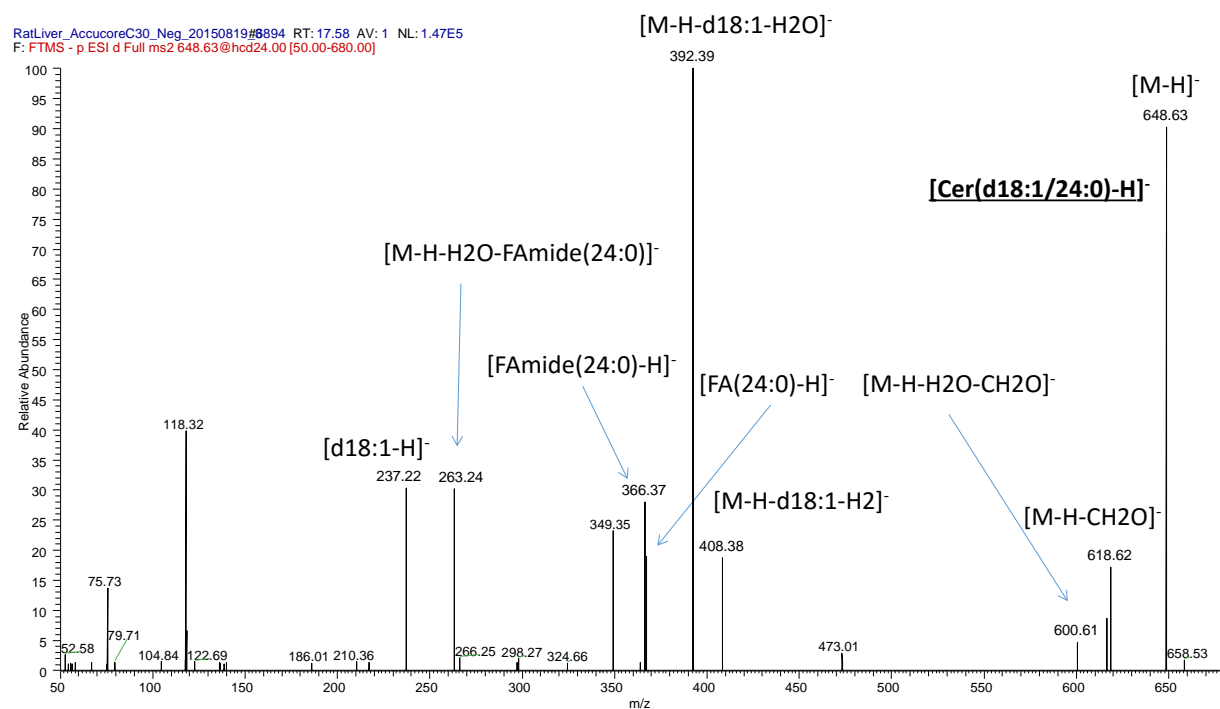
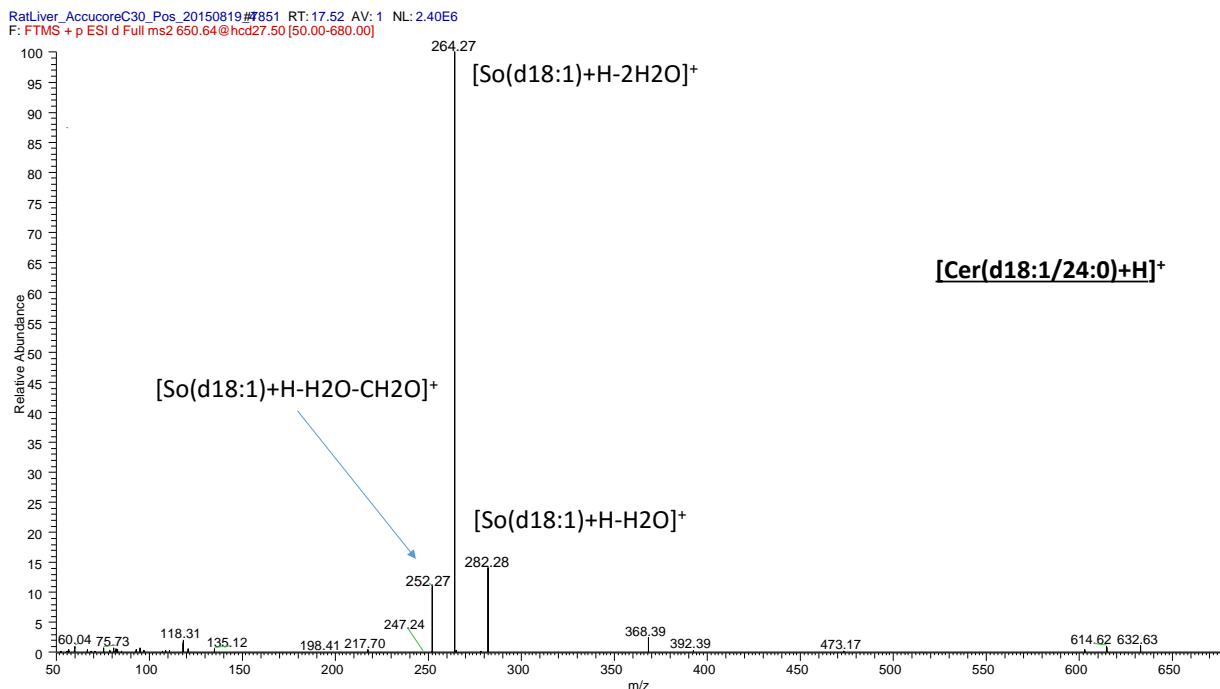


Figure S5: Example of MS/MS spectrum of a cardiolipin from a real sample (rat liver) obtained using HCD fragmentation in negative ion mode.

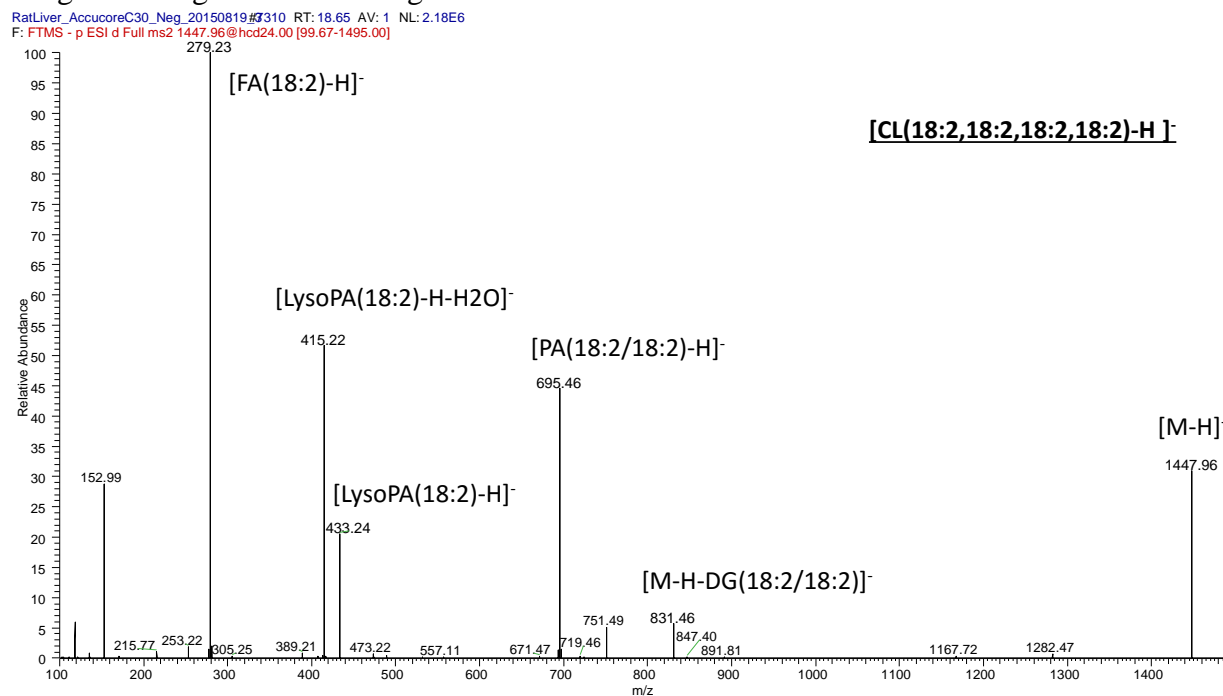


Figure S6: Example of MS/MS spectrum of a diacylglycerol from a real sample (rat liver) obtained using HCD fragmentation in positive ion mode.

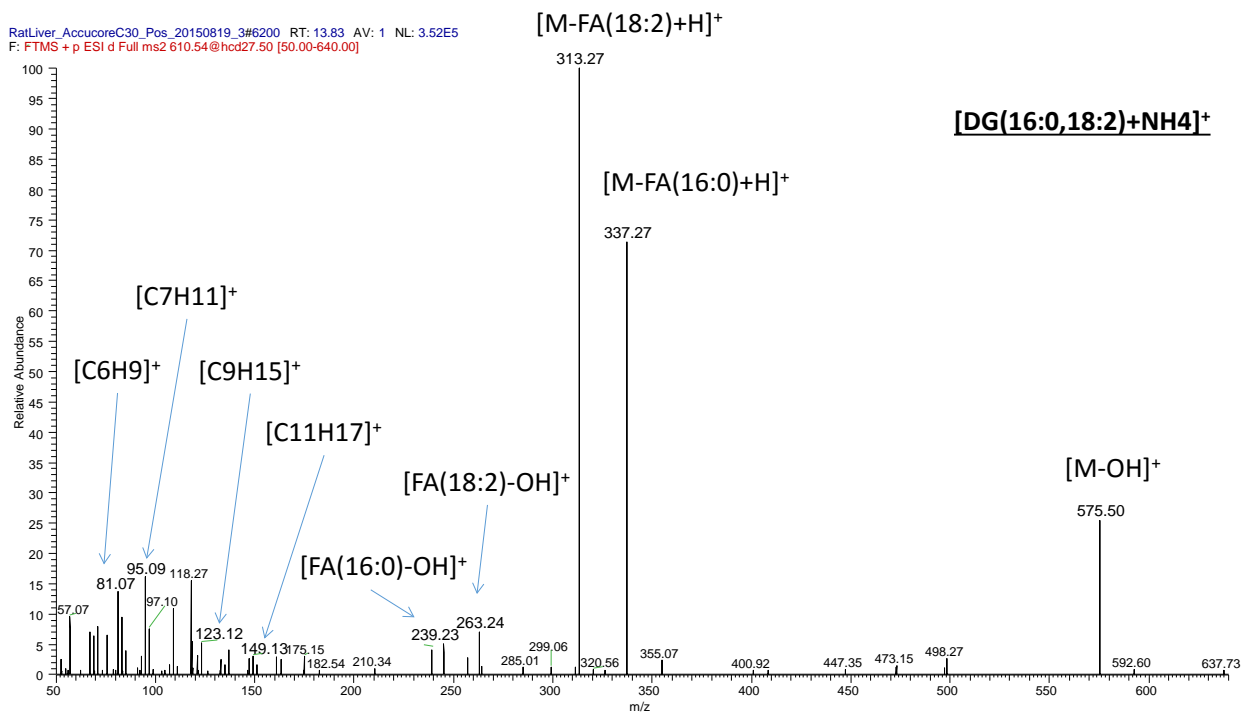


Figure S7: Example of MS/MS spectrum of a lysophosphatidylcholine from a real sample (rat liver) obtained using HCD fragmentation in positive and negative ion modes.

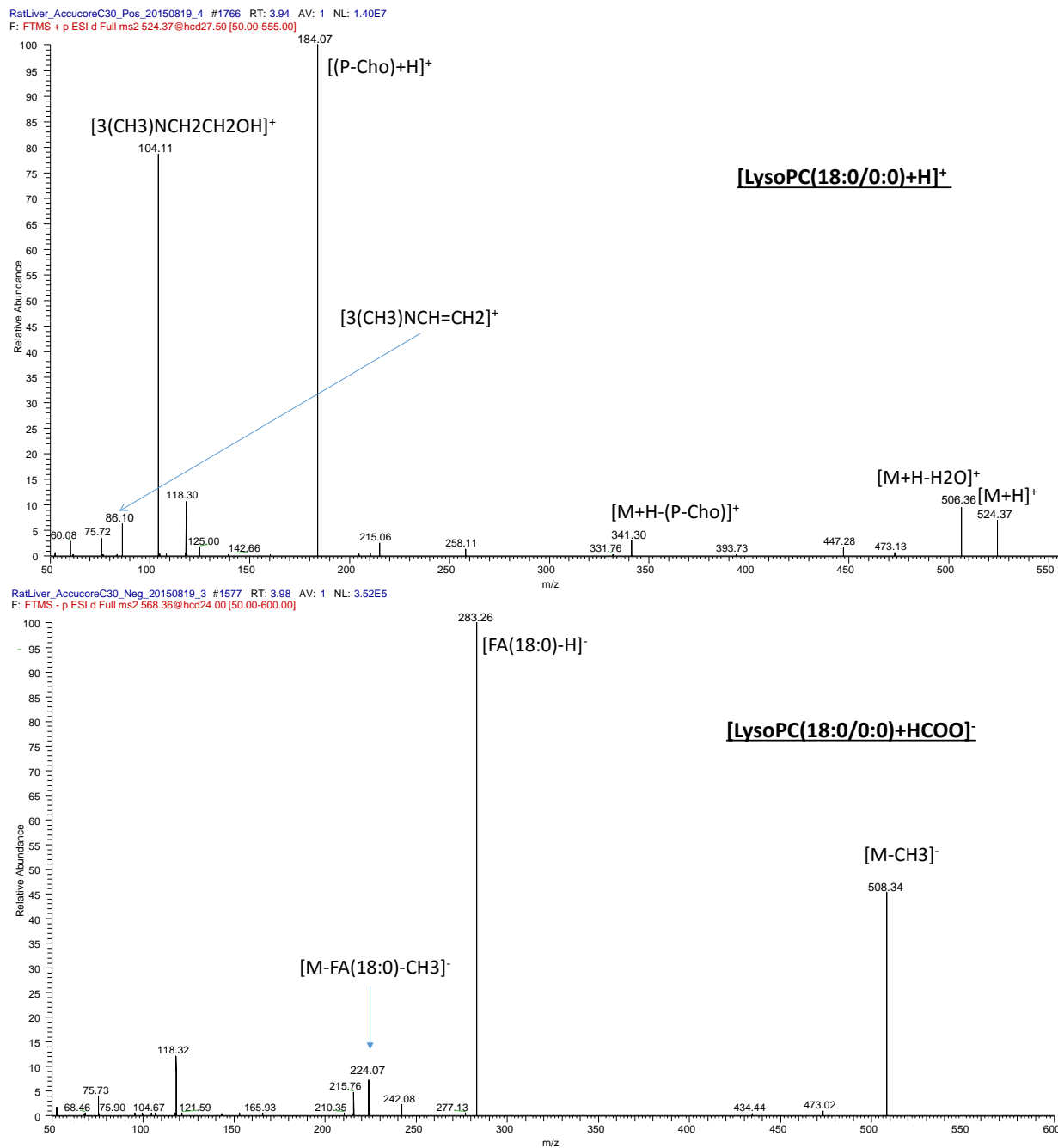


Figure S8: Example of MS/MS spectrum of a lysophosphatidylethanolamine from a real sample (rat plasma) obtained using HCD fragmentation in positive and negative ion modes.

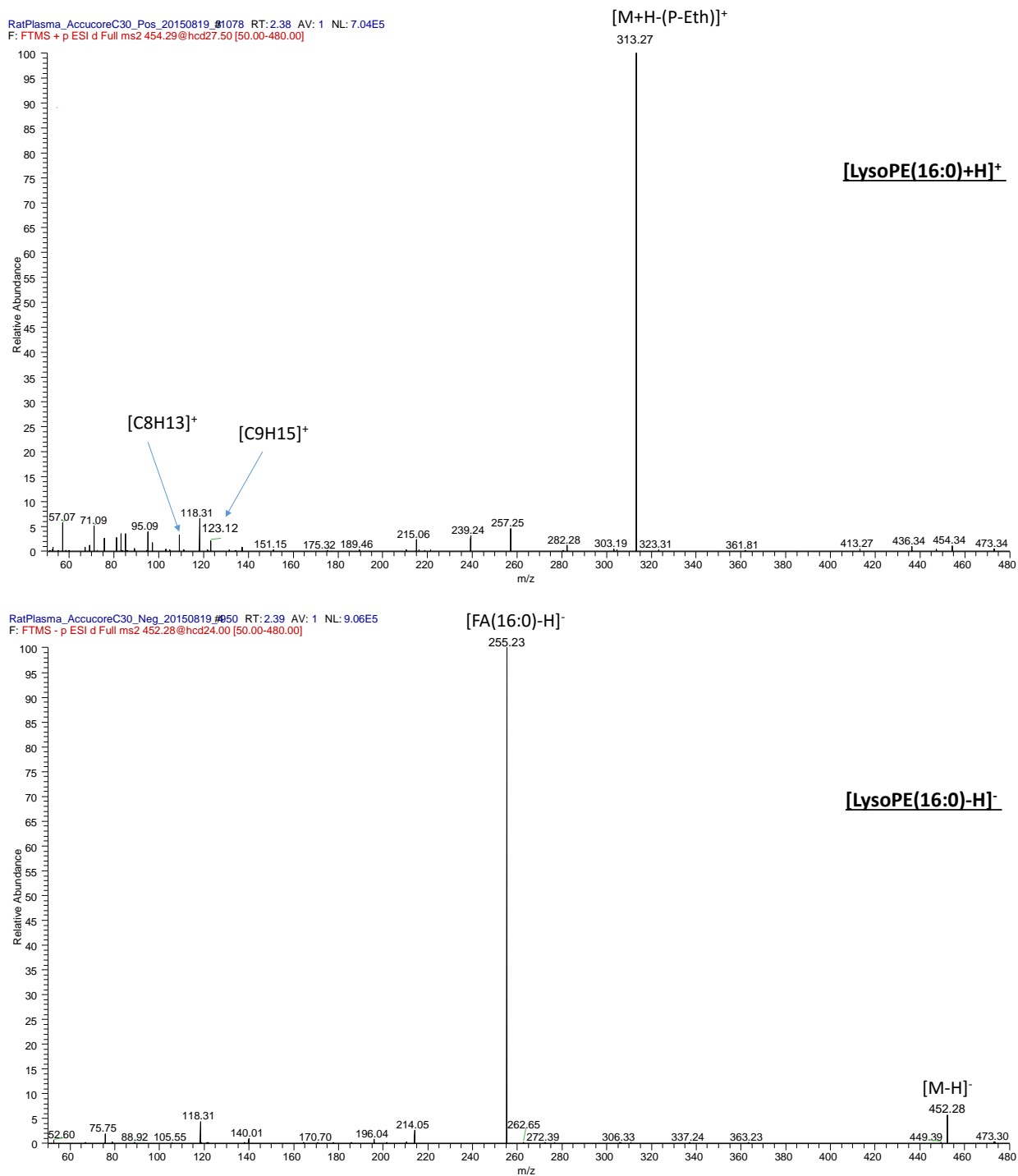
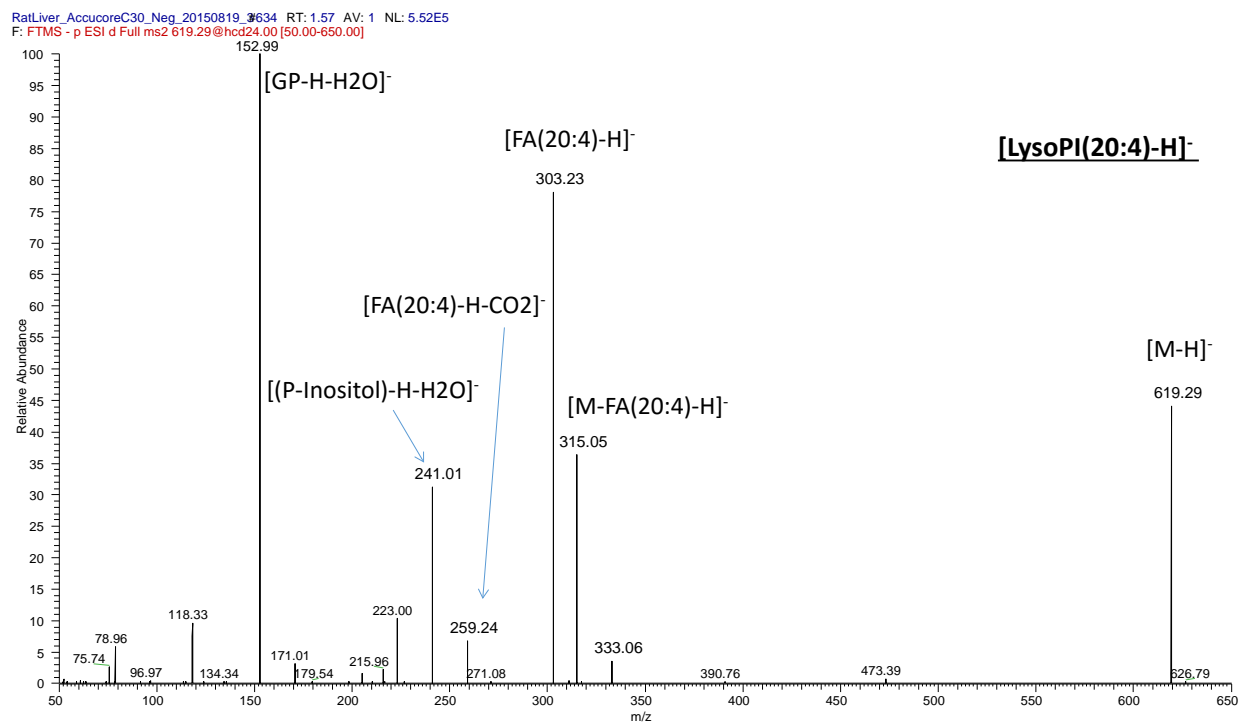




Figure S9: Example of MS/MS spectrum of a lysophosphatidylinositol from a real sample (rat liver) obtained using HCD fragmentation in negative ion mode.



GP: glycerol phosphate

Figure S10: Example of MS/MS spectrum of a lysophosphatidylglycerol from a real sample (rat liver) obtained using HCD fragmentation in negative mode.

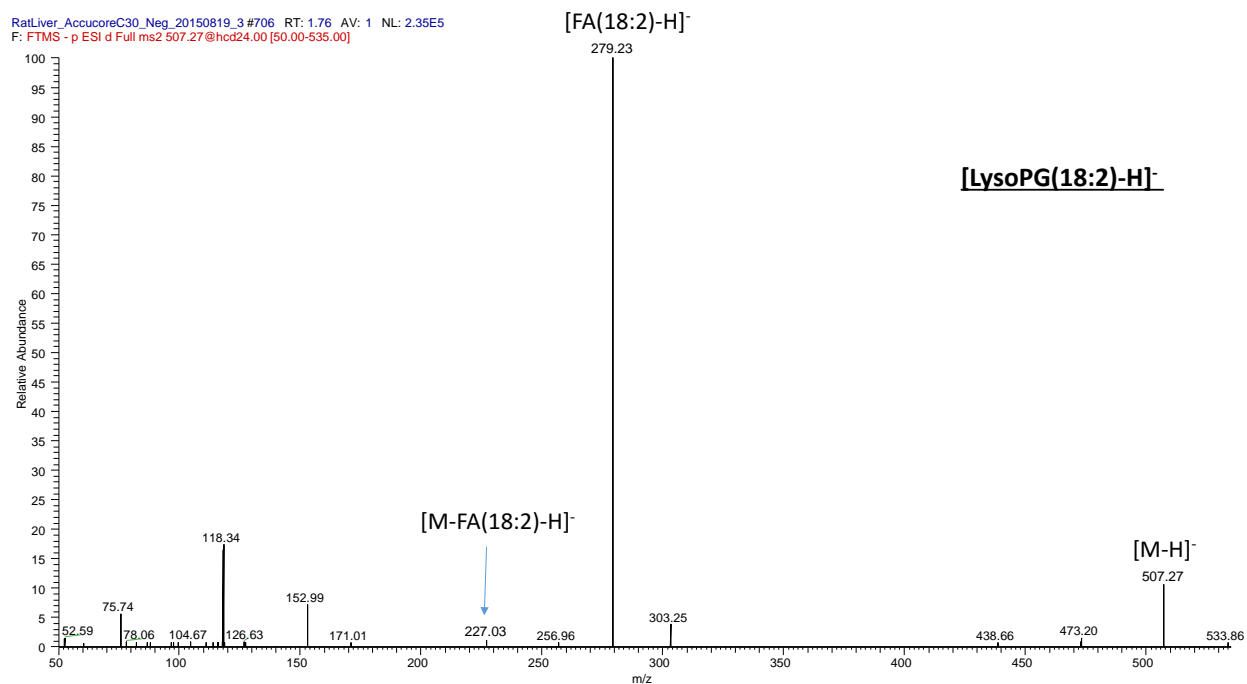


Figure S11: Example of MS/MS spectrum of a lysophosphatidylserine from a real sample (rat liver) obtained using HCD fragmentation in positive ion mode.

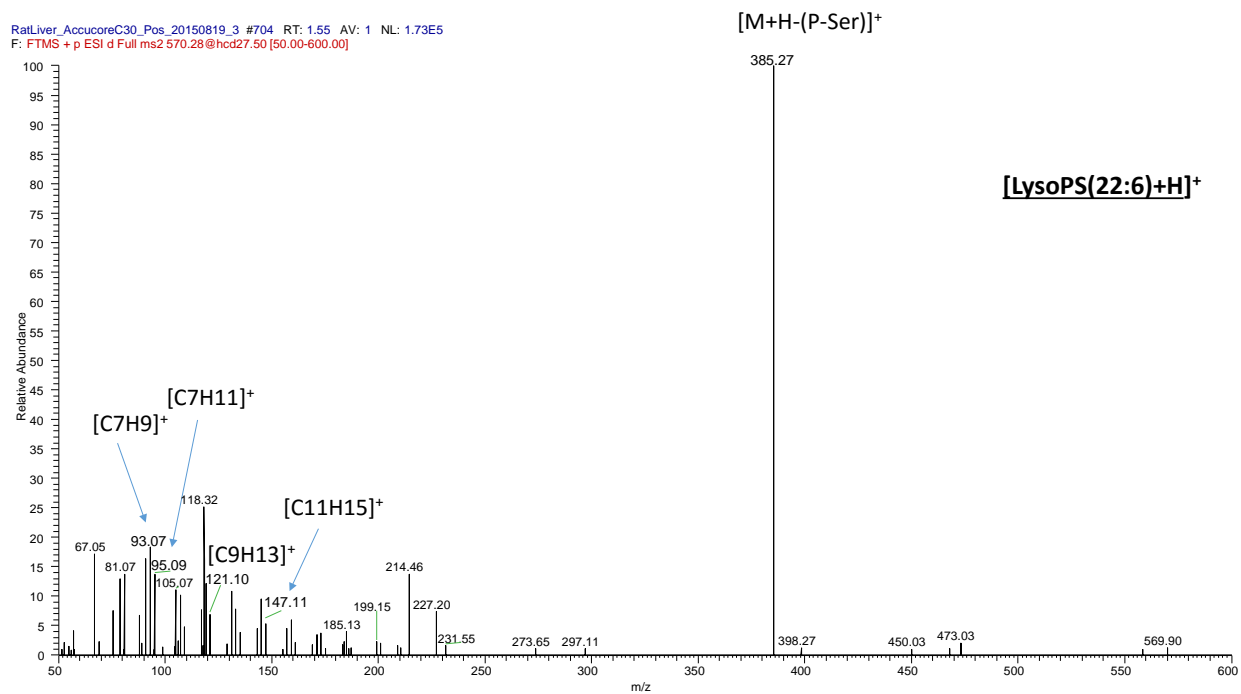


Figure S12: Example of MS/MS spectrum of a phosphatidic acid from a real sample (rat liver) obtained using HCD fragmentation in negative mode.

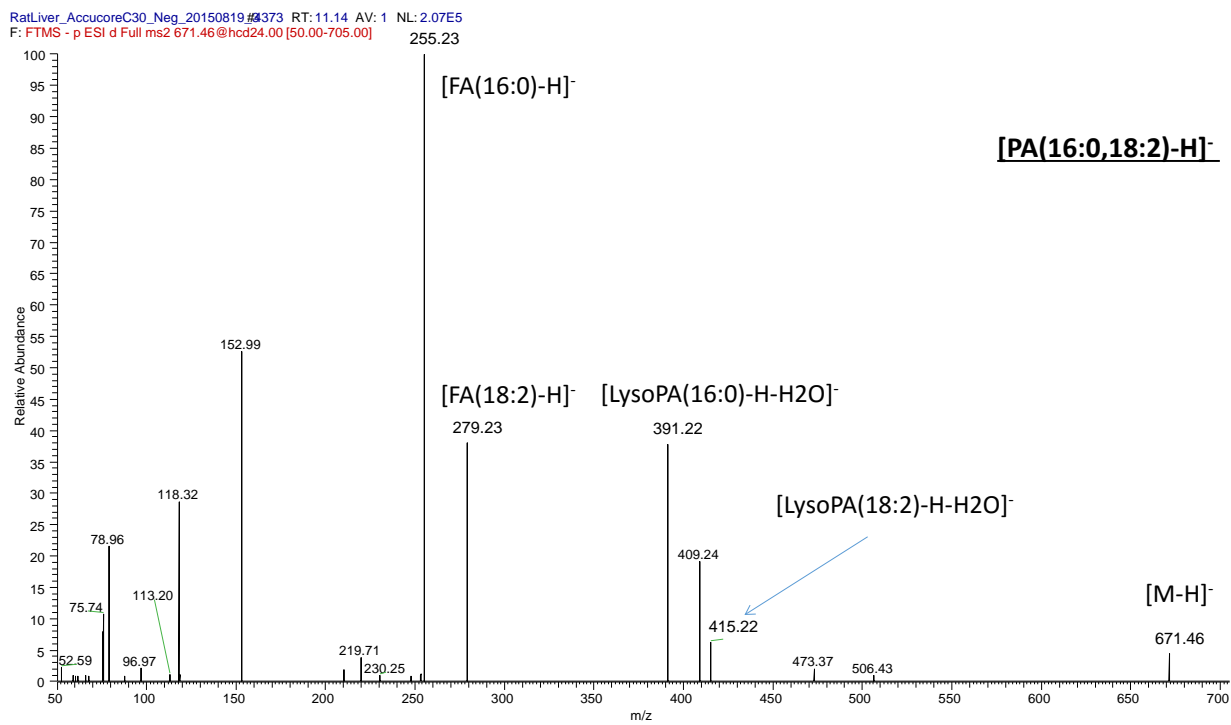


Figure S13: Example of MS/MS spectrum of a phosphatidylcholine from a real sample (rat plasma) obtained using HCD fragmentation in positive and negative ion modes.

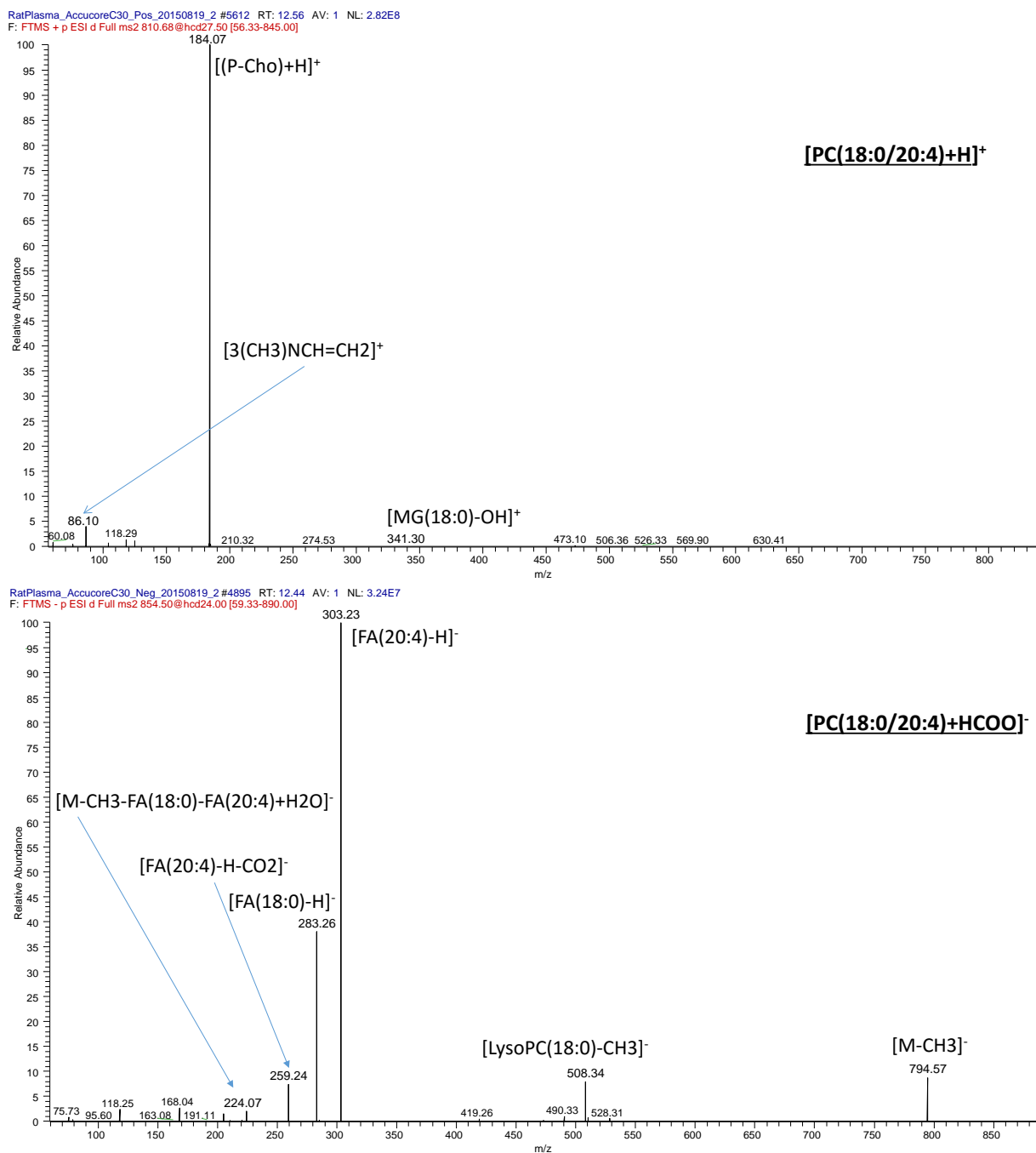


Figure S14: Example of MS/MS spectrum of a phosphatidylethanolamine from a real sample (rat liver) obtained using HCD fragmentation in positive and negative ion modes.

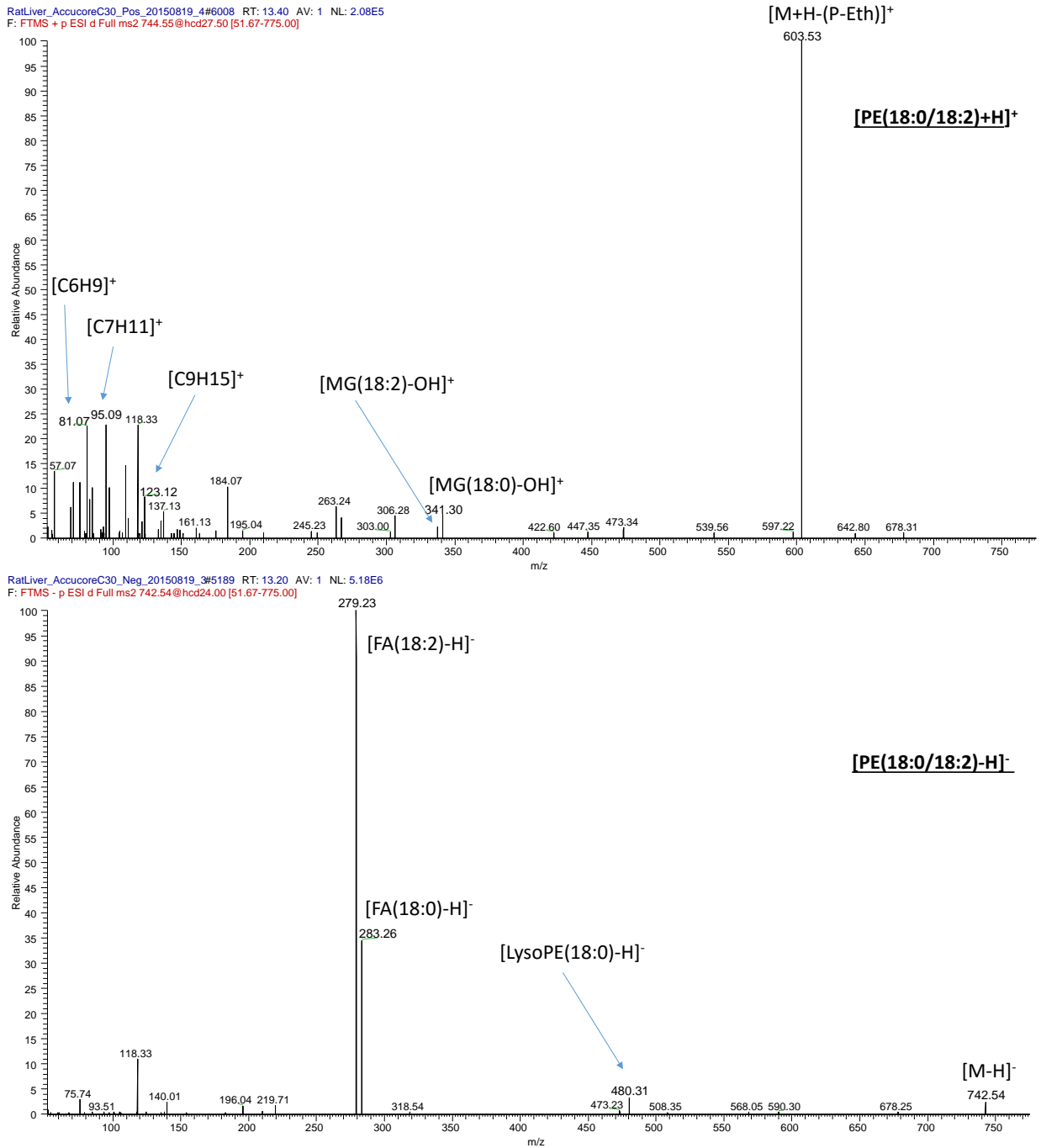


Figure S15: Example of MS/MS spectrum of a phosphatidylglycerol from a real sample (rat liver) obtained using HCD fragmentation in negative ion mode.

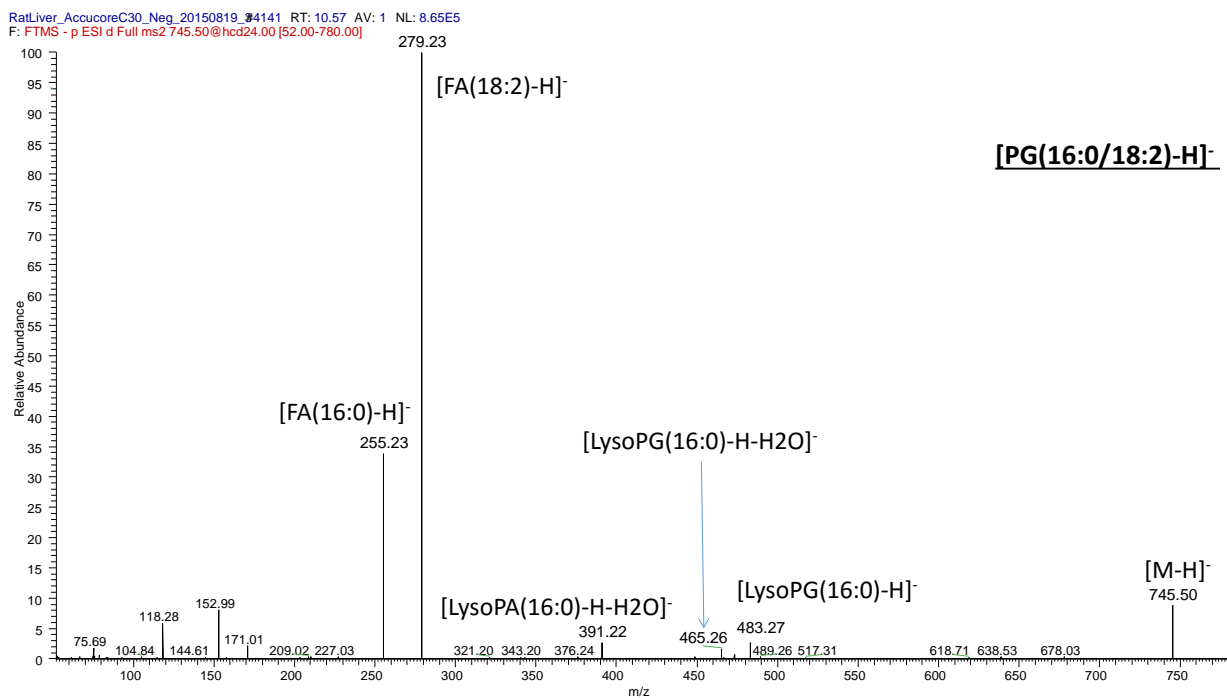


Figure S16: Example of MS/MS spectrum of a phosphatidylinositol from a real sample (rat liver) obtained using HCD fragmentation in positive and negative ion modes.

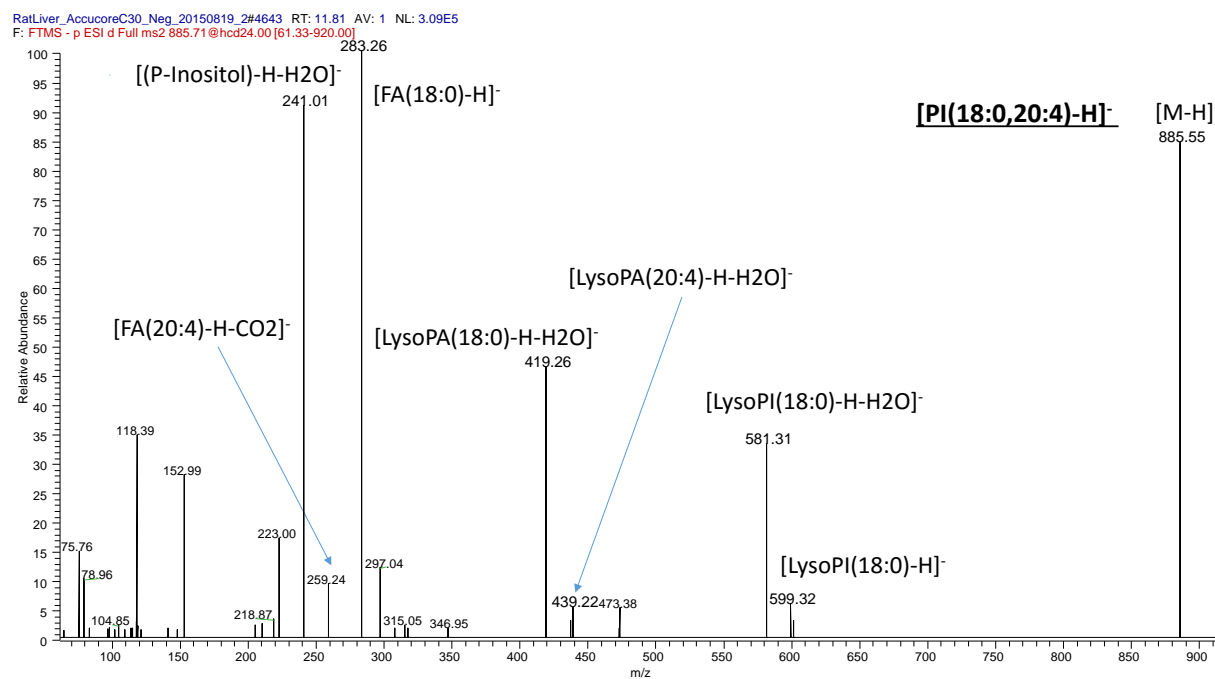
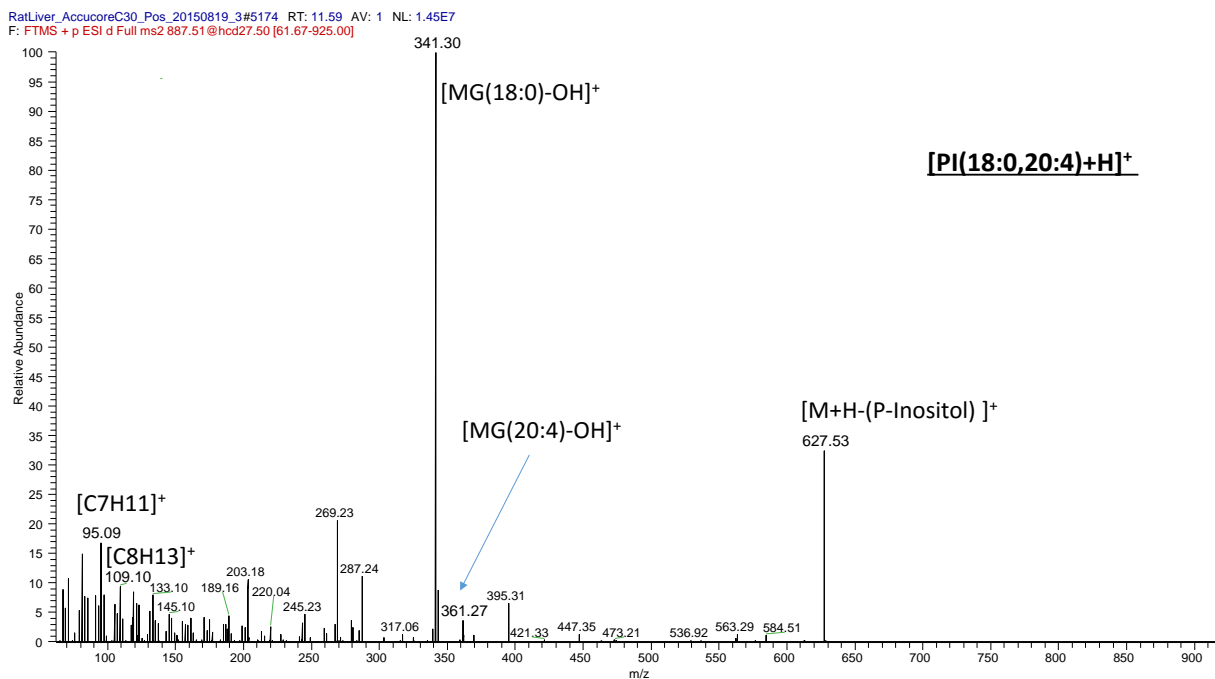




Figure S17: Example of MS/MS spectrum of a phosphatidylserine from a real sample (rat liver) obtained using HCD fragmentation in positive and negative ion modes.

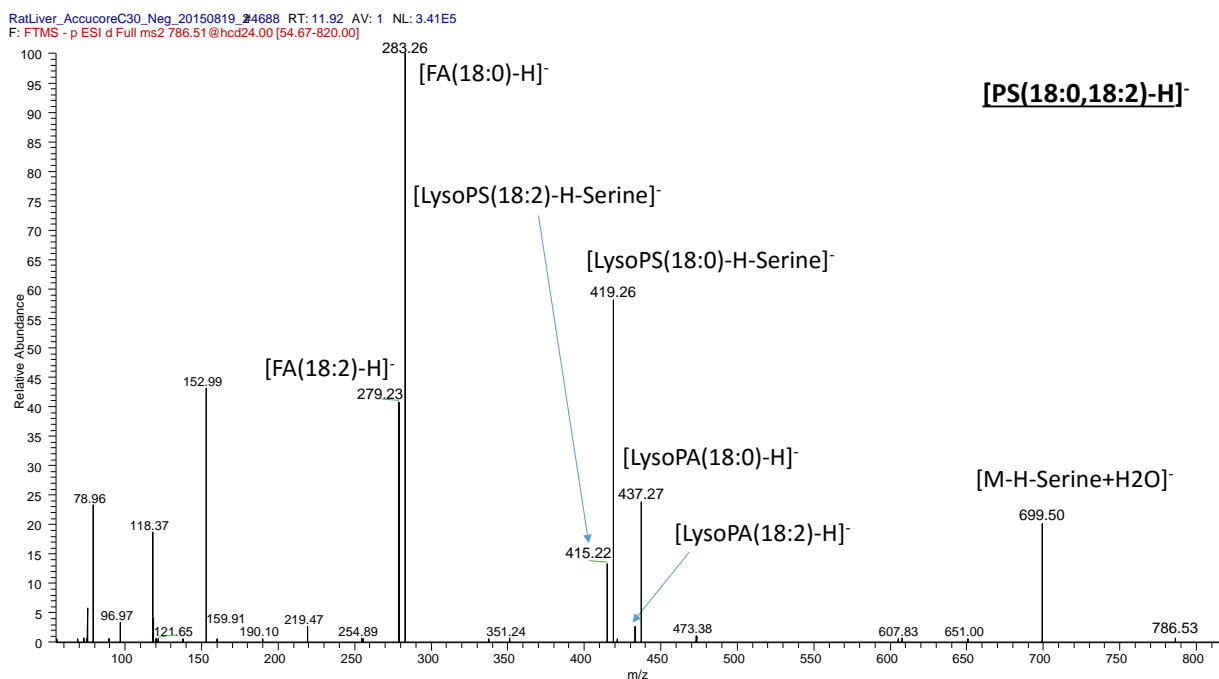
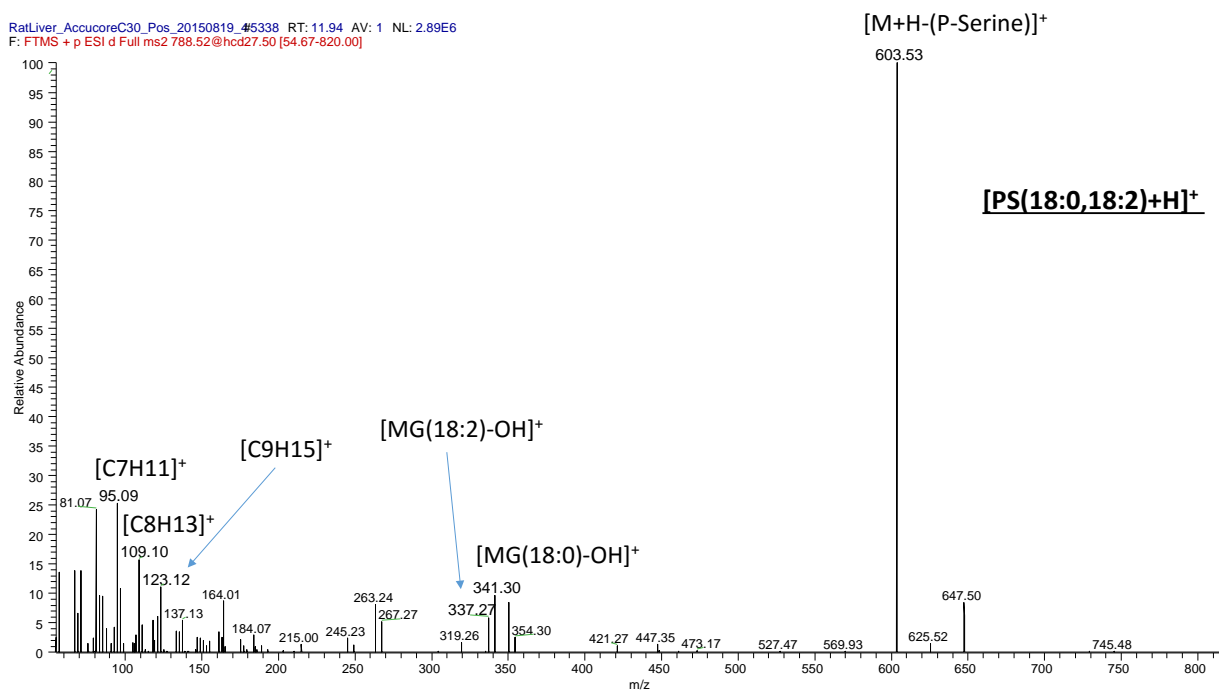


Figure S18: Example of MS/MS spectrum of a sphingosine (So) from a real sample (rat plasma) obtained using HCD fragmentation in positive ion mode.

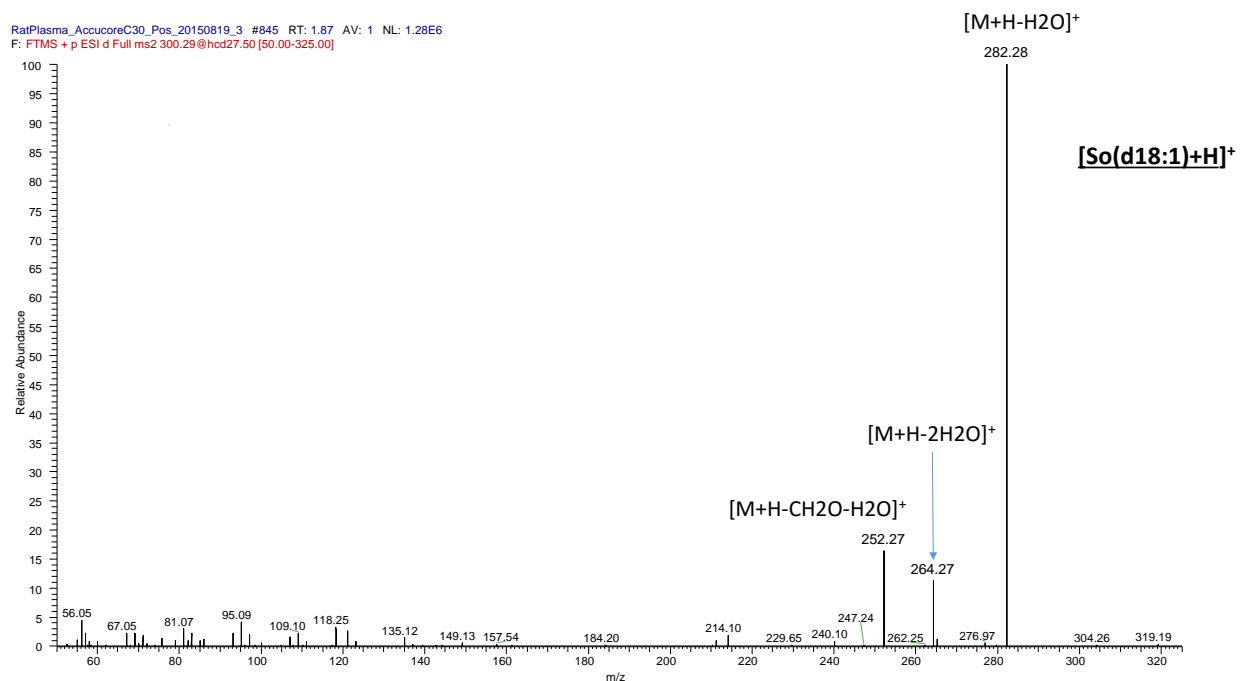
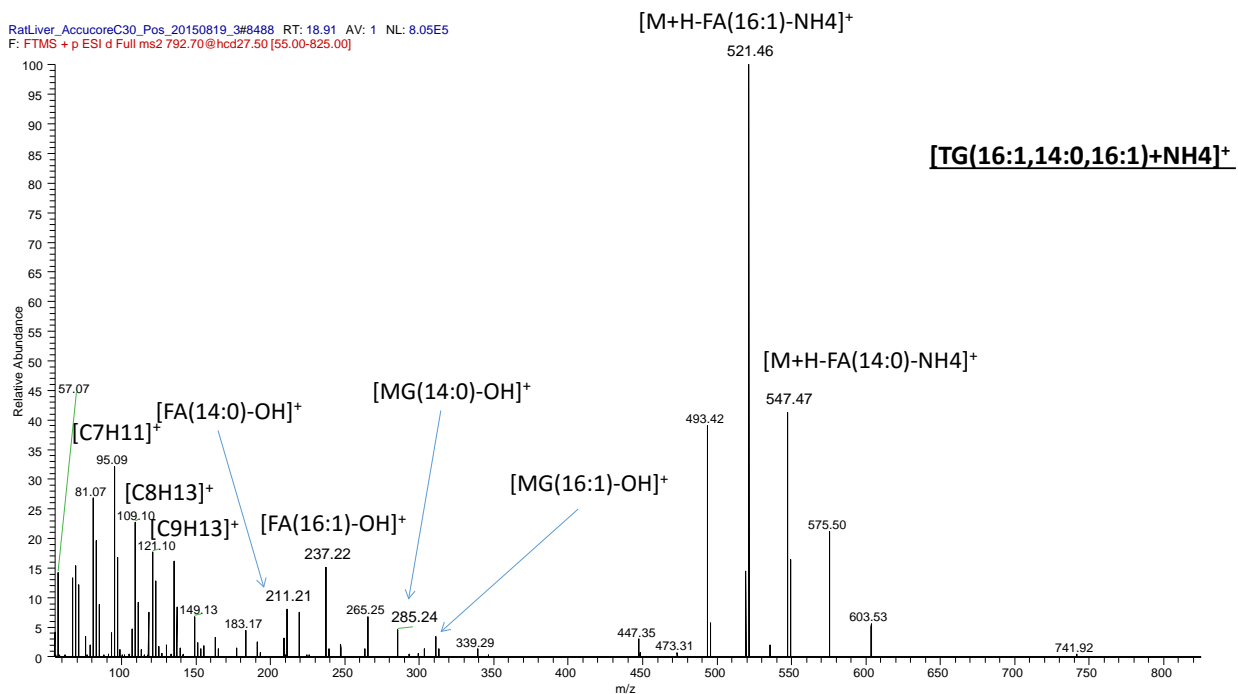
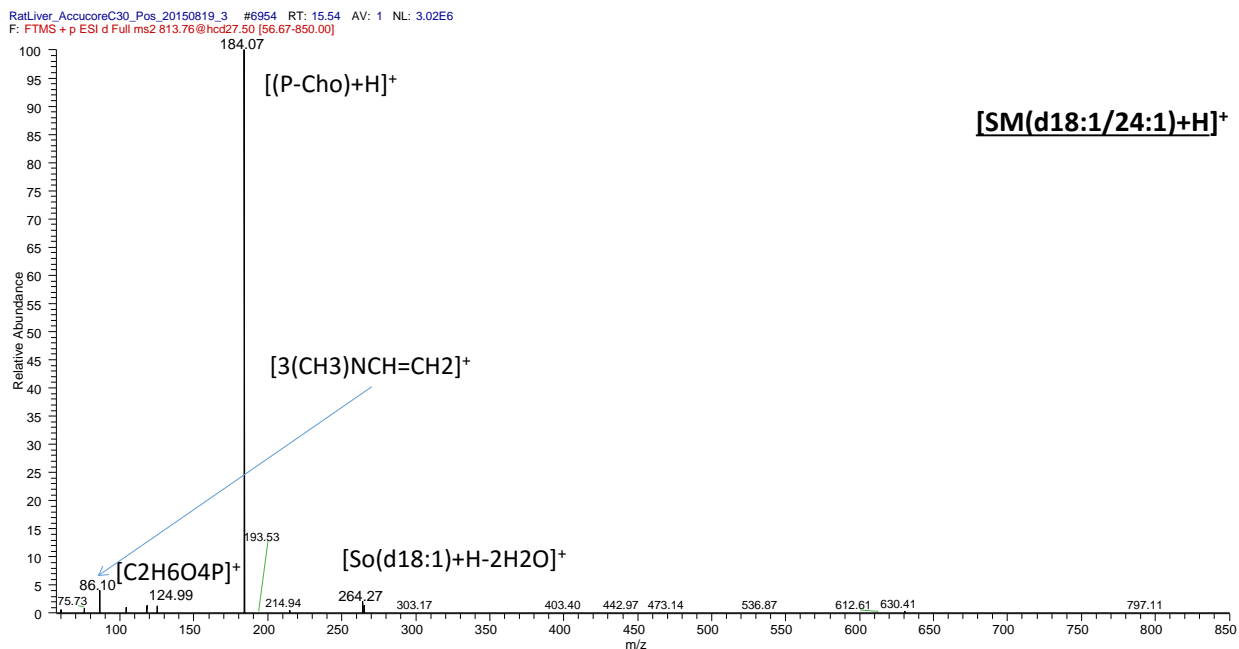


Figure S19: Example of MS/MS spectrum of a triacylglycerol from a real sample (rat liver) obtained using HCD fragmentation in positive ion mode.



Supplemental Figures for “Comprehensive untargeted lipidomic analysis using core-shell C30 particle column and high field orbitrap mass spectrometer”, by Mónica Narváez-Rivas and Qibin Zhang, *Journal of Chromatography A*.

Figure S20: Example of MS/MS spectrum of a sphingomyelin from a real sample (rat liver) obtained using HCD fragmentation in positive ion mode.



So: sphingosine