Supplementary Material

to

Comprehensive analysis of phospholipids in the brain, heart, kidney, and liver: brain phospholipids are least enriched with polyunsaturated fatty acids

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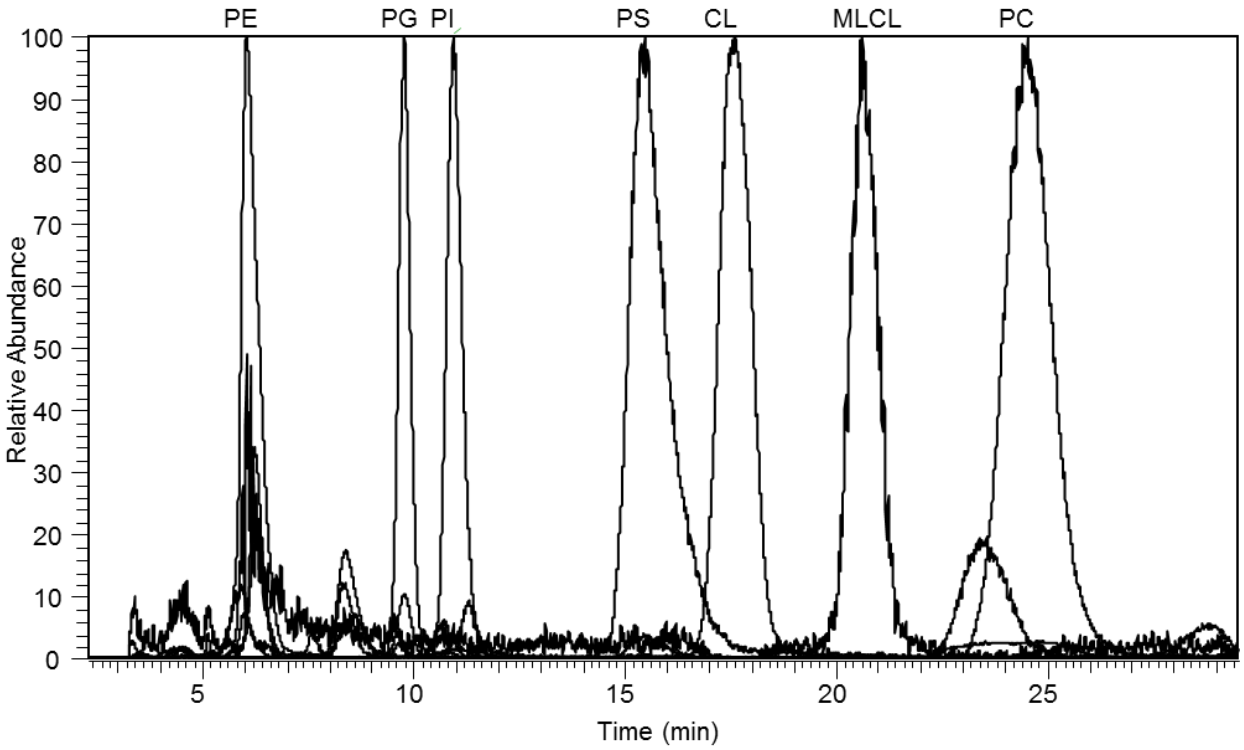
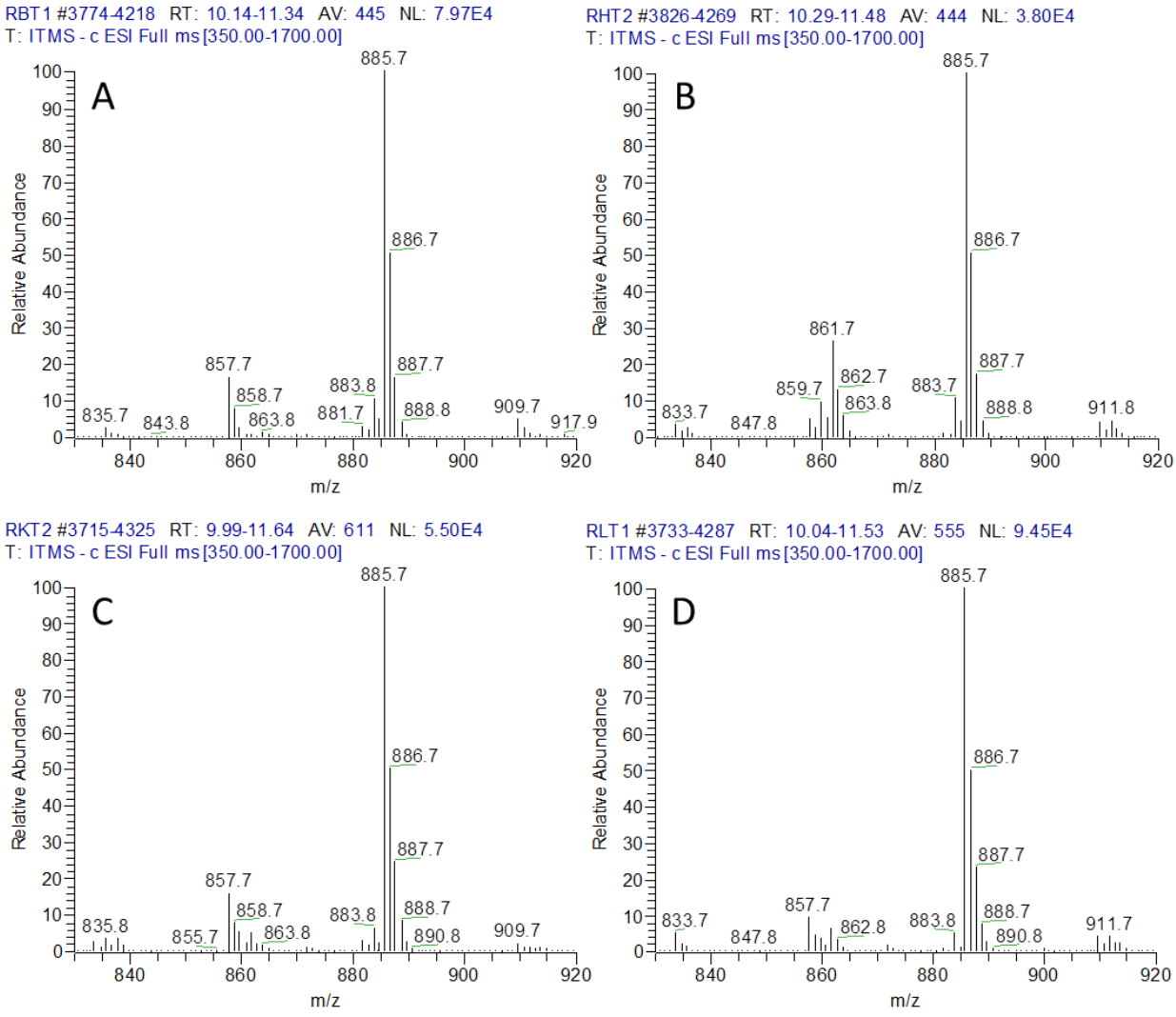
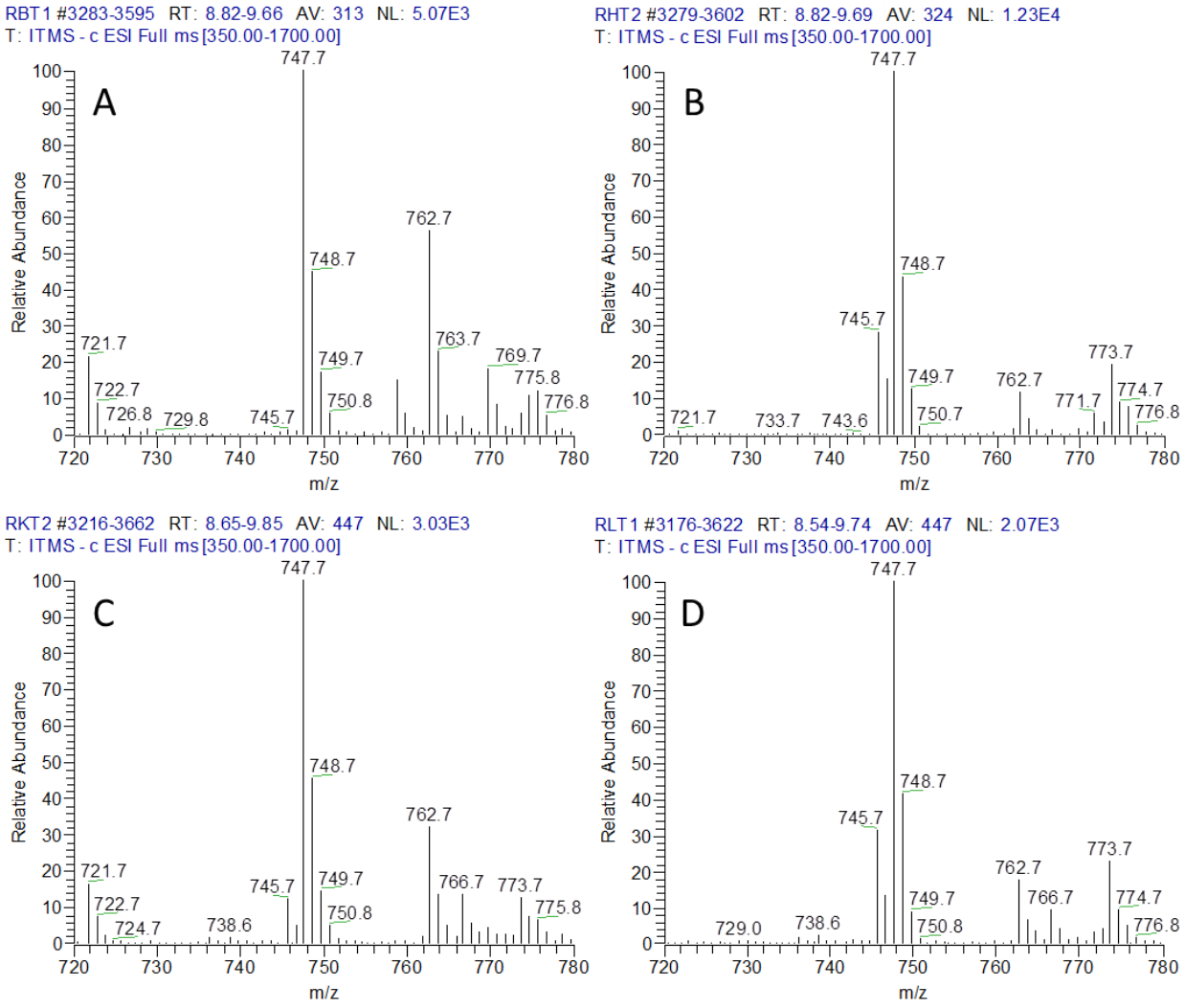
Supplementary Fig. 1. Ion chromatograms of individual classes of phospholipids extracted from whole heart tissue. Ion chromatograms are generated using the most abundant species of each class.



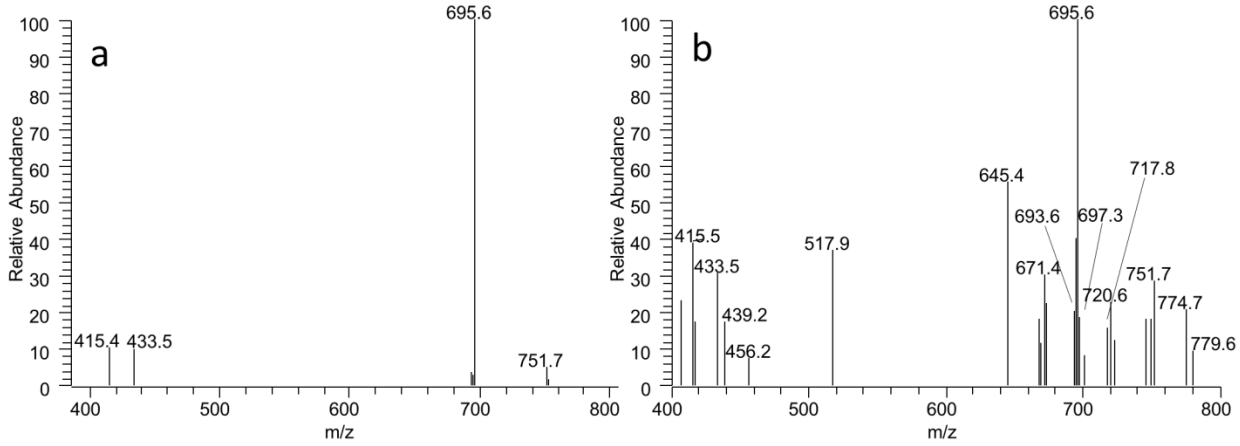
Supplementary Fig. 2. Mass spectra of PI in the brain (top left), heart (top right), kidney (bottom left), and liver (bottom right).



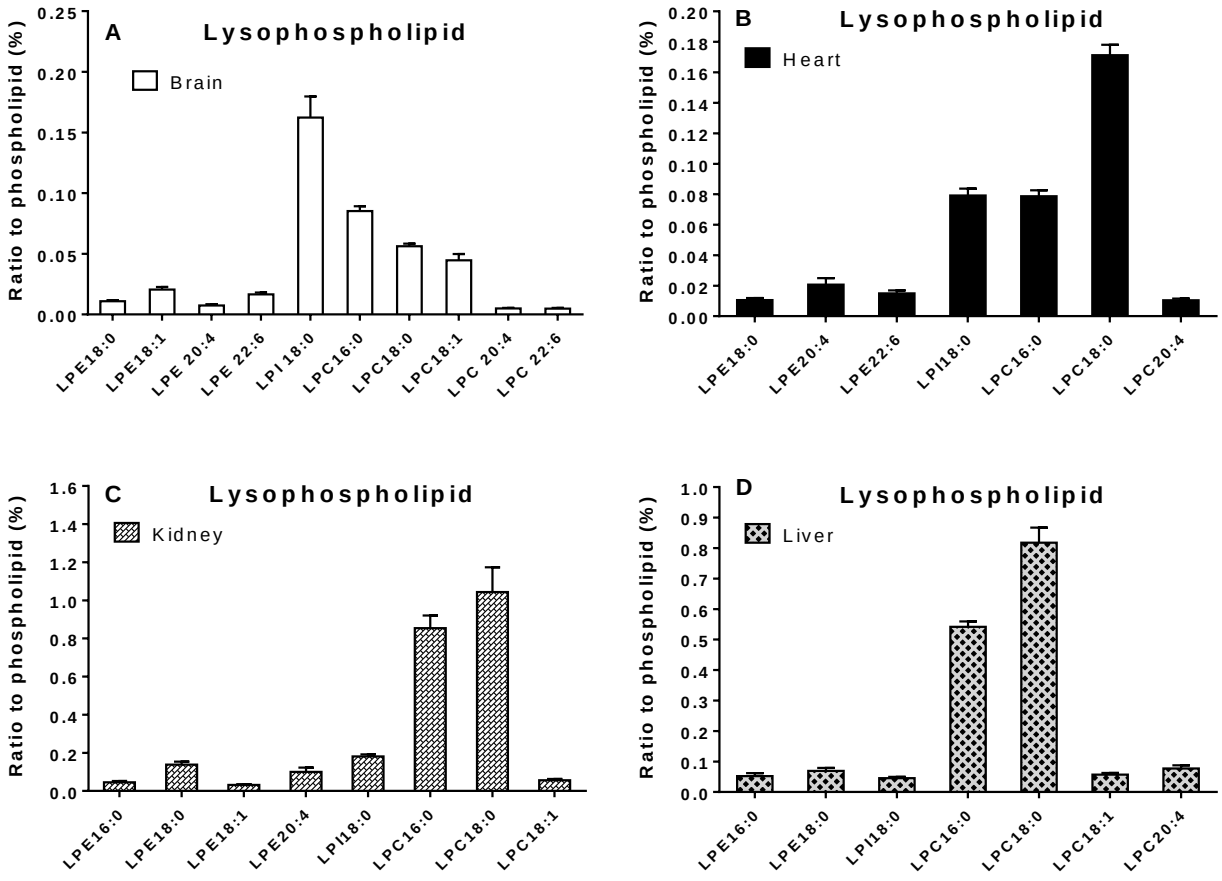
Supplementary Fig. 3. Mass spectra of PG in the brain (top left), heart (top right), kidney (bottom left), and liver (bottom right).



Supplementary Fig. 4. MS/MS spectra of the MS peak at m/z 1448 from the heart (A) and brain (B). The MS/MS spectra from heart tissue shows typical fragmentation pattern of $CL(18:2)_4$; the peak at 695 corresponds to a diacylglycerol moiety containing two 18:2 (A). In brain tissue, addition sets of peaks corresponding to diacylglycerol moiety, 671 and 719, 673 and 717, and 693 and 697, show the existence of at least 4 major isomers with molecular weight of 1448 (B)



Supplementary Fig. 5. The relative content of lysophospholipids compared to phospholipids in the brain (A), heart (B), kidney (C), and liver (D). LPC(16:0) and LPC(18:0) are significantly higher in kidney and liver tissues (data are presented as mean ± standard deviation, n=6).



Supplementary Fig. 6. The contents of free fatty acids in the brain, heart, kidney, and liver. Data are presented as mean ± standard deviation, n=4, * against brain, $p<0.05$).