

Table S1: Retention time (RT), peak area, peak height, peak width and theoretical plate numbers, with their standard deviations (SD), of standard lipids detected by LC-MS in negative and positive ion modes using the Accucore C30 column

Compound	RT (min)			Area		Height		Width		Number of plates	
	Mean	SD	%SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<u>Negative ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0) + LysoPC(14:0/0:0)	1.55	0.01	0.58	9.01E+09	2.83E+08	7.26E+08	2.75E+07	0.93	0.02	44	1
LysoPI(16:0/0:0) + LysoPG (18:1/0:0) + FA(12:0)	2.44	0.00	0.00	6.94E+09	2.61E+08	6.68E+08	3.20E+07	0.43	0.00	515	0
LysoPE(18:1/0:0)	2.84	0.00	0.00	4.05E+09	7.16E+07	4.54E+08	2.24E+07	0.72	0.03	247	17
FA(18:1)	5.67	0.01	0.24	6.95E+08	2.56E+07	1.35E+08	6.80E+06	0.26	0.03	7749	1859
PC(12:0/12:0)	6.21	0.00	0.00	2.25E+09	3.73E+07	3.37E+08	4.03E+06	0.29	0.01	7562	504
PE(12:0/12:0)	6.61	0.00	0.00	3.34E+09	1.17E+08	6.59E+08	3.66E+07	0.27	0.00	9589	0
LysoPC(22:0/0:0)	7.17	0.00	0.00	7.29E+08	6.13E+07	1.20E+08	7.77E+06	0.24	0.00	14280	0
SM(d18:1/12:0)	7.46	0.02	0.22	4.96E+09	2.06E+08	5.24E+08	9.12E+06	0.37	0.02	6602	573
PG(14:0/14:0) + PS(14:0/14:0)	8.38	0.02	0.25	8.31E+09	6.67E+08	6.80E+08	1.91E+07	0.65	0.02	2681	147
Cer(d18:1/12:0)	8.99	0.00	0.00	2.43E+09	1.70E+07	3.96E+08	9.86E+06	0.29	0.02	15716	1846
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	9.26	0.00	0.00	1.74E+09	4.27E+07	3.34E+08	1.19E+07	0.35	0.00	11200	0
PI(16:0/18:1(9Z))	11.35	0.00	0.00	1.54E+08	1.17E+07	2.41E+07	2.03E+06	0.24	0.00	35784	0
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	11.76	0.01	0.11	8.72E+09	9.45E+07	7.82E+08	2.10E+07	0.58	0.01	6624	240
PA(18:1(9Z)/18:1(9Z)) + Cer (d18:1/18:1(9Z)) + PC (18:1(9Z)/18:1(9Z))	12.39	0.01	0.07	6.75E+09	1.02E+08	7.36E+08	8.78E+06	0.53	0.00	8738	13
PE(18:1(9Z)/18:1(9Z))	12.86	0.01	0.10	2.19E+09	8.62E+07	3.03E+08	1.79E+07	0.30	0.00	29383	61
PC(P-18:0/20:4(5Z,8Z,11Z,14Z))	13.06	0.00	0.00	1.61E+09	5.25E+07	3.20E+08	1.23E+07	0.23	0.03	54749	16480
PC(P-18:0/18:1(9Z))	14.54	0.00	0.00	1.82E+09	6.26E+07	2.88E+08	7.10E+06	0.33	0.02	30614	3683
FA(26:0)	14.86	0.00	0.00	3.05E+08	3.52E+07	5.83E+07	5.32E+06	0.18	0.03	108953	28405
PE(P-18:0/18:1(9Z))+ SM (d18:1/24:1(15Z))	15.15	0.00	0.00	5.22E+09	1.39E+08	5.71E+08	2.79E+07	0.54	0.07	13145	3637
PC(22:1(13Z)/22:1(13Z))	17.19	0.00	0.00	1.82E+09	1.51E+07	3.02E+08	6.92E+06	0.35	0.05	41474	12022
CL (18:2) ₄	18.44	0.00	0.00	7.47E+08	7.33E+07	1.36E+08	2.01E+07	0.29	0.00	64691	0
CL (18:2) ₃ (18:1)	18.76	0.02	0.09	1.89E+08	2.56E+07	3.73E+07	1.40E+07	0.16	0.00	219914	385
CL (18:2) ₂ (18:1) ₂	18.91	0.06	0.30	3.08E+08	2.67E+07	3.53E+07	5.12E+06	0.34	0.02	50373	4754
<u>Positive ionization mode</u>											
LysoPG(14:0/0:0)	1.47	0.01	0.61	4.14E+09	4.06E+08	9.51E+08	5.56E+07	0.11	0.00	2842	35
LysoPC(14:0/0:0)	1.55	0.00	0.00	1.34E+10	1.32E+09	2.56E+09	9.83E+07	0.10	0.01	3743	1265
LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0)	1.63	0.00	0.00	2.27E+10	2.5E+09	2.8E+09	8.29E+07	0.30	0.02	469	49
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	2.44	0.01	0.37	2.51E+10	9.27E+08	2.09E+09	8.10E+07	0.50	0.04	385	61

Supplemental Tables 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*.

LysoPE(18:1(9Z)/0:0)	2.84	0.00	0.00	1.36E+10	7.66E+08	1.26E+09	2.63E+07	0.57	0.06	406	93
PC(12:0/12:0)	6.20	0.01	0.22	2.9E+10	5.81E+08	2.84E+09	3.59E+07	0.57	0.02	1915	140
PE(12:0/12:0)	6.57	0.02	0.25	1.51E+10	7.37E+08	2.13E+09	4.39E+07	0.21	0.00	15670	78
DG (12:1(11Z)/12:1(11Z)/0:0)	6.80	0.00	0.00	8.67E+09	9.06E+08	1.26E+09	1.19E+08	0.29	0.01	8606	862
LysoPC(22:0/0:0)	7.17	0.00	0.06	1.24E+10	1.41E+09	1.64E+09	1.96E+08	0.28	0.04	11071	2985
SM(d18:1/12:0)	7.50	0.00	0.00	4.57E+10	4.34E+09	3.48E+09	1.75E+08	0.54	0.04	3126	431
PG(14:0/14:0) + PS(14:0/14:0)	8.48	0.02	0.26	3.57E+10	3.23E+09	1.75E+09	2.47E+07	0.58	0.04	3502	441
Cer(d18:1/12:0)	9.01	0.01	0.12	3.18E+10	1.44E+09	3.49E+09	1.06E+08	0.33	0.04	12144	3417
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	9.24	0.00	0.00	2.18E+10	5.7E+08	2.66E+09	3.85E+07	0.32	0.02	13483	1811
PI(16:0/18:1(9Z))	11.34	0.02	0.14	1.59E+09	2.18E+08	2.21E+08	4.69E+07	0.19	0.02	57502	13671
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	11.78	0.07	0.61	3.11E+10	6.48E+08	1.77E+09	4.57E+07	0.58	0.04	6720	924
PA(18:1(9Z)/18:1(9Z)) + Cer (d18:1/18:1(9Z))	12.37	0.00	0.00	6.8E+10	2.61E+09	4.88E+09	1.73E+08	0.54	0.01	8470	396
+ PC(18:1(9Z)/18:1(9Z))	12.85	0.00	0.00	2.01E+10	4.55E+08	2.03E+09	4.33E+07	0.27	0.00	36241	0
PE(18:1(9Z)/18:1(9Z))		0.00									
PC(P-18:0/20:4(5Z,8Z,11Z,14Z))	13.09		0.00	5.79E+10	1.71E+09	3.4E+09	9.74E+07	0.61	0.04	7522	791
+ TG (12:1(11Z)/12:1(11Z)/12:1(11Z))											
DG(14:0/14:0/0:0)	13.34	0.02	0.15	4.13E+09	6.17E+08	6.94E+08	8.83E+07	0.19	0.00	90025	208
PC(P-18:0/18:1(9Z))	14.51	0.00	0.00	2.6E+10	1.59E+09	2.62E+09	1.45E+08	0.40	0.00	29140	0
DG(18:1/18:1/0:0)	14.87	0.02	0.15	5.23E+09	7.92E+08	6.01E+08	2.70E+07	0.22	0.02	72513	16511
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z))	15.13	0.00	0.00	3.03E+10	7.48E+08	2.65E+09	7.15E+07	0.57	0.00	11354	182
PC(22:1(13Z)/22:1(13Z))	17.13	0.00	0.00	2.08E+10	6.3E+08	1.58E+09	3.06E+07	0.49	0.03	19687	2054
CL(18:2) ₄	18.47	0.00	0.00	3.58E+09	1.09E+09	6.6E+08	1.15E+08	0.15	0.02	253026	56923
TG(14:0/14:0/14:0) + DG (22:1(13Z)/22:1(13Z)/0:0)	18.87	0.00	0.00	1.77E+10	4.05E+08	2.78E+09	3.02E+07	0.35	0.02	46932	5874
TG(16:0/16:0/16:0)	20.45	0.00	0.00	2.68E+09	3.1E+08	6.78E+08	7.02E+07	0.18	0.03	221546	57026
TG(22:1(13Z)/22:1(13Z)/22:1(13Z))	22.33	0.00	0.00	2.02E+10	4.44E+08	3.29E+09	5.97E+07	0.26	0.05	129294	67124

Cer: ceramide, CL: cardiolipin, DG: diacylglycerol, FA: fatty acid, LysoPC: lysophosphatidylcholine, LysoPE: lysophosphatidylethanolamine, LysoPG: lysophosphatidylglycerol, LysoPI: lysophosphatidylinositol, PA: phosphatidic acid, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PL: plasmalogen, PS: phosphatidylserine, SM: sphingomyelin, TG: triacylglycerol

Table S2: Retention time (RT), peak area, peak height, peak width and theoretical plate numbers, with their standard deviations (SD), of standard lipids detected by LC-MS in negative and positive ion modes using the Cortecs C18 column

Compound	RT (min)			Area		Height		Width		Number of plates	
	Mean	SD	%SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	n		D					n			
<u>Negative ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0) + LysoPC(14:0/0:0)	1.02	0.0	0.0	9.2E+09	7.98E+07	9.29E+08	2.96E+07	0.56	0.0	52	3
		0.0	0.0	6.76E+09	1.50E+08	7.62E+08	2.47E+07		0.0		
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	1.61	0	0	9	8	8	7	0.37	0	303	0
		0.0	0.0	5.02E+09	7.54E+07	6.33E+08	1.34E+07		0.0		
FA(12:0) + LPE(18:1(9Z)/0:0)	2.11	0	0	9	7	8	7	0.59	5	207	35
		0.0	0.2	4.02E+09	1.01E+08	7.27E+08	2.39E+07		0.0		
FA(18:1(9Z))	4.91	1	7	8	7	7	6	0.27	0	5365	180
		0.0	0.0	2.32E+09	2.90E+07	3.69E+08	8.37E+06		0.0		
PC(12:0/12:0)	5.41	0	0	9	7	8	6	0.39	4	3128	655
		0.0	0.0	3.61E+09	6.94E+07	3.48E+08	7.46E+06		0.0		
PE(12:0/12:0)	5.97	0	0	9	7	8	6	0.52	1	2128	89
		0.0	0.0	2.06E+09	2.25E+07	3.69E+08	5.94E+06		0.0		
LysoPC(22:0/0:0)	6.37	0	0	9	7	8	6	0.39	1	4233	240
		0.0	0.0	3.78E+09	2.77E+07	6.09E+08	1.49E+06		0.0		
SM(d18:1/12:0)	6.80	0	0	9	7	8	7	0.44	1	3862	190
		0.0	0.2	7.25E+09	5.04E+07	6.62E+08	2.53E+06		0.0		
PG(14:0/14:0) + PS(14:0/14:0)	7.35	2	2	9	7	8	7	0.83	3	1264	92
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	8.27	0	0	9	7	8	7	0.37	4	8330	1348
		0.0	0.0	2.45E+09	2.58E+07	4.53E+08	1.18E+06		0.0		
Cer(d18:1/12:0)	8.54	0	0	9	7	8	7	0.27	3	16429	3496
		0.0	0.0		1.01E+08	4.88E+08	1.63E+06		0.0		
PI(16:0/18:1(9Z))	9.96	0	0	2.4E+08	7	7	6	0.20	3	41625	13852
	10.2	0.0	0.0	6.19E+09	4.99E+07	5.75E+08	2.87E+06		0.0		
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	5	0	0	9	7	8	7	0.75	4	3038	290
	11.1	0.0	0.0	3.01E+09	3.38E+07		7.03E+06		0.0		
PA(18:1(9Z)/18:1(9Z))	4	0	0	9	7	3.5E+08	6	0.38	3	13867	2433

Supplemental Tables 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*.

PC (18:1/18:1)	11.3	0.0	0.0	2.19E+0	8.14E+0	3.39E+0	7.86E+0	0.0	0.0	18603	2735
PC(P-18:0/20:4(5Z,8Z,11Z,14Z) + Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	2	0	0	9	7	8	6	0.33	2		
	11.8	0.0	0.0	9.11E+0	1.83E+0	7.9E+08	2.92E+0	0.65	0.0	5390	1139
	1	0	0	9	8	7	7		7		
FA(26:0)	13.1	0.0	0.1		7.71E+0	7.12E+0	3.06E+0		0.0	16406	
	6	1	0	3.4E+08	6	7	6	0.13	0	3	334
PC(P-18:0/18:1(9Z))	13.3	0.0	0.0	1.59E+0	1.65E+0	2.78E+0	6.30E+0		0.0		
	0	0	0	9	7	8	6	0.30	3	31254	5564
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z))	13.9	0.0	0.0	4.49E+0	3.71E+0	4.76E+0	2.10E+0		0.0		
	7	0	0	9	7	8	7	0.67	5	7062	1095
PC(22:1(13Z)/22:1(13Z))	16.0	0.0	0.0	1.73E+0	3.69E+0	3.08E+0	9.72E+0		0.0		
	4	0	0	9	7	8	6	0.35	3	34299	5777
CL(18:2) ₄	17.5	0.0	0.0	1.24E+0	3.52E+0	2.05E+0	8.77E+0		0.0		
	1	0	0	9	7	8	6	0.38	1	34799	2314
CL(18:2) ₃ (18:1)	17.7	0.0	0.0	8.94E+0	3.64E+0	2.23E+0	1.31E+0		0.0	78765	
	5	0	0	7	6	7	6	0.08	0	6	0
CL(18:2) ₂ (18:1) ₂	17.8	0.0	0.0		1.61E+0	4.69E+0	2.26E+0		0.0		
	7	1	6	3.6E+08	7	7	6	0.30	0	56784	70
<u>Positive ionization mode</u>											
LysoPG(14:0/0:0)	1.04	0.0	0.8	1.83E+1	7.11E+0	2.25E+0	9.01E+0		0.0		
		1	6	0	8	9	7	0.22	0	355	6
LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0) + LysoPC(14:0/0:0)	1.15	0.0	0.0	2.28E+1	8.45E+0	2.7E+09	6.65E+0		0.0		
		0	0	0	8	7	7	0.34	2	186	19
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	1.61	0.0	0.0	2.13E+1		2.13E+0	6.46E+0		0.0		
		0	0	0	6.9E+08	9	7	0.39	2	277	24
LysoPE(18:1(9Z)/0:0)	2.07	0.0	0.6	1.29E+1	5.23E+0	1.16E+0	4.42E+0		0.0		
		1	5	0	8	9	7	0.54	3	236	27
PC(12:0/12:0)	5.41	0.0	0.0	2.47E+1	7.69E+0	2.95E+0	1.20E+0		0.0		
		0	0	0	8	9	8	0.47	1	2141	99
PE(12:0/12:0)	5.96	0.0	0.2	1.68E+1	7.44E+0	2.02E+0	7.51E+0		0.0		
		2	8	0	8	9	7	0.25	1	8985	792
DG(12:1(11Z)/12:1(11Z)/0:0)	6.08	0.0	0.0			1.87E+0	4.20E+0		0.0		
		0	0	1.4E+10	3.9E+08	9	7	0.24	0	10268	0
LysoPC(22:0/0:0)	6.35	0.0	0.1	2.23E+1	5.27E+0		7.36E+0		0.0		
		1	4	0	8	2.6E+09	7	0.41	2	3899	354
SM(d18:1/12:0)	6.79	0.0	0.2	2.42E+1	1.35E+0		1.34E+0		0.0		
		2	4	0	9	2.7E+09	8	0.41	7	4816	1854

Supplemental Tables 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*.

PG(14:0/14:0) + PS(14:0/14:0)	7.38	0.0	0.6	3.05E+1	7.61E+0	1.72E+0	4.63E+0	0.57	1	2723	135
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	8.25	0.0	0.0	2.05E+1	5.43E+0	2.68E+0	9.37E+0	0.35	3	9214	1352
Cer(d18:1/12:0)	8.56	0.0	0.2	2.68E+1	5.18E+0	3.42E+0	7.60E+0	0.31	2	12367	2098
PI(16:0/18:1(9Z))	9.95	0.0	0.1	2.21E+0	1.26E+0		1.95E+0	0.18	2	49511	11695
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	10.2	0.0	0.2	3.32E+1	8.26E+0	1.77E+0	3.96E+0	0.52	2	6323	433
PA(18:1(9Z)/18:1(9Z))	8	0.0	0.2	1.47E+1	3.63E+0	1.38E+0	5.97E+0	0.29	2	23076	3495
PC(18:1(9Z)/18:1(9Z))	11.3	0.0	0.0	3.99E+1	1.19E+0	3.09E+0	9.23E+0	0.43	0	11081	18
Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	2	0.0	0.0	6.14E+1	1.78E+0	4.43E+0	1.78E+0	0.50	1	9202	344
PC(P-18:0/20:4(5Z,8Z,11Z,14Z))	9	0.0	0.0	8.77E+0	3.06E+0	1.48E+0	4.73E+0	0.18	1	70563	11962
TG(12:1(11Z)/12:1(11Z)/12:1(11Z))	12.3	0.0	0.1	3.61E+1	7.43E+0	2.68E+0	7.38E+0	0.63	2	6200	466
PC(P-18:0/18:1(9Z))	8	0.0	0.1	2.42E+1	8.42E+0	2.54E+0	8.18E+0	0.43	4	15348	2572
PE(P-18:0/18:1(9Z)) + SM (d18:1/24:1(15Z))	13.9	0.0	0.0		9.11E+0	2.48E+0	7.65E+0	0.49	1	12769	446
DG(18:1(9Z)/18:1(9Z)/0:0)	5	0.0	0.0	2.7E+10	8	9	7	0.20	2	83867	15129
PC(22:1(13Z)/22:1(13Z))	14.3	0.0	0.0	3.07E+0	1.43E+0	5.27E+0	3.59E+0	0.36	3	32709	4080
CL(18:2)4	16.0	0.0	0.0	1.93E+1	8.17E+0	1.49E+0	3.17E+0	0.31	1	49991	4662
DG(22:1(13Z)/22:1(13Z)/0:0)	17.5	0.0	0.0	7.72E+0	3.56E+0	9.26E+0	1.00E+0	0.30	1	58124	4818
TG(14:0/14:0/14:0)	17.8	0.0	0.0	5.93E+0	4.31E+0	1.01E+0	4.70E+0	0.28	2	66496	7477
TG(16:0/16:0/16:0)	0	0.0	0.3	9	8	9	7	0.21	7	7	3
TG(22:1(13Z)/22:1(13Z)/22:1(13Z))	18.1	0.0	0.0	1.42E+1	6.33E+0	2.41E+0	8.46E+0	0.23	1	7	14807
	19.5	0.0	0.0	4.59E+0	8.53E+0		6.16E+0			18121	12203
	3	0.0	0.0	9	8	1E+09	8			14013	
	21.0	0.0	0.0	1.75E+1	7.98E+0	3.42E+0	8.21E+0				
	7	0.0	0.0	0	8	9	7				

Supplemental Tables 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*.

Cer: ceramide, CL: cardiolipin, DG: diacylglycerol, FA: fatty acid, LysoPC: lysophosphatidylcholine, LysoPE: lysophosphatidylethanolamine, LysoPG: lysophosphatidylglycerol, LysoPI: lysophosphatidylinositol, PA: phosphatidic acid, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PL: plasmalogen, PS: phosphatidylserine, SM: sphingomyelin, TG: triacylglycerol

Table S3: Retention time (RT), peak area, peak height, peak width and theoretical plate numbers, with their standard deviations (SD), of standard lipids detected by LC-MS in negative and positive ion modes using the HSST3 column

Compound	RT (min)			Area		Height		Width		Number of plates	
	Mean	SD	%SD	Mean	SD	Mean	SD	Mean	SD	MEAN	SD
<u>Negative ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0)	1.53	0.00	0.00	6.91E+09	2.47E+08	8.82E+08	3.81E+07	0.29	0.00	445	0
LysoPC(14:0/0:0)	1.71	0.01	0.52	2.32E+09	1.35E+08	3.5E+08	1.53E+07	0.32	0.06	509	245
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	2.54	0.01	0.35	6.67E+09	3.47E+08	6.87E+08	4.64E+07	0.51	0.04	396	62
FA(12:0) + LPE(18:1(9Z)/0:0)	3.19	0.00	0.00	4.98E+09	1.36E+08	5.83E+08	1.47E+07	0.65	0.08	393	82
PC(12:0/12:0) + FA (18:1(9Z))	6.67	0.01	0.13	2.19E+09	7.73E+07	3.65E+08	1.91E+07	0.32	0.05	7228	2370
PE(12:0/12:0)	7.04	0.00	0.00	2.75E+09	3.61E+07	3.85E+08	1.84E+07	0.37	0.00	5792	0
LysoPC(22:0/0:0)	7.69	0.02	0.21	2.96E+09	4.32E+07	3.04E+08	8.89E+06	0.54	0.00	3246	14
SM(d18:1/12:0)	7.94	0.02	0.21	3.99E+09	6.95E+07	5.23E+08	1.87E+07	0.46	0.02	4737	318
PS(14:0/14:0)	8.46	0.00	0.00	3.62E+09	6.28E+07	6.9E+08	2.02E+07	0.23	0.02	22315	3333
PG(14:0/14:0)	8.62	0.00	0.00	6.67E+09	7.31E+07	6.63E+08	1.57E+07	0.48	0.03	5178	759
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	9.78	0.01	0.14	1.88E+09	4.11E+07	3.14E+08	3.37E+06	0.28	0.03	20492	3898
Cer(d18:1/12:0)	9.99	0.00	0.00	3.61E+09	5.74E+07	4.14E+08	1.08E+07	0.41	0.01	9711	601
PI(16:0/18:1(9Z))	11.39	0.01	0.10	3.13E+08	9.93E+06	4.88E+07	1.05E+06	0.32	0.05	21749	8318
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	11.83	0.01	0.08	6.89E+09	1.23E+08	6.26E+08	2.35E+07	0.88	0.04	2928	241
PA(18:1(9Z)/18:1(9Z)) + PC(18:1(9Z)/18:1(9Z))	12.72	0.00	0.00	6.11E+09	1.44E+08	4.04E+08	1.43E+07	0.63	0.01	6613	283
PC(P-18:0/20:4(5Z,8Z,11Z,14Z)+ Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	13.33	0.00	0.00	1.02E+10	1.84E+08	8.54E+08	1.81E+07	0.79	0.01	4513	153
PC(P-18:0/18:1(9Z))	14.74	0.01	0.09	2.02E+09	8.22E+07	2.63E+08	1.32E+07	0.42	0.07	21429	6558
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z)) + FA(26:0)	15.37	0.00	0.00	5.05E+09	6.57E+07	5.82E+08	1.64E+07	0.57	0.05	11908	1987
PC(22:1(13Z)/22:1(13Z))	17.13	0.01	0.05	1.87E+09	2.36E+07	2.74E+08	6.68E+06	0.45	0.03	23724	3779
CL(18:2) ₄	18.23	0.00	0.00	1.38E+09	6.51E+07	2.14E+08	1.16E+07	0.35	0.02	43803	5482
CL(18:2) ₃ (18:1)	18.55	0.00	0.00	2.89E+08	5.21E+07	3.69E+07	3.82E+06	0.24	0.02	93707	13884
CL(18:2) ₂ (18:1) ₂	18.87	0.02	0.11	2.67E+08	4.20E+07	2.74E+07	3.48E+06	0.27	0.00	78135	170
<u>Positive ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0)	1.55	0.00	0.00	1.92E+10	2.66E+09	2.23E+09	1.61E+08	0.29	0.02	467	97
LysoPC(14:0/0:0)	1.70	0.01	0.59	2.19E+10	2.95E+09	2.55E+09	1.67E+08	0.46	0.08	222	71
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	2.53	0.01	0.46	2.02E+10	3.69E+09	1.98E+09	1.73E+08	0.52	0.08	396	166
LysoPE(18:1(9Z)/0:0)	3.13	0.00	0.00	1.19E+10	2.12E+09	1.14E+09	9.96E+07	0.48	0.00	680	0

Supplemental Tables 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*.

PC(12:0/12:0)	6.66	0.02	0.23	2.5E+10	1.08E+09	3.01E+09	8.69E+07	0.33	0.02	6554	689
PE(12:0/12:0)	7.05	0.02	0.21	1.6E+10	1.27E+09	2.09E+09	1.56E+07	0.26	0.03	13246	4101
DG(12:1(11Z)/12:1(11Z)/0:0)	7.36	0.00	0.00	1.09E+10	3.16E+09	1.41E+09	1.56E+08	0.27	0.06	12142	5032
LysoPC(22:0/0:0)	7.68	0.00	0.00	2.01E+10	1.19E+09	2.38E+09	8.92E+07	0.28	0.03	12452	3405
SM(d18:1/12:0)	7.93	0.02	0.19	2.5E+10	1.67E+09	2.51E+09	1.22E+08	0.45	0.11	4106	462
PS(14:0/14:0)	8.45	0.02	0.18	4.89E+09	5.87E+08	8.8E+08	1.47E+08	0.19	0.02	33296	10651
PG(14:0/14:0)	8.63	0.07	0.78	2.64E+10	2.17E+09	1.64E+09	3.06E+07	0.50	0.10	5038	1824
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	9.77	0.00	0.00	2.11E+10	1.57E+09	2.52E+09	4.91E+07	0.31	0.03	16111	4366
Cer(d18:1/12:0)	9.99	0.02	0.24	3.52E+10	1.86E+09	3.3E+09	9.36E+07	0.35	0.02	13426	2037
PI(16:0/18:1(9Z))	11.39	0.01	0.10	2.1E+09	4.42E+08	3.61E+08	8.35E+07	0.26	0.03	27195	2215
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	11.86	0.05	0.40	2.95E+10	3.36E+09	1.66E+09	3.31E+07	0.57	0.03	7378	332
DG(14:0/14:0/0:0)	12.24	0.01	0.12	4.66E+09	9.31E+08	7.1E+08	1.41E+08	0.27	0.01	32882	93
PA(18:1(9Z)/18:1(9Z))	12.57	0.03	0.20	1.37E+10	1.9E+09	1.43E+09	8.71E+07	0.25	0.01	43844	201
PC(18:1(9Z)/18:1(9Z))	12.77	0.00	0.00	4.22E+10	3.12E+09	2.96E+09	9.69E+07	0.41	0.01	15575	1268
PC(P-18:0/20:4(5Z,8Z,11Z,14Z)+ Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	13.43	0.02	0.13	6.93E+10	4.43E+09	4.13E+09	2.03E+08	0.66	0.01	6419	17
TG(12:1(11Z)/12:1(11Z)/12:1(11Z))	14.19	0.02	0.17	3.98E+10	3.15E+09	2.77E+09	8.88E+07	0.45	0.01	15983	1312
DG(18:1(9Z)/18:1(9Z)/0:0)	14.53	0.01	0.10	3.09E+09	6.32E+08	4.05E+08	7.27E+07	0.16	0.00	131951	314
PC(P-18:0/18:1(9Z))	14.74	0.01	0.10	2.78E+10	2.3E+09	2.37E+09	1.28E+08	0.47	0.02	16473	1182
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z))	15.37	0.00	0.00	2.69E+10	2.48E+09	2.44E+09	1.73E+08	0.51	0.03	14829	1740
PC(22:1(13Z)/22:1(13Z))	17.07	0.02	0.10	2.08E+10	1.13E+09	1.47E+09	8.10E+07	0.55	0.07	16396	4782
CL(18:2) ₄	18.26	0.03	0.16	9.35E+09	1.44E+09	8.77E+08	9.30E+07	0.38	0.03	37425	5943
CL(18:2) ₃ (18:1)	18.57	0.03	0.16	2.21E+09	5.15E+08	2.78E+08	5.25E+07	0.18	0.01	170294	636
DG(22:1(13Z)/22:1(13Z)/0:0)	18.78	0.01	0.05	5.35E+09	7.6E+08	7.8E+08	4.76E+07	0.20	0.02	143333	26864
TG(14:0/14:0/14:0)	18.98	0.00	0.00	1.19E+10	1.25E+09	2.13E+09	1.86E+08	0.21	0.01	122958	6704
TG(16:0/16:0/16:0)	20.29	0.01	0.05	2.36E+09	2.88E+08	5.17E+08	6.54E+07	0.11	0.00	544376	0
TG(22:1(13Z)/22:1(13Z)/22:1(13Z))	21.84	0.01	0.05	1.9E+10	1.44E+09	3.12E+09	1.51E+08	0.29	0.03	84746	90

Cer: ceramide, CL: cardiolipin, DG: diacylglycerol, FA: fatty acid, LysoPC: lysophosphatidylcholine, LysoPE: lysophosphatidylethanolamine, LysoPG: lysophosphatidylglycerol, LysoPI: lysophosphatidylinositol, PA: phosphatidic acid, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PL: plasmalogen, PS: phosphatidylserine, SM: sphingomyelin, TG: triacylglycerol

Table S4: Retention time (RT), peak area, peak height, peak width and theoretical plate numbers, with their standard deviations (SD), of standard lipids detected by LC-MS in negative and positive ion modes using the Kinetex C18 column

Compound	RT (min)			Area		Height		Width		Number of plates	
	Mean	SD	%SD	Mean	SD	Mean	SD	Mean	SD	MEAN	SD
<u>Negative ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0) + LysoPC(14:0/0:0)	0.91	0.03	3.30	9.74E+09	1.11E+08	8.99E+08	2.11E+07	0.42	0.00	75	5
LysoPI(16:0/0:0) + LysoPG(18:1(9Z)/0:0)	1.34	0.00	0.00	6.83E+09	2.01E+08	8.12E+08	3.37E+07	0.30	0.00	319	0
FA(12:0) + LysoPE(18:1(9Z)/0:0)	1.71	0.00	0.00	5.06E+09	1.13E+08	5.06E+08	2.82E+07	0.56	0.00	149	0
FA(18:1(9Z))	4.13	0.02	0.40	4.52E+08	7.31E+06	7.81E+07	1.08E+06	0.23	0.02	5082	831
PC(12:0/12:0)	4.42	0.00	0.00	2.68E+09	5.23E+07	3.82E+08	8.54E+06	0.38	0.01	2217	147
PE(12:0/12:0)	4.86	0.01	0.23	3.09E+09	1.17E+08	3.77E+08	1.35E+07	0.31	0.01	3847	351
LysoPC(22:0/0:0)	5.19	0.00	0.00	3.69E+09	2.03E+08	4.06E+08	1.80E+07	0.68	0.04	928	108
SM(d18:1/12:0)	5.86	0.01	0.15	4.56E+09	1.06E+08	5.58E+08	2.30E+07	0.43	0.00	2967	9
PS(14:0/14:0)	6.18	0.00	0.00	1.25E+09	7.62E+07	1.44E+08	9.33E+06	0.27	0.04	9197	3430
PG(14:0/14:0)	6.42	0.01	0.14	7.98E+09	4.14E+08	8.12E+08	2.01E+07	0.47	0.06	3075	628
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	7.42	0.00	0.00	3.58E+09	1.19E+08	8.39E+08	4.08E+07	0.21	0.01	20860	1980
Cer(d18:1/12:0)	7.66	0.00	0.00	2.88E+09	4.35E+07	4.97E+08	1.42E+07	0.33	0.04	9013	1868
PI(16:0/18:1(9Z))	8.59	0.00	0.00	1.51E+08	1.24E+07	3.17E+07	2.77E+06	0.27	0.02	16015	2912
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	8.97	0.01	0.10	6.31E+09	4.28E+07	6.3E+08	6.48E+06	0.62	0.05	3348	441
PA(18:1(9Z)/18:1(9Z))	9.65	0.01	0.11	1.69E+09	8.14E+07	1.54E+08	1.33E+07	0.45	0.05	7457	1737
PC(18:1(9Z)/18:1(9Z))	10.04	0.00	0.00	2.53E+09	1.23E+07	3.14E+08	6.31E+06	0.43	0.02	8843	766
PC(P-18:0/20:4(5Z,8Z,11Z,14Z) + Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	10.55	0.00	0.00	8.49E+09	7.74E+07	1.06E+09	3.51E+07	0.69	0.09	3948	1351
FA(26:0/26:0)	11.63	0.01	0.09	1.8E+08	2.11E+07	2.59E+07	3.24E+06	0.16	0.00	84507	159
PC(P-18:0/18:1(9Z))	11.81	0.00	0.00	1.85E+09	8.61E+07	2.3E+08	1.74E+07	0.42	0.08	14175	7125
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z))	12.42	0.00	0.00	4.84E+09	2.97E+08	6.49E+08	3.23E+07	0.59	0.06	7313	1321
PC(22:1(13Z)/22:1(13Z))	14.64	0.00	0.00	1.95E+09	6.01E+07	3.13E+08	1.49E+07	0.36	0.02	26635	2816
CL(18:2) ₄	16.60	0.00	0.00	8.93E+08	5.09E+07	1.81E+08	2.07E+07	0.37	0.01	32963	1693
CL(18:2) ₃ (18:1)	16.86	0.00	0.00	1.08E+08	5.64E+06	2.40E+07	1.92E+06	0.11	0.02	430827	158571
CL(18:2) ₂ (18:1) ₂	17.00	0.00	0.00	3.12E+08	1.71E+07	44294696	3.56E+06	0.33	0.03	41990	5693
<u>Positive ionization mode</u>											
LysoPG(14:0/0:0) + LysoPI(20:4(5Z,8Z,11Z,14Z)/0:0)	0.94	0.00	0.00	1.74E+10	9.32E+08	2.42E+09	8.74E+07	0.18	0.03	468	134
LysoPC(14:0/0:0)	1.00	0.02	1.64	2.19E+10	4.53E+08	2.68E+09	4.26E+07	0.25	0.00	257	8

Supplemental Tables 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*.

LysoPI(16:0/0:0) + LPG(18:1(9Z) /0:0)	1.34	0.00	0.00	2.00E+10	5.72E+08	2.18E+09	5.10E+07	0.29	0.00	342	0
LysoPE(18:1(9Z)/0:0)	1.71	0.01	0.52	1.51E+10	5.92E+08	1.23E+09	4.99E+07	0.58	0.01	137	7
PC(12:0/12:0)	4.39	0.00	0.00	2.62E+10	5.26E+08	2.78E+09	6.01E+07	0.40	0.03	1953	293
PE(12:0/12:0)	4.84	0.01	0.28	2.09E+10	4.64E+08	2.26E+09	5.83E+07	0.30	0.02	4144	429
LysoPC(22:0/0:0) + DG(12:1(11Z)/12:1(11Z)/0:0)	5.17	0.00	0.00	2.88E+10	8.31E+08	2.42E+09	2.23E+07	0.59	0.02	1223	72
SM(d18:1/12:0)	5.85	0.01	0.19	2.57E+10	4.16E+08	2.44E+09	3.33E+07	0.47	0.05	2518	549
PS(14:0/14:0)	6.30	0.01	0.21	5.41E+09	1.7E+08	9.65E+08	4.74E+07	0.13	0.00	37529	160
PG(14:0/14:0)	6.52	0.01	0.17	2.28E+10	3.28E+08	1.72E+09	2.51E+07	0.41	0.08	4557	1975
PE(22:6(4Z,7Z,10Z,13Z,16Z,19Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z))	7.46	0.02	0.22	1.20E+10	2.70E+07	1.85E+09	7.33E+07	0.21	0.00	20180	89
Cer(d18:1/12:0)	7.64	0.02	0.22	3.00E+10	4.73E+08	3.53E+09	5.28E+07	0.34	0.04	8500	1793
PI(16:0/18:1(9Z))	8.59	0.00	0.00	1.65E+09	1.33E+08	3.88E+08	1.81E+07	0.22	0.03	24656	4730
PG(18:1(9Z)/18:1(9Z)) + PS(18:1(9Z)/18:1(9Z))	9.08	0.01	0.10	3.15E+10	6.13E+08	1.76E+09	3.77E+07	0.59	0.05	3806	622
DG(14:0/14:0/0:0) + PA(18:1(9Z)/18:1(9Z))	9.74	0.00	0.00	2.81E+10	1.12E+09	1.99E+09	5.43E+07	0.51	0.03	5938	720
PC(18:1(9Z)/18:1(9Z))	10.02	0.01	0.13	4.40E+10	1.5E+09	3.18E+09	8.30E+07	0.45	0.02	7886	609
PC(P-18:0/20:4(5Z,8Z,11Z,14Z)+ Cer(d18:1/18:1(9Z)) + PE(18:1(9Z)/18:1(9Z))	10.57	0.00	0.00	7.89E+10	2.81E+09	5.34E+09	2.03E+08	0.75	0.01	3145	73
DG(18:1(9Z)/18:1(9Z)/0:0)	11.16	0.01	0.08	4.49E+09	3.18E+08	9.49E+08	6.98E+07	0.16	0.00	77785	125
TG(12:1(11Z)/12:1(11Z)/12:1(11Z))	11.39	0.01	0.10	3.25E+10	1.72E+09	2.47E+09	9.16E+07	0.37	0.01	14895	1163
PC(P-18:0/18:1(9Z))	11.80	0.02	0.14	3.57E+10	9.31E+08	2.40E+09	1.01E+08	0.58	0.03	6701	608
PE(P-18:0/18:1(9Z))+ SM(d18:1/24:1(15Z))	12.40	0.01	0.04	2.79E+10	1.34E+09	2.36E+09	1.01E+08	0.67	0.03	5503	491
PC(22:1(13Z)/22:1(13Z))	14.62	0.00	0.00	2.08E+10	2.68E+08	1.47E+09	2.40E+07	0.38	0.02	23538	1975
CL(18:2) ₄	16.64	0.02	0.10	7.89E+09	3.88E+08	8.79E+08	2.02E+07	0.40	0.05	29331	8538
DG(22:1(13Z)/22:1(13Z)/0:0)	16.91	0.01	0.08	3.52E+09	3.16E+08	4.12E+08	4.92E+07	0.29	0.03	55352	13769
TG(14:0/14:0/14:0)	17.24	0.00	0.00	1.42E+10	8.12E+08	2.40E+09	5.77E+07	0.25	0.06	83277	33627
TG(16:0/16:0/16:0)	18.69	0.11	0.57	4.70E+09	1.03E+09	1.28E+09	2.83E+08	0.21	0.03	135470	36487
TG(22:1(13Z)/22:1(13Z)/22:1(13Z))	20.48	0.00	0.00	1.84E+10	2.58E+08	3.36E+09	4.19E+07	0.26	0.01	96947	10935

Cer: ceramide, CL: cardiolipin, DG: diacylglycerol, FA: fatty acid, LysoPC: lysophosphatidylcholine, LysoPE: lysophosphatidylethanolamine, LysoPG: lysophosphatidylglycerol, LysoPI: lysophosphatidylinositol, PA: phosphatidic acid, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PL: plasmalogen, PS: phosphatidylserine, SM: sphingomyelin, TG: triacylglycerol

Table S5: Lipids identified in rat liver by LC-MS/MS using the Accucore C30 column

Lipid Molecule	Class	Fatty acids (FA)	FA Group	Calc Mass	Formula	Base Rt	Main Ion
Cer(d15:0/26:1)	Cer	d15:0/26:1	d41:1	635.6216	C41 H81 O3 N1	17.255	-H
Cer(d18:0/16:0)	Cer	d18:0/16:0	d34:0	539.5277	C34 H69 O3 N1	12.779	+H
Cer(d18:0/18:0)	Cer	d18:0/18:0	d36:0	567.559	C36 H73 O3 N1	14.396	+H
Cer(d18:0/24:0)	Cer	d18:0/24:0	d42:0	651.6529	C42 H85 O3 N1	17.854	+H
Cer(d18:0/24:2)	Cer	d18:0/24:2	d42:2	647.6216	C42 H81 O3 N1	16.009	+H
Cer(d18:1/16:0)	Cer	d18:1/16:0	d34:1	537.5121	C34 H67 O3 N1	12.193	+H
Cer(d18:1/18:0)	Cer	d18:1/18:0	d36:1	565.5434	C36 H71 O3 N1	13.838	+H
Cer(d18:1/20:0)	Cer	d18:1/20:0	d38:1	593.5747	C38 H75 O3 N1	15.42	+H
Cer(d18:1/22:0)	Cer	d18:1/22:0	d40:1	621.606	C40 H79 O3 N1	16.729	+H
Cer(d18:1/22:1)	Cer	d18:1/22:1	d40:2	619.5903	C40 H77 O3 N1	15.314	+H
Cer(d18:1/24:0)	Cer	d18:1/24:0	d42:1	649.6373	C42 H83 O3 N1	15.493	+H
Cer(d18:1/24:0)	Cer	d18:1/24:0	d42:1	649.6373	C42 H83 O3 N1	17.548	+H
Cer(d18:1/24:1)	Cer	d18:1/24:1	d42:2	647.6216	C42 H81 O3 N1	16.571	+H
Cer(d18:1/24:2)	Cer	d18:1/24:2	d42:3	645.606	C42 H79 O3 N1	15.534	+H
Cer(d18:1/26:0)	Cer	d18:1/26:0	d44:1	677.6686	C44 H87 O3 N1	18.524	+H
Cer(d18:1/26:1)	Cer	d18:1/26:1	d44:2	675.6529	C44 H85 O3 N1	17.591	+H
CL(17:2,18:2,18:2,18:2)	CL	17:2/18:2/18:2/18:2	71:08	1434.957	C80 H140 O17 P2	18.272	-H
CL(18:1,16:0,16:0,18:1)	CL	18:1/16:0/16:0/18:1	68:02	1405.004	C77 H146 O17 P2	19.74	-H
CL(18:2,12:0,18:2,18:2)	CL	18:2/12:0/18:2/18:2	66:06	1368.91	C75 H134 O17 P2	17.842	-H
CL(18:2,14:0,20:4,18:2)	CL	18:2/14:0/20:4/18:2	70:08	1420.941	C79 H138 O17 P2	18.714	-H
CL(18:2,15:0,18:2,18:1)	CL	18:2/15:0/18:2/18:1	69:05	1412.972	C78 H142 O17 P2	18.931	-H
CL(18:2,16:0,16:0,22:4)	CL	18:2/16:0/16:0/22:4	72:06	1453.004	C81 H146 O17 P2	11.502	-H
CL(18:2,16:0,18:1,16:0)	CL	18:2/16:0/18:1/16:0	68:03	1402.988	C77 H144 O17 P2	19.468	-H
CL(18:2,16:1,16:1,18:2)	CL	18:2/16:1/16:1/18:2	68:06	1396.941	C77 H138 O17 P2	18.341	-H
CL(18:2,16:1,18:1,18:2)	CL	18:2/16:1/18:1/18:2	70:06	1424.972	C79 H142 O17 P2	18.765	-H
CL(18:2,18:0,18:0,20:1)	CL	18:2/18:0/18:0/20:1	74:03	1487.082	C83 H156 O17 P2	13.115	-H
CL(18:2,18:0,18:0,22:4)	CL	18:2/18:0/18:0/22:4	76:06	1509.066	C85 H154 O17 P2	13.12	-H

CL(18:2,18:1,16:0,18:1)	CL	18:2/18:1/16:0/18:1	70:04	1429.004	C79 H146 O17 P2	19.464	-H
CL(18:2,18:1,18:1,18:2)	CL	18:2/18:1/18:1/18:2	72:06	1453.004	C81 H146 O17 P2	19.145	-H
CL(18:2,18:2,16:0,18:1)	CL	18:2/18:2/16:0/18:1	70:05	1426.988	C79 H144 O17 P2	19.136	-H
CL(18:2,18:2,18:2,18:2)	CL	18:2/18:2/18:2/18:2	72:08	1448.972	C81 H142 O17 P2	18.485	-H
CL(18:2,18:2,18:2,18:2)	CL	18:2/18:2/18:2/18:2	72:08	1448.972	C81 H142 O17 P2	19.167	-H
CL(18:2,18:2,20:3,18:2)	CL	18:2/18:2/20:3/18:2	74:09	1474.988	C83 H144 O17 P2	18.594	-H
CL(18:2,18:2,22:5,18:2)	CL	18:2/18:2/22:5/18:2	76:11	1498.988	C85 H144 O17 P2	18.914	-H
CL(18:2,18:2,22:6,18:2)	CL	18:2/18:2/22:6/18:2	76:12	1496.972	C85 H142 O17 P2	18.267	-H
CL(18:2,20:4,18:1,18:2)	CL	18:2/20:4/18:1/18:2	74:09	1474.988	C83 H144 O17 P2	19.148	-H
CL(18:3,16:1,18:2,18:2)	CL	18:3/16:1/18:2/18:2	70:08	1420.941	C79 H138 O17 P2	18.062	-H
CL(18:3,18:2,16:1,22:6)	CL	18:3/18:2/16:1/22:6	74:12	1468.941	C83 H138 O17 P2	18.151	-H
CL(18:3,18:2,18:2,18:2)	CL	18:3/18:2/18:2/18:2	72:09	1446.957	C81 H140 O17 P2	18.149	-H
CL(19:2,18:2,18:2,18:2)	CL	19:2/18:2/18:2/18:2	73:08	1462.988	C82 H144 O17 P2	18.7	-H
CL(20:2,18:2,18:1,18:2)	CL	20:2/18:2/18:1/18:2	74:07	1479.019	C83 H148 O17 P2	19.208	-H
CL(20:5,18:2,14:0,18:2)	CL	20:5/18:2/14:0/18:2	70:09	1418.925	C79 H136 O17 P2	18.334	-H
CL(20:5,18:2,16:1,18:2)	CL	20:5/18:2/16:1/18:2	72:10	1444.941	C81 H138 O17 P2	18.385	-H
CL(20:5,18:2,18:2,18:2)	CL	20:5/18:2/18:2/18:2	74:11	1470.957	C83 H140 O17 P2	18.092	-H
CL(20:5,18:2,18:2,18:2)	CL	20:5/18:2/18:2/18:2	74:11	1470.957	C83 H140 O17 P2	18.488	-H
CL(20:5,18:2,18:2,20:4)	CL	20:5/18:2/18:2/20:4	76:13	1494.957	C85 H140 O17 P2	18.387	-H
CL(20:5,18:2,22:6,18:2)	CL	20:5/18:2/22:6/18:2	78:15	1518.957	C87 H140 O17 P2	18.268	-H
CL(21:0,16:0,20:3,22:6)	CL	21:0/16:0/20:3/22:6	79:09	1545.066	C88 H154 O17 P2	10.894	-H
CL(22:2,18:0,20:4,20:4)	CL	22:2/18:0/20:4/20:4	80:10	1557.066	C89 H154 O17 P2	12.904	-H
CL(22:3,16:0,16:0,20:4)	CL	22:3/16:0/16:0/20:4	74:07	1479.019	C83 H148 O17 P2	11.287	-H
CL(22:3,16:0,18:1,22:5)	CL	22:3/16:0/18:1/22:5	78:09	1531.051	C87 H152 O17 P2	11.37	-H
CL(22:3,18:0,18:0,20:4)	CL	22:3/18:0/18:0/20:4	78:07	1535.082	C87 H156 O17 P2	12.899	-H
CL(23:0,16:0,20:4,22:6)	CL	23:0/16:0/20:4/22:6	81:10	1571.082	C90 H156 O17 P2	10.933	-H
CL(23:0,18:0,20:3,22:6)	CL	23:0/18:0/20:3/22:6	83:09	1601.129	C92 H162 O17 P2	12.506	-H
DG(16:0,18:2)	DG	16:0/18:2	34:02	592.5067	C37 H68 O5	13.856	+NH4
DG(16:0,20:4)	DG	16:0/20:4	36:04	616.5067	C39 H68 O5	10.061	+H
DG(16:0,20:4)	DG	16:0/20:4	36:04	616.5067	C39 H68 O5	13.541	+NH4
DG(16:0,22:6)	DG	16:0/22:6	38:06	640.5067	C41 H68 O5	13.122	+NH4
DG(18:0,20:3)	DG	18:0/20:3	38:03	646.5536	C41 H74 O5	12.198	+H

DG(18:0,20:4)	DG	18:0/20:4	38:04	644.538	C41 H72 O5	11.597	+H
DG(18:0,20:4)	DG	18:0/20:4	38:04	644.538	C41 H72 O5	15.113	+NH4
DG(18:0,22:6)	DG	18:0/22:6	40:06	668.538	C43 H72 O5	14.7	+NH4
DG(18:1,18:1)	DG	18:1/18:1	36:02	620.538	C39 H72 O5	15.107	+NH4
DG(18:1,18:2)	DG	18:1/18:2	36:03	618.5223	C39 H70 O5	13.921	+NH4
DG(18:1,18:3)	DG	18:1/18:3	36:04	616.5067	C39 H68 O5	18.474	+H
DG(18:1,22:6)	DG	18:1/22:6	40:07	666.5223	C43 H70 O5	13.133	+NH4
DG(18:2,18:2)	DG	18:2/18:2	36:04	616.5067	C39 H68 O5	12.706	+NH4
DG(18:2,20:4)	DG	18:2/20:4	38:06	640.5067	C41 H68 O5	12.324	+NH4
DG(18:2,22:6)	DG	18:2/22:6	40:08	664.5067	C43 H68 O5	11.898	+NH4
DG(18:3,18:2)	DG	18:3/18:2	36:05	614.491	C39 H66 O5	11.634	+H
DG(20:2,18:2)	DG	20:2/18:2	38:04	644.538	C41 H72 O5	14.129	+NH4
DG(20:3,18:2)	DG	20:3/18:2	38:05	642.5223	C41 H70 O5	13.055	+NH4
DG(20:5,18:2)	DG	20:5/18:2	38:07	638.491	C41 H66 O5	11.298	+NH4
DG(22:4,18:2)	DG	22:4/18:2	40:06	668.538	C43 H72 O5	13.471	+NH4
LysoPC(14:0/0:0)	LPC	14:00	14:00	467.3012	C22 H46 O7 N1 P1	1.674	+H
LysoPC(15:0/0:0)	LPC	15:00	15:00	481.3168	C23 H48 O7 N1 P1	2.009	+H
LysoPC(0:0/16:0)	LPC	16:00	16:00	495.3325	C24 H50 O7 N1 P1	1.959	+H
LysoPC(16:0/0:0)	LPC	16:00	16:00	495.3325	C24 H50 O7 N1 P1	2.478	+H
LysoPC(0:0/16:0e)	LPC	16:0e	16:0e	481.3532	C24 H52 O6 N1 P1	2.971	+H
LysoPC(0:0/16:0p)	LPC	16:0p	16:0p	479.3376	C24 H50 O6 N1 P1	10.5	+H
LysoPC(0:0/16:1)	LPC	16:01	16:01	493.3168	C24 H48 O7 N1 P1	1.675	+H
LysoPC(16:1p/0:0)	LPC	16:1p	16:1p	477.3219	C24 H48 O6 N1 P1	2.477	+H
LysoPC(17:0/0:0)	LPC	17:00	17:00	509.3481	C25 H52 O7 N1 P1	2.882	+H
LysoPC(0:0/18:0)	LPC	18:00	18:00	523.3638	C26 H54 O7 N1 P1	3.495	+H
LysoPC(18:0/0:0)	LPC	18:00	18:00	523.3638	C26 H54 O7 N1 P1	3.826	+H
LysoPC(0:0/18:0e)	LPC	18:0e	18:0e	509.3845	C26 H56 O6 N1 P1	4.608	+H
LysoPC(0:0/18:0p)	LPC	18:0p	18:0p	507.3689	C26 H54 O6 N1 P1	3.153	+H
LysoPC(0:0/18:1)	LPC	18:01	18:01	521.3481	C26 H52 O7 N1 P1	2.45	+H
LysoPC(18:1/0:0)	LPC	18:01	18:01	521.3481	C26 H52 O7 N1 P1	2.635	+H
LysoPC(18:1p/0:0)	LPC	18:1p	18:1p	505.3532	C26 H52 O6 N1 P1	3.824	+H
LysoPC(0:0/18:2)	LPC	18:02	18:02	519.3325	C26 H50 O7 N1 P1	1.861	+H

Supplemental Tables 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*.

LysoPC(18:2/0:0)	LPC	18:02	18:02	519.3325	C26 H50 O7 N1 P1	1.991	+H
LysoPC(18:3/0:0)	LPC	18:03	18:03	517.3168	C26 H48 O7 N1 P1	1.589	+H
LysoPC(0:0/19:0)	LPC	19:00	19:00	537.3794	C27 H56 O7 N1 P1	4.354	+H
LysoPC(19:0/0:0)	LPC	19:00	19:00	537.3794	C27 H56 O7 N1 P1	4.736	+H
LysoPC(19:1/0:0)	LPC	19:01	19:01	535.3638	C27 H54 O7 N1 P1	3.217	+H
LysoPC(20:0/0:0)	LPC	20:00	20:00	551.3951	C28 H58 O7 N1 P1	5.454	+H
LysoPC(0:0/20:0e)	LPC	20:0e	20:0e	537.4158	C28 H60 O6 N1 P1	6.668	+H
LysoPC(20:1/0:0)	LPC	20:01	20:01	549.3794	C28 H56 O7 N1 P1	3.947	+HCOO
LysoPC(0:0/20:2)	LPC	20:02	20:02	547.3638	C28 H54 O7 N1 P1	2.667	+H
LysoPC(0:0/20:3)	LPC	20:03	20:03	545.3481	C28 H52 O7 N1 P1	2.106	+H
LysoPC(0:0/20:4)	LPC	20:04	20:04	543.3325	C28 H50 O7 N1 P1	1.818	+H
LysoPC(0:0/20:5)	LPC	20:05	20:05	541.3168	C28 H48 O7 N1 P1	1.49	+H
LysoPC(22:0/0:0)	LPC	22:00	22:00	579.4264	C30 H62 O7 N1 P1	7.511	+H
LysoPC(0:0/22:4)	LPC	22:04	22:04	571.3638	C30 H54 O7 N1 P1	2.426	+H
LysoPC(0:0/22:5)	LPC	22:05	22:05	569.3481	C30 H52 O7 N1 P1	1.913	+H
LysoPC(0:0/22:6)	LPC	22:06	22:06	567.3325	C30 H50 O7 N1 P1	1.722	+H
LysoPC(24:0/0:0)	LPC	24:00	24:00	607.4577	C32 H66 O7 N1 P1	9.213	+H
LysoPC(24:1/0:0)	LPC	24:01	24:01	605.442	C32 H64 O7 N1 P1	7.444	+H
LysoPE(18:2)	LPE	18:02	18:02	477.2855	C23 H44 O7 N1 P1	1.954	+H
LysoPE(20:4)	LPE	20:04	20:04	501.2855	C25 H44 O7 N1 P1	1.902	-H
LysoPE(22:5)	LPE	22:05	22:05	527.3012	C27 H46 O7 N1 P1	2.006	+H
LysoPE(22:6)	LPE	22:06	22:06	525.2855	C27 H44 O7 N1 P1	1.809	+H
LysoPG(18:2)	LPG	18:02	18:02	508.2801	C24 H45 O9 N0 P1	1.773	-H
LysoPI(18:0)	LPI	18:00	18:00	600.3275	C27 H53 O12 N0 P1	3.247	+H
LysoPI(20:4)	LPI	20:04	20:04	620.2962	C29 H49 O12 N0 P1	1.607	-H
LysoPS(18:0)	LPS	18:00	18:00	525.3067	C24 H48 O9 N1 P1	3.3	+H
LysoPS(20:4)	LPS	20:04	20:04	545.2754	C26 H44 O9 N1 P1	1.626	+H
LysoPS(22:6)	LPS	22:06	22:06	569.2754	C28 H44 O9 N1 P1	1.552	+H
PA(16:0,18:1)	PA	16:0/18:1	34:01	674.4887	C37 H71 O8 N0 P1	12.373	-H
PA(16:0,18:2)	PA	16:0/18:2	34:02	672.473	C37 H69 O8 N0 P1	11.187	-H
PA(16:0,20:4)	PA	16:0/20:4	36:04	696.473	C39 H69 O8 N0 P1	10.972	-H
PA(18:0,20:4)	PA	18:0/20:4	38:04	724.5043	C41 H73 O8 N0 P1	11.789	-H

Supplemental Tables 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*.

PA(18:2,18:2)	PA	18:2/18:2	36:04	696.473	C39 H69 O8 N0 P1	10.117	-H
PC(15:0/18:2)	PC	15:0/18:2	33:02	743.5465	C41 H78 O8 N1 P1	10.293	+HCOO
PC(15:0/20:4)	PC	15:0/20:4	35:04	767.5465	C43 H78 O8 N1 P1	10.09	+HCOO
PC(15:0/22:6)	PC	15:0/22:6	37:06	791.5465	C45 H78 O8 N1 P1	9.732	+HCOO
PC(16:0/16:0)	PC	16:0/16:0	32:00	733.5622	C40 H80 O8 N1 P1	11.866	+HCOO
PC(16:0/16:0)	PC	16:0/16:0	32:00	733.5622	C40 H80 O8 N1 P1	12.122	+HCOO
PC(16:0/16:1)	PC	16:0/16:1	32:01	731.5465	C40 H78 O8 N1 P1	10.76	+HCOO
PC(16:0/18:2)	PC	16:0/18:2	34:02	757.5622	C42 H80 O8 N1 P1	11.083	+HCOO
PC(16:0/20:3)	PC	16:0/20:3	36:03	783.5778	C44 H82 O8 N1 P1	11.681	+HCOO
PC(16:0/20:4)	PC	16:0/20:4	36:04	781.5622	C44 H80 O8 N1 P1	10.022	+H
PC(16:0/22:4)	PC	16:0/22:4	38:04	809.5935	C46 H84 O8 N1 P1	11.951	+HCOO
PC(16:0/22:6)	PC	16:0/22:6	38:06	805.5622	C46 H80 O8 N1 P1	10.507	+HCOO
PC(16:0/24:7)	PC	16:0/24:7	40:07	831.5778	C48 H82 O8 N1 P1	10.189	+H
PC(16:0e/16:0)	PC	16:0e/16:0	32:0e	719.5829	C40 H82 O7 N1 P1	13.124	+HCOO
PC(17:0/22:6)	PC	17:0/22:6	39:06	819.5778	C47 H82 O8 N1 P1	11.305	+HCOO
PC(17:4/18:0)	PC	17:4/18:0	35:04	767.5465	C43 H78 O8 N1 P1	11.97	+H
PC(17:4/18:1)	PC	17:4/18:1	35:05	765.5309	C43 H76 O8 N1 P1	11.356	+H
PC(17:4/18:1)	PC	17:4/18:1	35:05	765.5309	C43 H76 O8 N1 P1	11.905	+H
PC(17:4/20:1)	PC	17:4/20:1	37:05	793.5622	C45 H80 O8 N1 P1	12.831	+H
PC(18:0/18:0)	PC	18:0/18:0	36:00	789.6248	C44 H88 O8 N1 P1	15.17	+HCOO
PC(18:0/18:2)	PC	18:0/18:2	36:02	785.5935	C44 H84 O8 N1 P1	12.683	+HCOO
PC(18:0/20:4)	PC	18:0/20:4	38:04	809.5935	C46 H84 O8 N1 P1	11.586	+H
PC(18:0/20:4)	PC	18:0/20:4	38:04	809.5935	C46 H84 O8 N1 P1	11.941	+H
PC(18:0/20:4)	PC	18:0/20:4	38:04	809.5935	C46 H84 O8 N1 P1	13.773	+H
PC(18:0/22:4)	PC	18:0/22:4	40:04	837.6248	C48 H88 O8 N1 P1	13.503	+HCOO
PC(18:0/22:5)	PC	18:0/22:5	40:05	835.6091	C48 H86 O8 N1 P1	11.814	+H
PC(18:0/22:6)	PC	18:0/22:6	40:06	833.5935	C48 H84 O8 N1 P1	12.088	+HCOO
PC(18:0/23:6)	PC	18:0/23:6	41:06	847.6091	C49 H86 O8 N1 P1	12.553	+H
PC(18:0e/16:0)	PC	18:0e/16:0	34:0e	747.6142	C42 H86 O7 N1 P1	14.687	+HCOO
PC(18:1/18:1)	PC	18:1/18:1	36:02	785.5935	C44 H84 O8 N1 P1	12.407	+HCOO
PC(18:1/19:5)	PC	18:1/19:5	37:06	791.5465	C45 H78 O8 N1 P1	11.417	+H
PC(18:1/20:4)	PC	18:1/20:4	38:05	807.5778	C46 H82 O8 N1 P1	10.505	+H

Supplemental Tables 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*.

PC(18:1/22:5)	PC	18:1/22:5	40:06	833.5935	C48 H84 O8 N1 P1	11.008	+HCOO
PC(18:1/22:6)	PC	18:1/22:6	40:07	831.5778	C48 H82 O8 N1 P1	9.897	+H
PC(18:2/18:2)	PC	18:2/18:2	36:04	781.5622	C44 H80 O8 N1 P1	10.024	+HCOO
PC(18:3/18:2)	PC	18:3/18:2	36:05	779.5465	C44 H78 O8 N1 P1	9.048	+HCOO
PC(19:0/18:2)	PC	19:0/18:2	37:02	799.6091	C45 H86 O8 N1 P1	13.15	+HCOO
PC(20:0/20:4)	PC	20:0/20:4	40:04	837.6248	C48 H88 O8 N1 P1	14.043	+HCOO
PC(20:2/18:2)	PC	20:2/18:2	38:04	809.5935	C46 H84 O8 N1 P1	11.424	+HCOO
PC(20:3/22:5)	PC	20:3/22:5	42:08	857.5935	C50 H84 O8 N1 P1	10.629	+H
PE(14:0/18:2)	PE	14:0/18:2	32:02	687.4839	C37 H70 O8 N1 P1	9.901	+H
PE(15:0/18:2)	PE	15:0/18:2	33:02	701.4996	C38 H72 O8 N1 P1	10.681	+H
PE(15:0/22:6)	PE	15:0/22:6	37:06	749.4996	C42 H72 O8 N1 P1	10.096	+H
PE(16:0/16:1)	PE	16:0/16:1	32:01	689.4996	C37 H72 O8 N1 P1	11.169	+H
PE(16:0/18:1)	PE	16:0/18:1	34:01	717.5309	C39 H76 O8 N1 P1	12.609	+H
PE(16:0/18:2)	PE	16:0/18:2	34:02	715.5152	C39 H74 O8 N1 P1	11.496	+H
PE(16:0/20:1)	PE	16:0/20:1	36:01	745.5622	C41 H80 O8 N1 P1	14.231	+H
PE(16:0/20:4)	PE	16:0/20:4	36:04	739.5152	C41 H74 O8 N1 P1	11.274	+H
PE(16:0/22:4)	PE	16:0/22:4	38:04	767.5465	C43 H78 O8 N1 P1	12.352	+H
PE(16:0/22:6)	PE	16:0/22:6	38:06	763.5152	C43 H74 O8 N1 P1	10.642	+H
PE(16:0p/18:2)	PE	16:0p/18:2	34:2p	699.5203	C39 H74 O7 N1 P1	12.271	+H
PE(16:0p/20:5)	PE	16:0p/20:5	36:5p	721.5046	C41 H72 O7 N1 P1	11.03	-H
PE(16:0p/22:4)	PE	16:0p/22:4	38:4p	751.5516	C43 H78 O7 N1 P1	13.112	+H
PE(16:0p/22:5)	PE	16:0p/22:5	38:5p	749.5359	C43 H76 O7 N1 P1	12.101	+H
PE(16:1/18:2)	PE	16:1/18:2	34:03	713.4996	C39 H72 O8 N1 P1	10.078	+H
PE(16:1/20:4)	PE	16:1/20:4	36:05	737.4996	C41 H72 O8 N1 P1	9.863	+H
PE(17:0/18:2)	PE	17:0/18:2	35:02	729.5309	C40 H76 O8 N1 P1	12.023	+H
PE(17:0/20:4)	PE	17:0/20:4	37:04	753.5309	C42 H76 O8 N1 P1	11.809	+H
PE(17:0/20:4)	PE	17:0/20:4	37:04	753.5309	C42 H76 O8 N1 P1	12.079	+H
PE(17:0/22:6)	PE	17:0/22:6	39:06	777.5309	C44 H76 O8 N1 P1	11.709	-H
PE(17:1/20:4)	PE	17:1/20:4	37:05	751.5152	C42 H74 O8 N1 P1	10.622	+H
PE(18:0/16:0)	PE	18:0/16:0	34:00	719.5465	C39 H78 O8 N1 P1	14.112	+H
PE(18:0/18:2)	PE	18:0/18:2	36:02	743.5465	C41 H78 O8 N1 P1	13.101	+H
PE(18:0/18:3)	PE	18:0/18:3	36:03	741.5309	C41 H76 O8 N1 P1	12.087	+H

Supplemental Tables 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*.

PE(18:0/20:2)	PE	18:0/20:2	38:02	771.5778	C43 H82 O8 N1 P1	14.405	+H
PE(18:0/20:3)	PE	18:0/20:3	38:03	769.5622	C43 H80 O8 N1 P1	13.48	+H
PE(18:0/20:3)	PE	18:0/20:3	38:03	769.5622	C43 H80 O8 N1 P1	13.956	+H
PE(18:0/20:4)	PE	18:0/20:4	38:04	767.5465	C43 H78 O8 N1 P1	12.889	+H
PE(18:0/22:4)	PE	18:0/22:4	40:04	795.5778	C45 H82 O8 N1 P1	13.912	-H
PE(18:0/22:5)	PE	18:0/22:5	40:05	793.5622	C45 H80 O8 N1 P1	12.952	+H
PE(18:0/22:5)	PE	18:0/22:5	40:05	793.5622	C45 H80 O8 N1 P1	13.456	+H
PE(18:0/22:6)	PE	18:0/22:6	40:06	791.5465	C45 H78 O8 N1 P1	12.51	+H
PE(18:0p/20:3)	PE	18:0p/20:3	38:3p	753.5672	C43 H80 O7 N1 P1	14.236	+H
PE(18:0p/20:4)	PE	18:0p/20:4	38:4p	751.5516	C43 H78 O7 N1 P1	13.617	+H
PE(18:0p/22:5)	PE	18:0p/22:5	40:5p	777.5672	C45 H80 O7 N1 P1	13.687	+H
PE(18:0p/22:6)	PE	18:0p/22:6	40:6p	775.5516	C45 H78 O7 N1 P1	13.217	+H
PE(18:1/18:1)	PE	18:1/18:1	36:02	743.5465	C41 H78 O8 N1 P1	12.817	+H
PE(18:1/18:2)	PE	18:1/18:2	36:03	741.5309	C41 H76 O8 N1 P1	11.607	+H
PE(18:1/20:4)	PE	18:1/20:4	38:05	765.5309	C43 H76 O8 N1 P1	11.355	+H
PE(18:1/22:5)	PE	18:1/22:5	40:06	791.5465	C45 H78 O8 N1 P1	11.431	-H
PE(18:1p/16:0)	PE	18:1p/16:0	34:1p	701.5359	C39 H76 O7 N1 P1	13.469	+H
PE(18:1p/18:1)	PE	18:1p/18:1	36:2p	727.5516	C41 H78 O7 N1 P1	13.528	+H
PE(18:1p/18:2)	PE	18:1p/18:2	36:3p	725.5359	C41 H76 O7 N1 P1	12.302	+H
PE(18:1p/20:4)	PE	18:1p/20:4	38:5p	749.5359	C43 H76 O7 N1 P1	12.113	-H
PE(18:1p/22:4)	PE	18:1p/22:4	40:5p	777.5672	C45 H80 O7 N1 P1	13.183	+H
PE(18:2/18:2)	PE	18:2/18:2	36:04	739.5152	C41 H74 O8 N1 P1	10.403	+H
PE(18:2/22:6)	PE	18:2/22:6	40:08	787.5152	C45 H74 O8 N1 P1	9.84	+H
PE(18:3/18:2)	PE	18:3/18:2	36:05	737.4996	C41 H72 O8 N1 P1	9.404	-H
PE(18:3/20:4)	PE	18:3/20:4	38:07	761.4996	C43 H72 O8 N1 P1	9.201	+H
PE(19:0/18:2)	PE	19:0/18:2	37:02	757.5622	C42 H80 O8 N1 P1	13.557	-H
PE(19:0/20:4)	PE	19:0/20:4	39:04	781.5622	C44 H80 O8 N1 P1	13.339	-H
PE(19:0/22:6)	PE	19:0/22:6	41:06	805.5622	C46 H80 O8 N1 P1	13.292	-H
PE(20:0/20:4)	PE	20:0/20:4	40:04	795.5778	C45 H82 O8 N1 P1	14.439	+H
PE(20:0/22:6)	PE	20:0/22:6	42:06	819.5778	C47 H82 O8 N1 P1	12.087	-H
PE(20:0p/18:2)	PE	20:0p/18:2	38:2p	755.5829	C43 H82 O7 N1 P1	15.395	+H
PE(20:0p/20:4)	PE	20:0p/20:4	40:4p	779.5829	C45 H82 O7 N1 P1	15.155	+H

Supplemental Tables 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*.

PE(20:0p/22:6)	PE	20:0p/22:6	42:6p	803.5829	C47 H82 O7 N1 P1	14.771	+H
PE(20:1/22:6)	PE	20:1/22:6	42:07	817.5622	C47 H80 O8 N1 P1	12.466	-H
PE(20:2/22:6)	PE	20:2/22:6	42:08	815.5465	C47 H78 O8 N1 P1	11.225	+H
PG(16:0,18:1)	PG	16:0/18:1	34:01	748.5254	C40 H77 O10 N0 P1	11.632	-H
PG(16:0,18:2)	PG	16:0/18:2	34:02	746.5098	C40 H75 O10 N0 P1	10.601	-H
PG(18:1,18:1)	PG	18:1/18:1	36:02	774.5411	C42 H79 O10 N0 P1	10.84	-H
PG(18:1,18:2)	PG	18:1/18:2	36:03	772.5254	C42 H77 O10 N0 P1	9.752	-H
PG(18:2,18:2)	PG	18:2/18:2	36:04	770.5098	C42 H75 O10 N0 P1	8.714	-H
PG(18:2,22:6)	PG	18:2/22:6	40:08	818.5098	C46 H75 O10 N0 P1	8.264	-H
PG(22:6,22:6)	PG	22:6/22:6	44:12	866.5098	C50 H75 O10 N0 P1	7.859	-H
PI(16:0,18:2)	PI	16:0/18:2	34:02	834.5258	C43 H79 O13 N0 P1	10.238	-H
PI(16:0,20:4)	PI	16:0/20:4	36:04	858.5258	C45 H79 O13 N0 P1	10.06	+H
PI(16:0,22:6)	PI	16:0/22:6	38:06	882.5258	C47 H79 O13 N0 P1	9.724	+H
PI(17:0,20:3)	PI	17:0/20:3	37:03	874.5571	C46 H83 O13 N0 P1	11.424	-H
PI(17:0,20:4)	PI	17:0/20:4	37:04	872.5415	C46 H81 O13 N0 P1	10.867	-H
PI(18:0,18:2)	PI	18:0/18:2	36:02	862.5571	C45 H83 O13 N0 P1	11.789	+H
PI(18:0,20:2)	PI	18:0/20:2	38:02	890.5884	C47 H87 O13 N0 P1	13.119	-H
PI(18:0,20:3)	PI	18:0/20:3	38:03	888.5728	C47 H85 O13 N0 P1	12.198	+H
PI(18:0,20:4)	PI	18:0/20:4	38:04	886.5571	C47 H83 O13 N0 P1	11.597	+H
PI(18:0,20:5)	PI	18:0/20:5	38:05	884.5415	C47 H81 O13 N0 P1	10.67	-H
PI(18:0,20:5)	PI	18:0/20:5	38:05	884.5415	C47 H81 O13 N0 P1	11.275	-H
PI(18:0,22:4)	PI	18:0/22:4	40:04	914.5884	C49 H87 O13 N0 P1	12.648	-H
PI(18:0,22:5)	PI	18:0/22:5	40:05	912.5728	C49 H85 O13 N0 P1	11.69	-H
PI(18:0,22:5)	PI	18:0/22:5	40:05	912.5728	C49 H85 O13 N0 P1	12.217	-H
PI(18:0,22:6)	PI	18:0/22:6	40:06	910.5571	C49 H83 O13 N0 P1	11.264	+H
PI(18:1,18:2)	PI	18:1/18:2	36:03	860.5415	C45 H81 O13 N0 P1	10.356	-H
PI(18:1,20:4)	PI	18:1/20:4	38:05	884.5415	C47 H81 O13 N0 P1	10.157	-H
PI(22:5,17:3)	PI	22:5/17:3	39:08	892.5102	C48 H77 O13 N0 P1	11.588	-H
PS(16:0,18:2)	PS	16:0/18:2	34:02	759.505	C40 H74 O10 N1 P1	10.396	-H
PS(16:0,20:4)	PS	16:0/20:4	36:04	783.505	C42 H74 O10 N1 P1	10.211	-H
PS(16:0,22:6)	PS	16:0/22:6	38:06	807.505	C44 H74 O10 N1 P1	9.86	-H
PS(17:0,20:4)	PS	17:0/20:4	37:04	797.5207	C43 H76 O10 N1 P1	11	+H

PS(17:0,22:6)	PS	17:0/22:6	39:06	821.5207	C45 H76 O10 N1 P1	10.641	+H
PS(18:0,18:1)	PS	18:0/18:1	36:01	789.552	C42 H80 O10 N1 P1	13.13	-H
PS(18:0,18:2)	PS	18:0/18:2	36:02	787.5363	C42 H78 O10 N1 P1	11.967	+H
PS(18:0,20:4)	PS	18:0/20:4	38:04	811.5363	C44 H78 O10 N1 P1	11.775	-H
PS(18:0,20:5)	PS	18:0/20:5	38:05	809.5207	C44 H76 O10 N1 P1	10.86	-H
PS(18:0,22:5)	PS	18:0/22:5	40:05	837.552	C46 H80 O10 N1 P1	11.854	+H
PS(18:0,22:6)	PS	18:0/22:6	40:06	835.5363	C46 H78 O10 N1 P1	11.411	+H
PS(18:1,20:4)	PS	18:1/20:4	38:05	809.5207	C44 H76 O10 N1 P1	10.302	-H
PS(18:2,18:2)	PS	18:2/18:2	36:04	783.505	C42 H74 O10 N1 P1	11.506	-H
PS(19:0,20:4)	PS	19:0/20:4	39:04	825.552	C45 H80 O10 N1 P1	12.597	+H
PS(20:4,20:4)	PS	20:4/20:4	40:08	831.505	C46 H74 O10 N1 P1	8.933	+H
SM(d18:1/16:0)	SM	d18:1/16:0	d34:1	702.5676	C39 H79 O6 N2 P1	10.463	+HCOO
SM(d18:1/24:1)	SM	d18:1/24:1	d42:2	812.6771	C47 H93 O6 N2 P1	15.525	+H
TG(10:0,18:2,18:2)	TG	10:0/18:2/18:2	46:04	770.6424	C49 H86 O6	17.759	+NH4
TG(10:0,18:2,18:3)	TG	10:0/18:2/18:3	46:05	768.6268	C49 H84 O6	17.16	+NH4
TG(10:0,18:2,20:4)	TG	10:0/18:2/20:4	48:06	794.6424	C51 H86 O6	17.375	+NH4
TG(12:0,18:2,18:2)	TG	12:0/18:2/18:2	48:04	798.6737	C51 H90 O6	18.46	+NH4
TG(12:0,18:2,22:6)	TG	12:0/18:2/22:6	52:08	846.6737	C55 H90 O6	18.276	+NH4
TG(14:0,18:2,18:3)	TG	14:0/18:2/18:3	50:05	824.6894	C53 H92 O6	18.654	+NH4
TG(15:0,14:0,16:0)	TG	15:0/14:0/16:0	45:00	764.6894	C48 H92 O6	19.762	+NH4
TG(15:0,14:1,18:2)	TG	15:0/14:1/18:2	47:03	786.6737	C50 H90 O6	18.703	+NH4
TG(15:0,16:0,16:1)	TG	15:0/16:0/16:1	47:01	790.705	C50 H94 O6	19.756	+NH4
TG(15:0,16:0,18:1)	TG	15:0/16:0/18:1	49:01	818.7363	C52 H98 O6	20.225	+NH4
TG(15:0,16:0,18:2)	TG	15:0/16:0/18:2	49:02	816.7207	C52 H96 O6	19.826	+NH4
TG(15:0,16:1,18:2)	TG	15:0/16:1/18:2	49:03	814.705	C52 H94 O6	19.306	+NH4
TG(15:0,18:2,18:2)	TG	15:0/18:2/18:2	51:04	840.7207	C54 H96 O6	19.382	+NH4
TG(15:0,18:2,18:3)	TG	15:0/18:2/18:3	51:05	838.705	C54 H94 O6	18.97	+NH4
TG(15:1,14:0,16:1)	TG	15:1/14:0/16:1	45:02	760.6581	C48 H88 O6	18.702	+NH4
TG(15:1,16:1,18:2)	TG	15:1/16:1/18:2	49:04	812.6894	C52 H92 O6	18.821	+NH4
TG(15:1,18:2,18:2)	TG	15:1/18:2/18:2	51:05	838.705	C54 H94 O6	18.829	+NH4
TG(15:1,18:2,18:3)	TG	15:1/18:2/18:3	51:06	836.6894	C54 H92 O6	18.373	+NH4
TG(16:0,10:0,18:1)	TG	16:0/10:0/18:1	44:01	748.6581	C47 H88 O6	18.933	+NH4

Supplemental Tables 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*.

TG(16:0,14:0,14:0)	TG	16:0/14:0/14:0	44:00	750.6737	C47 H90 O6	19.502	+NH4
TG(16:0,14:0,16:0)	TG	16:0/14:0/16:0	46:00	778.705	C49 H94 O6	20.004	+NH4
TG(16:0,14:0,16:1)	TG	16:0/14:0/16:1	46:01	776.6894	C49 H92 O6	19.486	+NH4
TG(16:0,14:0,18:1)	TG	16:0/14:0/18:1	48:01	804.7207	C51 H96 O6	19.993	+NH4
TG(16:0,16:0,16:0)	TG	16:0/16:0/16:0	48:00	806.7363	C51 H98 O6	20.478	+NH4
TG(16:0,16:0,18:2)	TG	16:0/16:0/18:2	50:02	830.7363	C53 H98 O6	20.087	+NH4
TG(16:0,16:0,18:3)	TG	16:0/16:0/18:3	50:03	828.7207	C53 H96 O6	19.737	+NH4
TG(16:0,16:0,22:6)	TG	16:0/16:0/22:6	54:06	878.7363	C57 H98 O6	19.752	+NH4
TG(16:0,16:1,18:2)	TG	16:0/16:1/18:2	50:03	828.7207	C53 H96 O6	19.563	+NH4
TG(16:0,16:1,18:3)	TG	16:0/16:1/18:3	50:04	826.705	C53 H94 O6	19.078	+NH4
TG(16:0,16:1,24:0)	TG	16:0/16:1/24:0	56:01	916.8459	C59 H112 O6	21.609	+NH4
TG(16:0,17:0,18:1)	TG	16:0/17:0/18:1	51:01	846.7676	C54 H102 O6	20.668	+NH4
TG(16:0,18:1,18:1)	TG	16:0/18:1/18:1	52:02	858.7676	C55 H102 O6	20.43	+NH4
TG(16:0,18:1,18:2)	TG	16:0/18:1/18:2	52:03	856.752	C55 H100 O6	20.054	+NH4
TG(16:0,18:1,18:3)	TG	16:0/18:1/18:3	52:04	854.7363	C55 H98 O6	19.649	+NH4
TG(16:0,18:1,19:0)	TG	16:0/18:1/19:0	53:01	874.7989	C56 H106 O6	20.961	+NH4
TG(16:0,18:1,20:4)	TG	16:0/18:1/20:4	54:05	880.752	C57 H100 O6	19.905	+NH4
TG(16:0,18:2,18:3)	TG	16:0/18:2/18:3	52:05	852.7207	C55 H96 O6	19.273	+NH4
TG(16:0,18:2,20:4)	TG	16:0/18:2/20:4	54:06	878.7363	C57 H98 O6	19.477	+NH4
TG(16:0,18:2,21:0)	TG	16:0/18:2/21:0	55:02	900.8146	C58 H108 O6	21.155	+NH4
TG(16:0,18:2,22:5)	TG	16:0/18:2/22:5	56:07	904.752	C59 H100 O6	19.488	+NH4
TG(16:0,18:2,23:0)	TG	16:0/18:2/23:0	57:02	928.8459	C60 H112 O6	21.481	+NH4
TG(16:0,20:3,22:6)	TG	16:0/20:3/22:6	58:09	928.752	C61 H100 O6	19.278	+NH4
TG(16:0,8:0,18:1)	TG	16:0/8:0/18:1	42:01	720.6268	C45 H84 O6	18.326	+NH4
TG(16:0e,16:0,18:2)	TG	16:0e/16:0/18:2	50:2e	816.7571	C53 H100 O5	20.747	+NH4
TG(16:1,12:0,18:1)	TG	16:1/12:0/18:1	46:02	774.6737	C49 H90 O6	18.997	+NH4
TG(16:1,12:0,18:2)	TG	16:1/12:0/18:2	46:03	772.6581	C49 H88 O6	18.367	+NH4
TG(16:1,14:0,18:1)	TG	16:1/14:0/18:1	48:02	802.705	C51 H94 O6	19.474	+NH4
TG(16:1,14:0,18:2)	TG	16:1/14:0/18:2	48:03	800.6894	C51 H92 O6	19.003	+NH4
TG(16:1,18:2,18:2)	TG	16:1/18:2/18:2	52:05	852.7207	C55 H96 O6	19.106	+NH4
TG(16:1,18:2,18:3)	TG	16:1/18:2/18:3	52:06	850.705	C55 H94 O6	18.671	+NH4
TG(16:2,14:1,18:2)	TG	16:2/14:1/18:2	48:05	796.6581	C51 H88 O6	17.97	+NH4

TG(16:2,18:2,18:3)	TG	16:2/18:2/18:3	52:07	848.6894	C55 H92 O6	18.196	+NH4
TG(16:2,18:3,18:3)	TG	16:2/18:3/18:3	52:08	846.6737	C55 H90 O6	17.695	+NH4
TG(17:0,18:1,18:1)	TG	17:0/18:1/18:1	53:02	872.7833	C56 H104 O6	20.627	+NH4
TG(17:0,18:2,18:2)	TG	17:0/18:2/18:2	53:04	868.752	C56 H100 O6	19.909	+NH4
TG(17:4,16:1,20:4)	TG	17:4/16:1/20:4	53:09	858.6737	C56 H90 O6	19.275	+NH4
TG(18:0,16:0,18:1)	TG	18:0/16:0/18:1	52:01	860.7833	C55 H104 O6	20.877	+NH4
TG(18:0,16:0,19:0)	TG	18:0/16:0/19:0	53:00	876.8146	C56 H108 O6	21.444	+NH4
TG(18:0,16:0,20:4)	TG	18:0/16:0/20:4	54:04	882.7676	C57 H102 O6	20.39	+NH4
TG(18:0,16:0,24:1)	TG	18:0/16:0/24:1	58:01	944.8772	C61 H116 O6	21.946	+NH4
TG(18:0,17:0,18:2)	TG	18:0/17:0/18:2	53:02	872.7833	C56 H104 O6	20.745	+NH4
TG(18:0,18:0,18:1)	TG	18:0/18:0/18:1	54:01	888.8146	C57 H108 O6	21.251	+NH4
TG(18:0,18:0,22:0)	TG	18:0/18:0/22:0	58:00	946.8928	C61 H118 O6	22.157	+NH4
TG(18:0,18:1,18:2)	TG	18:0/18:1/18:2	54:03	884.7833	C57 H104 O6	20.511	+NH4
TG(18:0,18:2,18:3)	TG	18:0/18:2/18:3	54:05	880.752	C57 H100 O6	19.757	+NH4
TG(18:0,20:0,22:0)	TG	18:0/20:0/22:0	60:00	974.9241	C63 H122 O6	22.536	+NH4
TG(18:0,20:4,20:4)	TG	18:0/20:4/20:4	58:08	930.7676	C61 H102 O6	19.843	+NH4
TG(18:0,20:4,22:6)	TG	18:0/20:4/22:6	60:10	954.7676	C63 H102 O6	19.687	+NH4
TG(18:0,22:0,22:0)	TG	18:0/22:0/22:0	62:00	1002.955	C65 H126 O6	22.819	+NH4
TG(18:0e,16:0,18:0)	TG	18:0e/16:0/18:0	52:0e	848.8197	C55 H108 O5	21.844	+NH4
TG(18:0e,16:0,22:4)	TG	18:0e/16:0/22:4	56:4e	896.8197	C59 H108 O5	21.261	+NH4
TG(18:1,18:2,22:1)	TG	18:1/18:2/22:1	58:04	938.8302	C61 H110 O6	20.893	+NH4
TG(18:2,13:1,18:2)	TG	18:2/13:1/18:2	49:05	810.6737	C52 H90 O6	18.34	+NH4
TG(18:2,18:2,18:2)	TG	18:2/18:2/18:2	54:06	878.7363	C57 H98 O6	22.369	+NH4
TG(18:2p,16:0,18:2)	TG	18:2p/16:0/18:2	52:4p	838.7414	C55 H98 O5	20.058	+NH4
TG(18:2p,16:0,18:3)	TG	18:2p/16:0/18:3	52:5p	836.7258	C55 H96 O5	19.65	+NH4
TG(18:3,14:1,18:2)	TG	18:3/14:1/18:2	50:06	822.6737	C53 H90 O6	18.135	+NH4
TG(18:3,14:1,18:3)	TG	18:3/14:1/18:3	50:07	820.6581	C53 H88 O6	17.604	+NH4
TG(18:3,17:1,18:2)	TG	18:3/17:1/18:2	53:06	864.7207	C56 H96 O6	18.939	+NH4
TG(18:3,17:2,18:2)	TG	18:3/17:2/18:2	53:07	862.705	C56 H94 O6	18.48	+NH4
TG(18:3,17:3,18:2)	TG	18:3/17:3/18:2	53:08	860.6894	C56 H92 O6	18.008	+NH4
TG(18:3,18:2,18:2)	TG	18:3/18:2/18:2	54:07	876.7207	C57 H96 O6	18.769	+NH4
TG(18:3,18:2,18:3)	TG	18:3/18:2/18:3	54:08	874.705	C57 H94 O6	18.318	+NH4

TG(18:3,18:2,20:5)	TG	18:3/18:2/20:5	56:10	898.705	C59 H94 O6	18.101	+NH4
TG(18:3,18:2,21:5)	TG	18:3/18:2/21:5	57:10	912.7207	C60 H96 O6	18.33	+NH4
TG(18:3,18:2,22:6)	TG	18:3/18:2/22:6	58:11	924.7207	C61 H96 O6	18.354	+NH4
TG(18:3,18:3,20:5)	TG	18:3/18:3/20:5	56:11	896.6894	C59 H92 O6	17.632	+NH4
TG(18:3,18:3,22:6)	TG	18:3/18:3/22:6	58:12	922.705	C61 H94 O6	17.885	+NH4
TG(18:3,20:5,20:5)	TG	18:3/20:5/20:5	58:13	920.6894	C61 H92 O6	17.318	+NH4
TG(18:3,20:5,22:6)	TG	18:3/20:5/22:6	60:14	946.705	C63 H94 O6	17.611	+NH4
TG(18:4,16:0,20:5)	TG	18:4/16:0/20:5	54:09	872.6894	C57 H92 O6	18.171	+NH4
TG(18:4,18:2,18:3)	TG	18:4/18:2/18:3	54:09	872.6894	C57 H92 O6	17.858	+NH4
TG(19:0,18:1,18:1)	TG	19:0/18:1/18:1	55:02	900.8146	C58 H108 O6	21.045	+NH4
TG(19:1,18:2,18:2)	TG	19:1/18:2/18:2	55:05	894.7676	C58 H102 O6	19.876	+NH4
TG(19:2,18:2,20:5)	TG	19:2/18:2/20:5	57:09	914.7363	C60 H98 O6	18.779	+NH4
TG(20:0,18:2,18:2)	TG	20:0/18:2/18:2	56:04	910.7989	C59 H106 O6	20.584	+NH4
TG(20:0e,16:0,18:1)	TG	20:0e/16:0/18:1	54:1e	874.8353	C57 H110 O5	21.809	+NH4
TG(20:1,18:1,18:3)	TG	20:1/18:1/18:3	56:05	908.7833	C59 H104 O6	20.117	+NH4
TG(20:2,18:2,22:4)	TG	20:2/18:2/22:4	60:08	958.7989	C63 H106 O6	19.931	+NH4
TG(20:5,17:1,18:2)	TG	20:5/17:1/18:2	55:08	888.7207	C58 H96 O6	18.778	+NH4
TG(20:5,17:2,18:2)	TG	20:5/17:2/18:2	55:09	886.705	C58 H94 O6	18.289	+NH4
TG(20:5,18:2,18:2)	TG	20:5/18:2/18:2	56:09	900.7207	C59 H96 O6	18.576	+NH4
TG(20:5,18:2,22:6)	TG	20:5/18:2/22:6	60:13	948.7207	C63 H96 O6	18.137	+NH4
TG(22:4,18:2,18:2)	TG	22:4/18:2/18:2	58:08	930.7676	C61 H102 O6	19.419	+NH4
TG(24:1,18:2,20:4)	TG	24:1/18:2/20:4	62:07	988.8459	C65 H112 O6	20.823	+NH4
TG(24:2,18:2,18:2)	TG	24:2/18:2/18:2	60:06	962.8302	C63 H110 O6	20.677	+NH4
TG(25:0,14:0,16:0)	TG	25:0/14:0/16:0	55:00	904.8459	C58 H112 O6	21.805	+NH4
TG(25:0,16:0,16:0)	TG	25:0/16:0/16:0	57:00	932.8772	C60 H116 O6	22.092	+NH4
TG(25:0,16:0,18:1)	TG	25:0/16:0/18:1	59:01	958.8928	C62 H118 O6	22.088	+NH4
TG(25:0,18:1,18:1)	TG	25:0/18:1/18:1	61:02	984.9085	C64 H120 O6	22.071	+NH4
TG(25:0,18:2,18:2)	TG	25:0/18:2/18:2	61:04	980.8772	C64 H116 O6	21.571	+NH4
TG(26:1,18:2,20:4)	TG	26:1/18:2/20:4	64:07	1016.877	C67 H116 O6	21.203	+NH4
TG(28:1,16:0,18:1)	TG	28:1/16:0/18:1	62:02	998.9241	C65 H122 O6	22.201	+NH4
TG(30:1,16:0,18:2)	TG	30:1/16:0/18:2	64:03	1024.94	C67 H124 O6	22.232	+NH4
TG(30:1,18:1,20:2)	TG	30:1/18:1/20:2	68:04	1078.987	C71 H130 O6	22.493	+NH4

Supplemental Tables 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*.

TG(30:1,18:2,18:2)	TG	30:1/18:2/18:2	66:05	1048.94	C69 H124 O6	21.985	+NH4
TG(4:0,16:0,16:0)	TG	4:0/16:0/16:0	36:00	638.5485	C39 H74 O6	16.924	+NH4
TG(4:0,16:0,18:1)	TG	4:0/16:0/18:1	38:01	664.5642	C41 H76 O6	16.922	+NH4
TG(4:0,16:0,18:2)	TG	4:0/16:0/18:2	38:02	662.5485	C41 H74 O6	16.004	+NH4
TG(4:0,18:1,18:2)	TG	4:0/18:1/18:2	40:03	688.5642	C43 H76 O6	16.013	+NH4
TG(4:0,18:2,18:2)	TG	4:0/18:2/18:2	40:04	686.5485	C43 H74 O6	14.903	+NH4
TG(6:0,16:0,18:1)	TG	6:0/16:0/18:1	40:01	692.5955	C43 H80 O6	17.663	+NH4
TG(8:0,18:1,18:2)	TG	8:0/18:1/18:2	44:03	744.6268	C47 H84 O6	17.686	+NH4
TG(8:0,18:2,18:2)	TG	8:0/18:2/18:2	44:04	742.6111	C47 H82 O6	16.945	+NH4

Cer: ceramide, CL: cardiolipin, DG: diacylglycerol, LPC: lysophosphatidylcholine, LPE: lysophosphatidylethanolamine, LPG: lysophosphatidylglycerol, LPI: lysophosphatidylinositol, LPS: lysophosphatidylserine, PA: phosphatidic acid, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PS: phosphatidylserine, SM: sphingomyelin, TG: triacylglycerol

Table S6: Lipids identified in rat plasma by LC-MS/MS using the Accucore C30 column

Lipid Molecule	Class	Fatty acids (FA)	FA Group	Calc Mass	Formula	Base Rt	Main Ion
Cer(d15:0/26:1)	Cer	d15:0/26:1	d41:1	635.6216	C41 H81 O3 N1	17.26	-H
Cer(d18:0/16:0)	Cer	d18:0/16:0	d34:0	539.5277	C34 H69 O3 N1	12.776	+H
Cer(d18:0/22:0)	Cer	d18:0/22:0	d40:0	623.6216	C40 H81 O3 N1	17.082	+H
Cer(d18:0/24:2)	Cer	d18:0/24:2	d42:2	647.6216	C42 H81 O3 N1	16	+H
Cer(d18:1/16:0)	Cer	d18:1/16:0	d34:1	537.5121	C34 H67 O3 N1	12.185	+H
Cer(d18:1/20:0)	Cer	d18:1/20:0	d38:1	593.5747	C38 H75 O3 N1	15.42	+H
Cer(d18:1/22:0)	Cer	d18:1/22:0	d40:1	621.606	C40 H79 O3 N1	16.714	+H
Cer(d18:1/24:0)	Cer	d18:1/24:0	d42:1	649.6373	C42 H83 O3 N1	16.948	+H
Cer(d18:1/24:0)	Cer	d18:1/24:0	d42:1	649.6373	C42 H83 O3 N1	17.549	+H
Cer(d18:1/24:1)	Cer	d18:1/24:1	d42:2	647.6216	C42 H81 O3 N1	16.567	+H
Cer(d18:1/24:2)	Cer	d18:1/24:2	d42:3	645.606	C42 H79 O3 N1	15.523	+H
Cer(d18:1/26:0)	Cer	d18:1/26:0	d44:1	677.6686	C44 H87 O3 N1	18.523	+H
Cer(d18:1/26:1)	Cer	d18:1/26:1	d44:2	675.6529	C44 H85 O3 N1	17.59	+H
DG(16:0,18:2)	DG	16:0/18:2	34:02	592.5067	C37 H68 O5	13.842	+NH4
DG(16:0,20:4)	DG	16:0/20:4	36:04	616.5067	C39 H68 O5	10.063	+H
DG(18:0,20:4)	DG	18:0/20:4	38:04	644.538	C41 H72 O5	11.606	+H
DG(18:1,18:2)	DG	18:1/18:2	36:03	618.5223	C39 H70 O5	13.915	+NH4
DG(18:1,18:3)	DG	18:1/18:3	36:04	616.5067	C39 H68 O5	19.173	+H
DG(18:1,20:4)	DG	18:1/20:4	38:05	642.5223	C41 H70 O5	13.541	+NH4
DG(18:2,18:2)	DG	18:2/18:2	36:04	616.5067	C39 H68 O5	12.709	+NH4
DG(18:2,18:2)	DG	18:2/18:2	36:04	616.5067	C39 H68 O5	17.808	+H
DG(18:2,20:4)	DG	18:2/20:4	38:06	640.5067	C41 H68 O5	12.315	+NH4
DG(18:2,22:6)	DG	18:2/22:6	40:08	664.5067	C43 H68 O5	11.902	+NH4
DG(18:3,18:2)	DG	18:3/18:2	36:05	614.491	C39 H66 O5	11.629	+H
DG(20:5,18:2)	DG	20:5/18:2	38:07	638.491	C41 H66 O5	11.291	+NH4
DG(22:4,18:2)	DG	22:4/18:2	40:06	668.538	C43 H72 O5	13.468	+NH4
DG(36:6,16:0)	DG	36:6/16:0	52:06	836.7258	C55 H96 O5	19.659	+H

Supplemental Tables 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*.

LysoPC(0:0/15:0)	LPC	15:00	15:00	481.3168	C23 H48 O7 N1 P1	1.858	+H
LysoPC(15:0/0:0)	LPC	15:00	15:00	481.3168	C23 H48 O7 N1 P1	2.019	+H
LysoPC(15:1/0:0)	LPC	15:01	15:01	479.3012	C23 H46 O7 N1 P1	2.791	+H
LysoPC(15:2/0:0)	LPC	15:02	15:02	477.2855	C23 H44 O7 N1 P1	2.083	+H
LysoPC(0:0/16:0)	LPC	16:00	16:00	495.3325	C24 H50 O7 N1 P1	2.263	+H
LysoPC(16:0/0:0)	LPC	16:00	16:00	495.3325	C24 H50 O7 N1 P1	2.471	+H
LysoPC(16:1/0:0)	LPC	16:01	16:01	493.3168	C24 H48 O7 N1 P1	1.812	+H
LysoPC(16:1p/0:0)	LPC	16:1p	16:1p	477.3219	C24 H48 O6 N1 P1	2.265	+H
LysoPC(0:0/17:0)	LPC	17:00	17:00	509.3481	C25 H52 O7 N1 P1	2.603	+H
LysoPC(17:0/0:0)	LPC	17:00	17:00	509.3481	C25 H52 O7 N1 P1	3.07	+H
LysoPC(17:2/0:0)	LPC	17:02	17:02	505.3168	C25 H48 O7 N1 P1	1.677	+H
LysoPC(17:4/0:0)	LPC	17:04	17:04	501.2855	C25 H44 O7 N1 P1	1.903	+H
LysoPC(0:0/18:0)	LPC	18:00	18:00	523.3638	C26 H54 O7 N1 P1	3.296	+H
LysoPC(18:0/0:0)	LPC	18:00	18:00	523.3638	C26 H54 O7 N1 P1	3.826	+H
LysoPC(0:0/18:0e)	LPC	18:0e	18:0e	509.3845	C26 H56 O6 N1 P1	4.605	+H
LysoPC(0:0/18:0p)	LPC	18:0p	18:0p	507.3689	C26 H54 O6 N1 P1	3.152	+H
LysoPC(18:0p/0:0)	LPC	18:0p	18:0p	507.3689	C26 H54 O6 N1 P1	4.455	+H
LysoPC(0:0/18:1)	LPC	18:01	18:01	521.3481	C26 H52 O7 N1 P1	2.422	+H
LysoPC(18:1/0:0)	LPC	18:01	18:01	521.3481	C26 H52 O7 N1 P1	2.644	+H
LysoPC(0:0/18:1p)	LPC	18:1p	18:1p	505.3532	C26 H52 O6 N1 P1	2.316	+H
LysoPC(18:1p/0:0)	LPC	18:1p	18:1p	505.3532	C26 H52 O6 N1 P1	3.061	+H
LysoPC(0:0/18:2)	LPC	18:02	18:02	519.3325	C26 H50 O7 N1 P1	1.855	+H
LysoPC(18:2/0:0)	LPC	18:02	18:02	519.3325	C26 H50 O7 N1 P1	1.995	+H
LysoPC(18:2p/0:0)	LPC	18:2p	18:2p	503.3376	C26 H50 O6 N1 P1	2.269	+H
LysoPC(0:0/18:3)	LPC	18:03	18:03	517.3168	C26 H48 O7 N1 P1	1.471	+H
LysoPC(0:0/19:0)	LPC	19:00	19:00	537.3794	C27 H56 O7 N1 P1	3.973	+H
LysoPC(19:0/0:0)	LPC	19:00	19:00	537.3794	C27 H56 O7 N1 P1	4.359	+H
LysoPC(0:0/19:1)	LPC	19:01	19:01	535.3638	C27 H54 O7 N1 P1	2.978	+H
LysoPC(19:2/0:0)	LPC	19:02	19:02	533.3481	C27 H52 O7 N1 P1	2.382	+H
LysoPC(0:0/20:0)	LPC	20:00	20:00	551.3951	C28 H58 O7 N1 P1	4.859	+H
LysoPC(20:0/0:0)	LPC	20:00	20:00	551.3951	C28 H58 O7 N1 P1	5.455	+H
LysoPC(0:0/20:0e)	LPC	20:0e	20:0e	537.4158	C28 H60 O6 N1 P1	6.656	+H

Supplemental Tables 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*.

LysoPC(0:0/20:0p)	LPC	20:0p	20:0p	535.4002	C28 H58 O6 N1 P1	4.688	+H
LysoPC(20:0p/0:0)	LPC	20:0p	20:0p	535.4002	C28 H58 O6 N1 P1	6.527	+H
LysoPC(0:0/20:1)	LPC	20:01	20:01	549.3794	C28 H56 O7 N1 P1	3.629	+H
LysoPC(20:1/0:0)	LPC	20:01	20:01	549.3794	C28 H56 O7 N1 P1	3.935	+H
LysoPC(0:0/20:1p)	LPC	20:1p	20:1p	533.3845	C28 H56 O6 N1 P1	3.42	+H
LysoPC(0:0/20:2)	LPC	20:02	20:02	547.3638	C28 H54 O7 N1 P1	2.663	+H
LysoPC(20:2/0:0)	LPC	20:02	20:02	547.3638	C28 H54 O7 N1 P1	2.887	+H
LysoPC(0:0/20:3)	LPC	20:03	20:03	545.3481	C28 H52 O7 N1 P1	2.095	+H
LysoPC(0:0/20:4)	LPC	20:04	20:04	543.3325	C28 H50 O7 N1 P1	1.806	+H
LysoPC(20:4/0:0)	LPC	20:04	20:04	543.3325	C28 H50 O7 N1 P1	1.913	+H
LysoPC(20:4/0:0)	LPC	20:04	20:04	543.3325	C28 H50 O7 N1 P1	2.658	+H
LysoPC(20:5/0:0)	LPC	20:05	20:05	541.3168	C28 H48 O7 N1 P1	1.568	+H
LysoPC(21:0/0:0)	LPC	21:00	21:00	565.4107	C29 H60 O7 N1 P1	6.42	+H
LysoPC(0:0/22:0)	LPC	22:00	22:00	579.4264	C30 H62 O7 N1 P1	7.172	+H
LysoPC(22:0/0:0)	LPC	22:00	22:00	579.4264	C30 H62 O7 N1 P1	7.503	+H
LysoPC(0:0/22:1)	LPC	22:01	22:01	577.4107	C30 H60 O7 N1 P1	5.357	+H
LysoPC(22:1/0:0)	LPC	22:01	22:01	577.4107	C30 H60 O7 N1 P1	5.77	+H
LysoPC(22:2/0:0)	LPC	22:02	22:02	575.3951	C30 H58 O7 N1 P1	4.294	+H
LysoPC(22:3/0:0)	LPC	22:03	22:03	573.3794	C30 H56 O7 N1 P1	3.254	+H
LysoPC(0:0/22:5)	LPC	22:05	22:05	569.3481	C30 H52 O7 N1 P1	1.906	+H
LysoPC(22:5/0:0)	LPC	22:05	22:05	569.3481	C30 H52 O7 N1 P1	2.04	+H
LysoPC(0:0/22:5)	LPC	22:05	22:05	569.3481	C30 H52 O7 N1 P1	2.285	+H
LysoPC(22:6/0:0)	LPC	22:06	22:06	567.3325	C30 H50 O7 N1 P1	1.715	+H
LysoPC(0:0/24:0)	LPC	24:00:00	24:00	607.4577	C32 H66 O7 N1 P1	8.821	+H
LysoPC(24:0/0:0)	LPC	24:00:00	24:00	607.4577	C32 H66 O7 N1 P1	9.201	+H
LysoPC(0:0/24:1)	LPC	24:01:00	24:01	605.442	C32 H64 O7 N1 P1	7.107	+H
LysoPC(24:1/0:0)	LPC	24:01:00	24:01	605.442	C32 H64 O7 N1 P1	7.423	+H
LysoPC(0:0/24:2)	LPC	24:02:00	24:02	603.4264	C32 H62 O7 N1 P1	5.748	+H
LysoPC(24:2/0:0)	LPC	24:02:00	24:02	603.4264	C32 H62 O7 N1 P1	6.214	+H
LysoPC(24:3/0:0)	LPC	24:03:00	24:03	601.4107	C32 H60 O7 N1 P1	4.651	+H
LysoPC(0:0/24:4)	LPC	24:04:00	24:04	599.3951	C32 H58 O7 N1 P1	3.397	+H
LysoPC(24:5/0:0)	LPC	24:05:00	24:05	597.3794	C32 H56 O7 N1 P1	2.831	+H

Supplemental Tables 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*.

LysoPC(0:0/24:6)	LPC	24:06:00	24:06	595.3638	C32 H54 O7 N1 P1	2.213	+H
LysoPC(25:0/0:0)	LPC	25:00:00	25:00	621.4733	C33 H68 O7 N1 P1	10.105	+H
LysoPC(26:1/0:0)	LPC	26:01:00	26:01	633.4733	C34 H68 O7 N1 P1	9.067	+H
LysoPC(26:2/0:0)	LPC	26:02:00	26:02	631.4577	C34 H66 O7 N1 P1	7.53	+H
LysoPC(0:0/35:4)	LPC	35:04:00	35:04	753.5672	C43 H80 O7 N1 P1	10.993	+H
LysoPC(0:0/37:5)	LPC	37:05:00	37:05	779.5829	C45 H82 O7 N1 P1	12.343	+H
LysoPE(16:0)	LPE	16:00	16:00	453.2855	C21 H44 O7 N1 P1	2.404	+H
LysoPE(18:0)	LPE	18:00	18:00	481.3168	C23 H48 O7 N1 P1	3.714	+H
LysoPE(18:2)	LPE	18:02	18:02	477.2855	C23 H44 O7 N1 P1	1.951	+H
LysoPE(20:4)	LPE	20:04	20:04	501.2855	C25 H44 O7 N1 P1	1.906	-H
PC(15:0/18:1)	PC	15:0/18:1	33:01	745.5622	C41 H80 O8 N1 P1	11.483	+HCOO
PC(15:0/20:2)	PC	15:0/20:2	35:02	771.5778	C43 H82 O8 N1 P1	14.401	+H
PC(15:0/20:3)	PC	15:0/20:3	35:03	769.5622	C43 H80 O8 N1 P1	13.474	+H
PC(15:1/18:2)	PC	15:1/18:2	33:03	741.5309	C41 H76 O8 N1 P1	11.596	+H
PC(16:0/16:0)	PC	16:0/16:0	32:00	733.5622	C40 H80 O8 N1 P1	11.854	+HCOO
PC(16:0/18:1)	PC	16:0/18:1	34:01	759.5778	C42 H82 O8 N1 P1	12.251	+HCOO
PC(16:0/18:2)	PC	16:0/18:2	34:02	757.5622	C42 H80 O8 N1 P1	11.075	+HCOO
PC(16:0/20:3)	PC	16:0/20:3	36:03	783.5778	C44 H82 O8 N1 P1	11.678	+HCOO
PC(16:0/20:4)	PC	16:0/20:4	36:04	781.5622	C44 H80 O8 N1 P1	12.253	+H
PC(16:0/22:4)	PC	16:0/22:4	38:04	809.5935	C46 H84 O8 N1 P1	11.941	+HCOO
PC(16:0/22:5)	PC	16:0/22:5	38:05	807.5778	C46 H82 O8 N1 P1	11.488	+HCOO
PC(16:0/22:6)	PC	16:0/22:6	38:06	805.5622	C46 H80 O8 N1 P1	10.369	+HCOO
PC(16:0/24:7)	PC	16:0/24:7	40:07	831.5778	C48 H82 O8 N1 P1	10.186	+H
PC(16:0e/22:4)	PC	16:0e/22:4	38:4e	795.6142	C46 H86 O7 N1 P1	12.905	+HCOO
PC(16:0p/16:0)	PC	16:0p/16:0	32:0p	717.5672	C40 H80 O7 N1 P1	12.887	+HCOO
PC(16:0p/18:2)	PC	16:0p/18:2	34:2p	741.5672	C42 H80 O7 N1 P1	11.809	+HCOO
PC(16:1/20:4)	PC	16:1/20:4	36:05	779.5465	C44 H78 O8 N1 P1	9.494	+HCOO
PC(17:0/18:1)	PC	17:0/18:1	35:01	773.5935	C43 H84 O8 N1 P1	13.035	+HCOO
PC(17:0/18:2)	PC	17:0/18:2	35:02	771.5778	C43 H82 O8 N1 P1	11.881	+HCOO
PC(17:1/18:2)	PC	17:1/18:2	35:03	769.5622	C43 H80 O8 N1 P1	10.437	+HCOO
PC(17:4/18:0)	PC	17:4/18:0	35:04	767.5465	C43 H78 O8 N1 P1	12.867	+H
PC(18:0/15:2)	PC	18:0/15:2	33:02	743.5465	C41 H78 O8 N1 P1	13.09	+H

PC(18:0/17:2)	PC	18:0/17:2	35:02	771.5778	C43 H82 O8 N1 P1	11.873	+H
PC(18:0/18:0)	PC	18:0/18:0	36:00	789.6248	C44 H88 O8 N1 P1	15.166	+HCOO
PC(18:0/18:1)	PC	18:0/18:1	36:01	787.6091	C44 H86 O8 N1 P1	13.814	+HCOO
PC(18:0/18:2)	PC	18:0/18:2	36:02	785.5935	C44 H84 O8 N1 P1	12.676	+HCOO
PC(18:0/20:3)	PC	18:0/20:3	38:03	811.6091	C46 H86 O8 N1 P1	13.072	+HCOO
PC(18:0/20:4)	PC	18:0/20:4	38:04	809.5935	C46 H84 O8 N1 P1	12.464	+HCOO
PC(18:0/22:4)	PC	18:0/22:4	40:04	837.6248	C48 H88 O8 N1 P1	13.501	+HCOO
PC(18:0/22:5)	PC	18:0/22:5	40:05	835.6091	C48 H86 O8 N1 P1	13.048	+HCOO
PC(18:0e/16:0)	PC	18:0e/16:0	34:0e	747.6142	C42 H86 O7 N1 P1	14.681	+HCOO
PC(18:0p/16:0)	PC	18:0p/16:0	34:0p	745.5985	C42 H84 O7 N1 P1	13.154	+HCOO
PC(18:0p/22:6)	PC	18:0p/22:6	40:6p	817.5985	C48 H84 O7 N1 P1	11.491	+HCOO
PC(18:1/14:0)	PC	18:1/14:0	32:01	731.5465	C40 H78 O8 N1 P1	10.73	+HCOO
PC(18:1/20:4)	PC	18:1/20:4	38:05	807.5778	C46 H82 O8 N1 P1	10.402	+H
PC(18:1/23:4)	PC	18:1/23:4	41:05	849.6248	C49 H88 O8 N1 P1	13.906	+H
PC(18:1/24:0)	PC	18:1/24:0	42:01	871.703	C50 H98 O8 N1 P1	17.53	+HCOO
PC(18:2/18:2)	PC	18:2/18:2	36:04	781.5622	C44 H80 O8 N1 P1	10.019	+HCOO
PC(18:2/20:4)	PC	18:2/20:4	38:06	805.5622	C46 H80 O8 N1 P1	9.81	+HCOO
PC(18:2/23:0)	PC	18:2/23:0	41:02	855.6717	C49 H94 O8 N1 P1	16.343	+HCOO
PC(18:2/23:5)	PC	18:2/23:5	41:07	845.5935	C49 H84 O8 N1 P1	11.304	+H
PC(18:2p/18:2)	PC	18:2p/18:2	36:4p	765.5672	C44 H80 O7 N1 P1	10.688	+H
PC(19:0/18:2)	PC	19:0/18:2	37:02	799.6091	C45 H86 O8 N1 P1	13.473	+HCOO
PC(19:0/20:4)	PC	19:0/20:4	39:04	823.6091	C47 H86 O8 N1 P1	13.258	+HCOO
PC(19:0/22:6)	PC	19:0/22:6	41:06	847.6091	C49 H86 O8 N1 P1	12.549	+HCOO
PC(19:2/18:2)	PC	19:2/18:2	37:04	795.5778	C45 H82 O8 N1 P1	10.719	+HCOO
PC(19:3/20:4)	PC	19:3/20:4	39:07	817.5622	C47 H80 O8 N1 P1	9.861	+H
PC(20:0/22:6)	PC	20:0/22:6	42:06	861.6248	C50 H88 O8 N1 P1	13.666	+HCOO
PC(20:0e/16:0)	PC	20:0e/16:0	36:0e	775.6455	C44 H90 O7 N1 P1	16.104	+HCOO
PC(20:0e/18:2)	PC	20:0e/18:2	38:2e	799.6455	C46 H90 O7 N1 P1	15.207	+HCOO
PC(20:1/20:4)	PC	20:1/20:4	40:05	835.6091	C48 H86 O8 N1 P1	12.41	+HCOO
PC(20:1/22:6)	PC	20:1/22:6	42:07	859.6091	C50 H86 O8 N1 P1	12.054	+HCOO
PC(20:2/18:2)	PC	20:2/18:2	38:04	809.5935	C46 H84 O8 N1 P1	11.419	+HCOO
PC(20:2/22:6)	PC	20:2/22:6	42:08	857.5935	C50 H84 O8 N1 P1	10.829	+HCOO

PC(20:3/18:2)	PC	20:3/18:2	38:05	807.5778	C46 H82 O8 N1 P1	10.423	+HCOO
PC(20:3/22:5)	PC	20:3/22:5	42:08	857.5935	C50 H84 O8 N1 P1	10.623	+H
PC(20:4/22:6)	PC	20:4/22:6	42:10	853.5622	C50 H80 O8 N1 P1	9.185	+HCOO
PC(22:0/18:2)	PC	22:0/18:2	40:02	841.6561	C48 H92 O8 N1 P1	15.716	+HCOO
PC(24:0/20:4)	PC	24:0/20:4	44:04	893.6874	C52 H96 O8 N1 P1	16.722	+HCOO
PC(24:2/18:2)	PC	24:2/18:2	42:04	865.6561	C50 H92 O8 N1 P1	14.327	+HCOO
PE(15:0/18:2)	PE	15:0/18:2	33:02	701.4996	C38 H72 O8 N1 P1	10.68	+H
PE(16:0/18:1)	PE	16:0/18:1	34:01	717.5309	C39 H76 O8 N1 P1	12.586	+H
PE(16:0/18:2)	PE	16:0/18:2	34:02	715.5152	C39 H74 O8 N1 P1	11.483	+H
PE(16:0/18:3)	PE	16:0/18:3	34:03	713.4996	C39 H72 O8 N1 P1	10.471	-H
PE(16:0/20:4)	PE	16:0/20:4	36:04	739.5152	C41 H74 O8 N1 P1	11.268	+H
PE(16:0/22:6)	PE	16:0/22:6	38:06	763.5152	C43 H74 O8 N1 P1	10.892	+H
PE(16:0p/18:2)	PE	16:0p/18:2	34:2p	699.5203	C39 H74 O7 N1 P1	12.275	+H
PE(16:0p/20:3)	PE	16:0p/20:3	36:3p	725.5359	C41 H76 O7 N1 P1	12.669	-H
PE(16:0p/20:4)	PE	16:0p/20:4	36:4p	723.5203	C41 H74 O7 N1 P1	12.027	-H
PE(16:0p/22:4)	PE	16:0p/22:4	38:4p	751.5516	C43 H78 O7 N1 P1	13.108	-H
PE(16:0p/22:5)	PE	16:0p/22:5	38:5p	749.5359	C43 H76 O7 N1 P1	12.641	-H
PE(16:0p/22:6)	PE	16:0p/22:6	38:6p	747.5203	C43 H74 O7 N1 P1	11.614	-H
PE(17:0/18:2)	PE	17:0/18:2	35:02	729.5309	C40 H76 O8 N1 P1	12.293	+H
PE(17:0/20:4)	PE	17:0/20:4	37:04	753.5309	C42 H76 O8 N1 P1	12.067	+H
PE(18:0/16:0)	PE	18:0/16:0	34:00	719.5465	C39 H78 O8 N1 P1	14.104	+H
PE(18:0/18:1)	PE	18:0/18:1	36:01	745.5622	C41 H80 O8 N1 P1	14.23	+H
PE(18:0/18:2)	PE	18:0/18:2	36:02	743.5465	C41 H78 O8 N1 P1	13.091	+H
PE(18:0/20:3)	PE	18:0/20:3	38:03	769.5622	C43 H80 O8 N1 P1	13.483	-H
PE(18:0/20:4)	PE	18:0/20:4	38:04	767.5465	C43 H78 O8 N1 P1	12.867	+H
PE(18:0/22:4)	PE	18:0/22:4	40:04	795.5778	C45 H82 O8 N1 P1	13.891	+H
PE(18:0/22:6)	PE	18:0/22:6	40:06	791.5465	C45 H78 O8 N1 P1	12.491	+H
PE(18:0e/22:4)	PE	18:0e/22:4	40:4e	781.5985	C45 H84 O7 N1 P1	14.896	-H
PE(18:0p/16:0)	PE	18:0p/16:0	34:0p	703.5516	C39 H78 O7 N1 P1	14.913	+H
PE(18:0p/18:2)	PE	18:0p/18:2	36:2p	727.5516	C41 H78 O7 N1 P1	12.592	-H
PE(18:0p/20:3)	PE	18:0p/20:3	38:3p	753.5672	C43 H80 O7 N1 P1	14.226	+H
PE(18:0p/20:4)	PE	18:0p/20:4	38:4p	751.5516	C43 H78 O7 N1 P1	13.612	+H

Supplemental Tables 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*.

PE(18:0p/22:5)	PE	18:0p/22:5	40:5p	777.5672	C45 H80 O7 N1 P1	13.683	+H
PE(18:0p/22:6)	PE	18:0p/22:6	40:6p	775.5516	C45 H78 O7 N1 P1	13.223	-H
PE(18:1/18:1)	PE	18:1/18:1	36:02	743.5465	C41 H78 O8 N1 P1	12.815	+H
PE(18:1/18:2)	PE	18:1/18:2	36:03	741.5309	C41 H76 O8 N1 P1	11.602	-H
PE(18:1/20:4)	PE	18:1/20:4	38:05	765.5309	C43 H76 O8 N1 P1	11.362	+H
PE(18:1/22:6)	PE	18:1/22:6	40:07	789.5309	C45 H76 O8 N1 P1	10.983	+H
PE(18:1p/16:0)	PE	18:1p/16:0	34:1p	701.5359	C39 H76 O7 N1 P1	13.46	+H
PE(18:1p/18:1)	PE	18:1p/18:1	36:2p	727.5516	C41 H78 O7 N1 P1	13.556	+H
PE(18:1p/18:2)	PE	18:1p/18:2	36:3p	725.5359	C41 H76 O7 N1 P1	12.292	+H
PE(18:1p/20:4)	PE	18:1p/20:4	38:5p	749.5359	C43 H76 O7 N1 P1	12.114	-H
PE(18:1p/22:4)	PE	18:1p/22:4	40:5p	777.5672	C45 H80 O7 N1 P1	13.186	-H
PE(18:1p/22:6)	PE	18:1p/22:6	40:7p	773.5359	C45 H76 O7 N1 P1	11.709	-H
PE(18:2/18:2)	PE	18:2/18:2	36:04	739.5152	C41 H74 O8 N1 P1	10.4	+H
PE(18:2/20:4)	PE	18:2/20:4	38:06	763.5152	C43 H74 O8 N1 P1	10.172	+H
PE(18:2p/18:2)	PE	18:2p/18:2	36:4p	723.5203	C41 H74 O7 N1 P1	11.162	-H
PE(18:2p/20:4)	PE	18:2p/20:4	38:6p	747.5203	C43 H74 O7 N1 P1	10.895	+H
PE(18:3/18:2)	PE	18:3/18:2	36:05	737.4996	C41 H72 O8 N1 P1	9.388	+H
PE(20:0e/16:0)	PE	20:0e/16:0	36:0e	733.5985	C41 H84 O7 N1 P1	16.471	-H
PE(20:0e/18:2)	PE	20:0e/18:2	38:2e	757.5985	C43 H84 O7 N1 P1	15.646	-H
PE(20:0p/16:0)	PE	20:0p/16:0	36:0p	731.5829	C41 H82 O7 N1 P1	13.156	-H
PE(20:0p/18:2)	PE	20:0p/18:2	38:2p	755.5829	C43 H82 O7 N1 P1	15.387	+H
PE(20:0p/20:4)	PE	20:0p/20:4	40:4p	779.5829	C45 H82 O7 N1 P1	15.151	+H
PE(20:0p/22:5)	PE	20:0p/22:5	42:5p	805.5985	C47 H84 O7 N1 P1	15.205	-H
PE(20:0p/22:6)	PE	20:0p/22:6	42:6p	803.5829	C47 H82 O7 N1 P1	14.762	+H
PE(20:2/18:2)	PE	20:2/18:2	38:04	767.5465	C43 H78 O8 N1 P1	11.825	-H
PE(20:4/20:4)	PE	20:4/20:4	40:08	787.5152	C45 H74 O8 N1 P1	9.872	+H
PG(28:0/18:2)	PG	28:0/18:2	46:02	914.6976	C52 H99 O10 N0 P1	17.029	-H
PG(30:0/18:2)	PG	30:0/18:2	48:02	942.7289	C54 H103 O10 N0 P1	16.747	-H
PI(16:0,16:0)	PI	16:0/16:0	32:00	810.5258	C41 H79 O13 N0 P1	11.222	-H
PI(16:0,18:1)	PI	16:0/18:1	34:01	836.5415	C43 H81 O13 N0 P1	11.38	-H
PI(16:0,20:4)	PI	16:0/20:4	36:04	858.5258	C45 H79 O13 N0 P1	10.06	+H
PI(18:0,18:2)	PI	18:0/18:2	36:02	862.5571	C45 H83 O13 N0 P1	11.788	+H

PI(18:0,20:2)	PI	18:0/20:2	38:02	890.5884	C47 H87 O13 N0 P1	13.108	-H
PI(18:0,20:3)	PI	18:0/20:3	38:03	888.5728	C47 H85 O13 N0 P1	12.19	+H
PI(18:0,20:4)	PI	18:0/20:4	38:04	886.5571	C47 H83 O13 N0 P1	11.61	+H
PI(18:0,20:5)	PI	18:0/20:5	38:05	884.5415	C47 H81 O13 N0 P1	10.666	-H
PI(18:0,22:4)	PI	18:0/22:4	40:04	914.5884	C49 H87 O13 N0 P1	12.637	-H
PI(18:0,22:6)	PI	18:0/22:6	40:06	910.5571	C49 H83 O13 N0 P1	11.262	+H
PI(18:1,18:1)	PI	18:1/18:1	36:02	862.5571	C45 H83 O13 N0 P1	11.533	-H
PI(18:1,18:2)	PI	18:1/18:2	36:03	860.5415	C45 H81 O13 N0 P1	10.371	-H
PI(18:1,20:4)	PI	18:1/20:4	38:05	884.5415	C47 H81 O13 N0 P1	10.186	-H
PS(18:0,18:1)	PS	18:0/18:1	36:01	789.552	C42 H80 O10 N1 P1	13.13	-H
PS(18:0,18:2)	PS	18:0/18:2	36:02	787.5363	C42 H78 O10 N1 P1	11.981	-H
PS(18:0,20:4)	PS	18:0/20:4	38:04	811.5363	C44 H78 O10 N1 P1	11.789	-H
PS(20:4,20:4)	PS	20:4/20:4	40:08	831.505	C46 H74 O10 N1 P1	8.934	+H
SM(d18:1/24:2)	SM	d18:1/24:2	d42:3	810.6615	C47 H91 O6 N2 P1	13.889	+H
So(d18:0)	So	d18:0	d18:0	301.2981	C18 H39 O2 N1	2.126	+H
So(d18:1)	So	d18:1	d18:1	299.2824	C18 H37 O2 N1	1.898	+H
TG(10:0,18:1,18:1)	TG	10:0/18:1/18:1	46:02	774.6737	C49 H90 O6	18.999	+NH4
TG(10:0,18:1,18:2)	TG	10:0/18:1/18:2	46:03	772.6581	C49 H88 O6	18.383	+NH4
TG(10:0,18:2,18:2)	TG	10:0/18:2/18:2	46:04	770.6424	C49 H86 O6	17.751	+NH4
TG(10:0,18:2,18:3)	TG	10:0/18:2/18:3	46:05	768.6268	C49 H84 O6	17.144	+NH4
TG(11:0,18:1,18:2)	TG	11:0/18:1/18:2	47:03	786.6737	C50 H90 O6	18.694	+NH4
TG(12:0,18:2,18:2)	TG	12:0/18:2/18:2	48:04	798.6737	C51 H90 O6	18.464	+NH4
TG(12:0,18:2,18:3)	TG	12:0/18:2/18:3	48:05	796.6581	C51 H88 O6	17.949	+NH4
TG(12:0,18:3,18:3)	TG	12:0/18:3/18:3	48:06	794.6424	C51 H86 O6	17.351	+NH4
TG(14:0,18:2,18:2)	TG	14:0/18:2/18:2	50:04	826.705	C53 H94 O6	19.083	+NH4
TG(14:0,18:2,18:3)	TG	14:0/18:2/18:3	50:05	824.6894	C53 H92 O6	18.655	+NH4
TG(14:0,18:2,20:5)	TG	14:0/18:2/20:5	52:07	848.6894	C55 H92 O6	18.456	+NH4
TG(15:0,12:0,18:2)	TG	15:0/12:0/18:2	45:02	760.6581	C48 H88 O6	18.696	+NH4
TG(15:0,14:0,16:0)	TG	15:0/14:0/16:0	45:00	764.6894	C48 H92 O6	19.759	+NH4
TG(15:0,14:0,18:1)	TG	15:0/14:0/18:1	47:01	790.705	C50 H94 O6	19.757	+NH4

Supplemental Tables 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*.

TG(15:0,14:0,18:2)	TG	15:0/14:0/18:2	47:02	788.6894	C50 H92 O6	19.295	+NH4
TG(15:0,16:0,18:1)	TG	15:0/16:0/18:1	49:01	818.7363	C52 H98 O6	20.223	+NH4
TG(15:0,16:0,18:2)	TG	15:0/16:0/18:2	49:02	816.7207	C52 H96 O6	19.723	+NH4
TG(15:0,16:1,18:2)	TG	15:0/16:1/18:2	49:03	814.705	C52 H94 O6	19.31	+NH4
TG(15:0,18:1,18:2)	TG	15:0/18:1/18:2	51:03	842.7363	C54 H98 O6	19.805	+NH4
TG(15:0,18:2,18:2)	TG	15:0/18:2/18:2	51:04	840.7207	C54 H96 O6	19.376	+NH4
TG(15:1,18:2,18:2)	TG	15:1/18:2/18:2	51:05	838.705	C54 H94 O6	18.83	+NH4
TG(15:1,18:2,18:3)	TG	15:1/18:2/18:3	51:06	836.6894	C54 H92 O6	18.364	+NH4
TG(16:0,10:0,18:1)	TG	16:0/10:0/18:1	44:01	748.6581	C47 H88 O6	18.936	+NH4
TG(16:0,10:0,18:2)	TG	16:0/10:0/18:2	44:02	746.6424	C47 H86 O6	18.383	+NH4
TG(16:0,12:0,16:0)	TG	16:0/12:0/16:0	44:00	750.6737	C47 H90 O6	19.503	+NH4
TG(16:0,12:0,18:1)	TG	16:0/12:0/18:1	46:01	776.6894	C49 H92 O6	19.486	+NH4
TG(16:0,14:0,16:0)	TG	16:0/14:0/16:0	46:00	778.705	C49 H94 O6	20.005	+NH4
TG(16:0,14:0,18:1)	TG	16:0/14:0/18:1	48:01	804.7207	C51 H96 O6	19.983	+NH4
TG(16:0,14:0,22:6)	TG	16:0/14:0/22:6	52:06	850.705	C55 H94 O6	18.877	+NH4
TG(16:0,16:0,18:1)	TG	16:0/16:0/18:1	50:01	832.752	C53 H100 O6	20.336	+NH4
TG(16:0,16:0,18:1)	TG	16:0/16:0/18:1	50:01	832.752	C53 H100 O6	20.456	+NH4
TG(16:0,16:0,18:2)	TG	16:0/16:0/18:2	50:02	830.7363	C53 H98 O6	19.28	+NH4
TG(16:0,16:0,18:2)	TG	16:0/16:0/18:2	50:02	830.7363	C53 H98 O6	20.09	+NH4
TG(16:0,16:0,21:0)	TG	16:0/16:0/21:0	53:00	876.8146	C56 H108 O6	21.38	+NH4
TG(16:0,16:1,18:1)	TG	16:0/16:1/18:1	50:02	830.7363	C53 H98 O6	19.971	+NH4
TG(16:0,16:1,18:2)	TG	16:0/16:1/18:2	50:03	828.7207	C53 H96 O6	17.787	+NH4
TG(16:0,16:1,18:3)	TG	16:0/16:1/18:3	50:04	826.705	C53 H94 O6	17.257	+NH4
TG(16:0,17:0,18:1)	TG	16:0/17:0/18:1	51:01	846.7676	C54 H102 O6	20.664	+NH4
TG(16:0,18:1,18:1)	TG	16:0/18:1/18:1	52:02	858.7676	C55 H102 O6	18.737	+NH4
TG(16:0,18:1,18:1)	TG	16:0/18:1/18:1	52:02	858.7676	C55 H102 O6	20.424	+NH4
TG(16:0,18:1,18:2)	TG	16:0/18:1/18:2	52:03	856.752	C55 H100 O6	18.239	+NH4
TG(16:0,18:1,18:2)	TG	16:0/18:1/18:2	52:03	856.752	C55 H100 O6	20.054	+NH4

Supplemental Tables 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*.

TG(16:0,18:1,18:3)	TG	16:0/18:1/18:3	52:04	854.7363	C55 H98 O6	19.648	+NH4
TG(16:0,18:1,20:4)	TG	16:0/18:1/20:4	54:05	880.752	C57 H100 O6	19.898	+NH4
TG(16:0,18:1,22:0)	TG	16:0/18:1/22:0	56:01	916.8459	C59 H112 O6	21.592	+NH4
TG(16:0,18:2,18:2)	TG	16:0/18:2/18:2	52:04	854.7363	C55 H98 O6	25.07	+NH4
TG(16:0,18:2,18:3)	TG	16:0/18:2/18:3	52:05	852.7207	C55 H96 O6	17.465	+NH4
TG(16:0,18:2,18:3)	TG	16:0/18:2/18:3	52:05	852.7207	C55 H96 O6	19.271	+NH4
TG(16:0,18:2,20:4)	TG	16:0/18:2/20:4	54:06	878.7363	C57 H98 O6	19.474	+NH4
TG(16:0,18:2,21:0)	TG	16:0/18:2/21:0	55:02	900.8146	C58 H108 O6	21.052	+NH4
TG(16:0,18:2,22:4)	TG	16:0/18:2/22:4	56:06	906.7676	C59 H102 O6	19.851	+NH4
TG(16:0,18:2,22:6)	TG	16:0/18:2/22:6	56:08	902.7363	C59 H98 O6	19.289	+NH4
TG(16:0,20:1,21:0)	TG	16:0/20:1/21:0	57:01	930.8615	C60 H114 O6	21.738	+NH4
TG(16:0,20:1,23:0)	TG	16:0/20:1/23:0	59:01	958.8928	C62 H118 O6	22.074	+NH4
TG(16:0,22:4,22:4)	TG	16:0/22:4/22:4	60:08	958.7989	C63 H106 O6	20.186	+NH4
TG(16:0,22:5,22:6)	TG	16:0/22:5/22:6	60:11	952.752	C63 H100 O6	19.099	+NH4
TG(16:0,8:0,18:2)	TG	16:0/8:0/18:2	42:02	718.6111	C45 H82 O6	17.692	+NH4
TG(16:0e,16:0,18:2)	TG	16:0e/16:0/18:2	50:2e	816.7571	C53 H100 O5	20.651	+NH4
TG(16:1,14:0,18:1)	TG	16:1/14:0/18:1	48:02	802.705	C51 H94 O6	19.56	+NH4
TG(16:1,18:2,18:3)	TG	16:1/18:2/18:3	52:06	850.705	C55 H94 O6	18.666	+NH4
TG(16:2,18:2,18:3)	TG	16:2/18:2/18:3	52:07	848.6894	C55 H92 O6	18.19	+NH4
TG(17:0,18:1,18:1)	TG	17:0/18:1/18:1	53:02	872.7833	C56 H104 O6	20.645	+NH4
TG(17:0,18:1,18:2)	TG	17:0/18:1/18:2	53:03	870.7676	C56 H102 O6	20.194	+NH4
TG(17:0,18:2,18:2)	TG	17:0/18:2/18:2	53:04	868.752	C56 H100 O6	19.901	+NH4
TG(17:4,16:1,20:4)	TG	17:4/16:1/20:4	53:09	858.6737	C56 H90 O6	19.268	+NH4
TG(18:0,16:0,16:0)	TG	18:0/16:0/16:0	50:00	834.7676	C53 H102 O6	20.897	+NH4
TG(18:0,16:0,17:0)	TG	18:0/16:0/17:0	51:00	848.7833	C54 H104 O6	21.041	+NH4
TG(18:0,16:0,18:0)	TG	18:0/16:0/18:0	52:00	862.7989	C55 H106 O6	21.282	+NH4
TG(18:0,16:0,18:1)	TG	18:0/16:0/18:1	52:01	860.7833	C55 H104 O6	20.746	+NH4
TG(18:0,16:0,20:0)	TG	18:0/16:0/20:0	54:00	890.8302	C57 H110 O6	21.626	+NH4

Supplemental Tables 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*.

TG(18:0,16:0,21:0)	TG	18:0/16:0/21:0	55:00	904.8459	C58 H112 O6	21.749	+NH4
TG(18:0,17:0,18:2)	TG	18:0/17:0/18:2	53:02	872.7833	C56 H104 O6	20.751	+NH4
TG(18:0,20:4,20:5)	TG	18:0/20:4/20:5	58:09	928.752	C61 H100 O6	19.501	+NH4
TG(18:0,20:4,22:6)	TG	18:0/20:4/22:6	60:10	954.7676	C63 H102 O6	19.677	+NH4
TG(18:0,22:0,22:0)	TG	18:0/22:0/22:0	62:00	1002.955	C65 H126 O6	22.824	+NH4
TG(18:0p,18:2,18:2)	TG	18:0p/18:2/18:2	54:4p	866.7727	C57 H102 O5	20.312	+NH4
TG(18:1,12:0,18:2)	TG	18:1/12:0/18:2	48:03	800.6894	C51 H92 O6	18.999	+NH4
TG(18:1,14:0,18:2)	TG	18:1/14:0/18:2	50:03	828.7207	C53 H96 O6	19.552	+NH4
TG(18:1,18:1,18:1)	TG	18:1/18:1/18:1	54:03	884.7833	C57 H104 O6	20.492	+NH4
TG(18:1,18:2,18:3)	TG	18:1/18:2/18:3	54:06	878.7363	C57 H98 O6	17.453	+NH4
TG(18:1,18:2,18:3)	TG	18:1/18:2/18:3	54:06	878.7363	C57 H98 O6	19.181	+NH4
TG(18:1,18:2,20:4)	TG	18:1/18:2/20:4	56:07	904.752	C59 H100 O6	19.481	+NH4
TG(18:1,18:2,23:0)	TG	18:1/18:2/23:0	59:03	954.8615	C62 H114 O6	21.477	+NH4
TG(18:1,18:2,24:1)	TG	18:1/18:2/24:1	60:04	966.8615	C63 H114 O6	21.24	+NH4
TG(18:1,18:3,22:6)	TG	18:1/18:3/22:6	58:10	926.7363	C61 H98 O6	18.802	+NH4
TG(18:1,18:3,24:1)	TG	18:1/18:3/24:1	60:05	964.8459	C63 H112 O6	20.946	+NH4
TG(18:2,17:2,18:2)	TG	18:2/17:2/18:2	53:06	864.7207	C56 H96 O6	18.929	+NH4
TG(18:2,17:2,22:6)	TG	18:2/17:2/22:6	57:10	912.7207	C60 H96 O6	18.509	+NH4
TG(18:2,18:2,18:2)	TG	18:2/18:2/18:2	54:06	878.7363	C57 H98 O6	22.966	+NH4
TG(18:2,18:2,18:2)	TG	18:2/18:2/18:2	54:06	878.7363	C57 H98 O6	23.479	+NH4
TG(18:2,20:4,21:5)	TG	18:2/20:4/21:5	59:11	938.7363	C62 H98 O6	18.584	+NH4
TG(18:2,20:4,22:6)	TG	18:2/20:4/22:6	60:12	950.7363	C63 H98 O6	18.594	+NH4
TG(18:2p,16:0,18:2)	TG	18:2p/16:0/18:2	52:4p	838.7414	C55 H98 O5	20.05	+NH4
TG(18:3,13:0,18:2)	TG	18:3/13:0/18:2	49:05	810.6737	C52 H90 O6	18.325	+NH4
TG(18:3,14:1,18:2)	TG	18:3/14:1/18:2	50:06	822.6737	C53 H90 O6	18.146	+NH4
TG(18:3,14:1,18:3)	TG	18:3/14:1/18:3	50:07	820.6581	C53 H88 O6	17.603	+NH4
TG(18:3,17:2,18:2)	TG	18:3/17:2/18:2	53:07	862.705	C56 H94 O6	18.485	+NH4
TG(18:3,17:3,18:2)	TG	18:3/17:3/18:2	53:08	860.6894	C56 H92 O6	17.979	+NH4

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TG(18:3,18:2,18:2)	TG	18:3/18:2/18:2	54:07	876.7207	C57 H96 O6	16.554	+NH4
TG(18:3,18:2,18:2)	TG	18:3/18:2/18:2	54:07	876.7207	C57 H96 O6	18.176	+NH4
TG(18:3,18:2,18:2)	TG	18:3/18:2/18:2	54:07	876.7207	C57 H96 O6	18.765	+NH4
TG(18:3,18:2,18:2)	TG	18:3/18:2/18:2	54:07	876.7207	C57 H96 O6	19.093	+NH4
TG(18:3,18:2,18:3)	TG	18:3/18:2/18:3	54:08	874.705	C57 H94 O6	18.301	+NH4
TG(18:3,18:2,18:3)	TG	18:3/18:2/18:3	54:08	874.705	C57 H94 O6	18.473	+NH4
TG(18:3,18:2,20:3)	TG	18:3/18:2/20:3	56:08	902.7363	C59 H98 O6	18.901	+NH4
TG(18:3,18:2,20:4)	TG	18:3/18:2/20:4	56:09	900.7207	C59 H96 O6	18.572	+NH4
TG(18:3,18:2,20:4)	TG	18:3/18:2/20:4	56:09	900.7207	C59 H96 O6	18.881	+NH4
TG(18:3,18:2,20:5)	TG	18:3/18:2/20:5	56:10	898.705	C59 H94 O6	18.11	+NH4
TG(18:3,18:3,18:3)	TG	18:3/18:3/18:3	54:09	872.6894	C57 H92 O6	17.787	+NH4
TG(18:3,18:3,22:6)	TG	18:3/18:3/22:6	58:12	922.705	C61 H94 O6	17.882	+NH4
TG(18:4,18:1,18:2)	TG	18:4/18:1/18:2	54:07	876.7207	C57 H96 O6	16.765	+NH4
TG(18:4,18:2,18:2)	TG	18:4/18:2/18:2	54:08	874.705	C57 H94 O6	17.123	+NH4
TG(18:4,18:2,18:2)	TG	18:4/18:2/18:2	54:08	874.705	C57 H94 O6	18.669	+NH4
TG(19:0,18:2,18:2)	TG	19:0/18:2/18:2	55:04	896.7833	C58 H104 O6	20.367	+NH4
TG(19:2,18:2,18:3)	TG	19:2/18:2/18:3	55:07	890.7363	C58 H98 O6	19.034	+NH4
TG(20:0e,16:0,18:1)	TG	20:0e/16:0/18:1	54:1e	874.8353	C57 H110 O5	21.812	+NH4
TG(20:0e,18:1,18:1)	TG	20:0e/18:1/18:1	56:2e	900.851	C59 H112 O5	21.772	+NH4
TG(20:0e,18:2,20:1)	TG	20:0e/18:2/20:1	58:3e	926.8666	C61 H114 O5	21.825	+NH4
TG(20:2,18:2,18:2)	TG	20:2/18:2/18:2	56:06	906.7676	C59 H102 O6	19.738	+NH4
TG(20:3,18:2,22:4)	TG	20:3/18:2/22:4	60:09	956.7833	C63 H104 O6	19.562	+NH4
TG(20:5,18:2,20:4)	TG	20:5/18:2/20:4	58:11	924.7207	C61 H96 O6	18.353	+NH4
TG(20:5,18:2,22:6)	TG	20:5/18:2/22:6	60:13	948.7207	C63 H96 O6	18.134	+NH4
TG(20:5,20:4,20:5)	TG	20:5/20:4/20:5	60:14	946.705	C63 H94 O6	17.619	+NH4
TG(20:5,20:4,22:6)	TG	20:5/20:4/22:6	62:15	972.7207	C65 H96 O6	17.912	+NH4
TG(22:0,18:2,18:2)	TG	22:0/18:2/18:2	58:04	938.8302	C61 H110 O6	21.015	+NH4
TG(22:4,18:2,18:2)	TG	22:4/18:2/18:2	58:08	930.7676	C61 H102 O6	19.434	+NH4

Supplemental Tables 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*.

TG(22:5,18:2,24:6)	TG	22:5/18:2/24:6	64:13	1004.783	C67 H104 O6	19.006	+NH4
TG(24:1,18:2,22:6)	TG	24:1/18:2/22:6	64:09	1012.846	C67 H112 O6	20.675	+NH4
TG(24:1,18:2,23:0)	TG	24:1/18:2/23:0	65:03	1038.955	C68 H126 O6	22.316	+NH4
TG(24:4,18:1,18:2)	TG	24:4/18:1/18:2	60:07	960.8146	C63 H108 O6	20.275	+NH4
TG(26:1,16:0,18:0)	TG	26:1/16:0/18:0	60:01	972.9085	C63 H120 O6	22.225	+NH4
TG(26:1,16:0,24:1)	TG	26:1/16:0/24:1	66:02	1054.987	C69 H130 O6	22.725	+NH4
TG(26:1,18:2,20:4)	TG	26:1/18:2/20:4	64:07	1016.877	C67 H116 O6	21.204	+NH4
TG(27:0,18:2,18:2)	TG	27:0/18:2/18:2	63:04	1008.909	C66 H120 O6	21.828	+NH4
TG(30:1,18:2,18:3)	TG	30:1/18:2/18:3	66:06	1046.924	C69 H122 O6	21.773	+NH4
TG(8:0,18:1,18:2)	TG	8:0/18:1/18:2	44:03	744.6268	C47 H84 O6	17.688	+NH4
TG(8:0,18:2,18:2)	TG	8:0/18:2/18:2	44:04	742.6111	C47 H82 O6	16.945	+NH4

Cer: ceramide, DG: diacylglycerol, LPC: lysophosphatidylcholine, LPE: lysophosphatidylethanolamine, PC: phosphatidylcholine, PE: phosphatidylethanolamine, PG: phosphatidylglycerol, PI: phosphatidylinositol, PS: phosphatidylserine, SM: sphingomyelin, So: sphingosine, TG: triacylglycerol