Table 1 Measurement accuracy summary compared against SRM 1950 - "Metabolites in

Lipid Species	Measurement*	Consensus Value**	Units	No. of labs	Notes
DAG 34:1	27.43666 ± 6.044209	6.1 ± 2.4	nmol/mL	16	
DAG 36:2	54.93324 ± 12.14247	6.2 ± 2.2	nmol/mL	16	
DAG 36:3	91.92176 ± 19.31519	8.4 ± 3.3	nmol/mL	15	
DAG 36:4	20.61328 ± 6.742786	2.8 ± 1.0	nmol/mL	12	
LPC 14:0	0.761142 ± 0.029648	1.0 ± 0.20	nmol/mL	16	
LPC 15:0	0.52642 ± 0.010926	0.52 ± 0.11	nmol/mL	9	
LPC 16:0	89.66176 ± 2.66598	73 ± 11	nmol/mL	20	
LPC O-16:0	0.60202 ± 0.012325	0.55 ± 0.16	nmol/mL	10	
LPC P-16:0	89.66176 ± 2.66598	0.46 ± 0.13	nmol/mL	8	
LPC 16:1	2.792925 ± 0.060359	2.4 ± 0.35	nmol/mL	19	
LPC 17:0	0.744143 ± 0.01195	1.4 ± 0.24	nmol/mL	6	
LPC 17:1	0.205219 ± 0.007316	0.25 ± 0.071	nmol/mL	6	
LPC 18:0	29.60517 ± 0.410207	27 ± 3.3	nmol/mL	20	
LPC O-18:0	0.183568 ± 0.002425	0.16 ± 0.058	nmol/mL	6	
LPC 18:1	20.63964 ± 0.182089	18 ± 2.3	nmol/mL	19	
LPC 18:2	31.49792 ± 0.908458	22 ± 2.9	nmol/mL	19	
LPC 18:3	6.130608 ± 0.494298	0.44 ± 0.13	nmol/mL	18	
LPC 20:0	0.140307 ± 0.003997	0.10 ± 0.034	nmol/mL	7	
LPC 20:1	0.222413 ± 0.007439	0.19 ± 0.024	nmol/mL	13	
LPC 20:2	0.276573 ± 0.009123	0.23 ± 0.044	nmol/mL	9	
LPC 20:3	2.303262 ± 0.070517	1.8 ± 0.26	nmol/mL	18	
LPC 20:4	8.639267 ± 0.145556	6.0 ± 0.60	nmol/mL	20	
LPC 22:0	0.023275 ± 0.001725	0.025 ± 0.0017	nmol/mL	5	
LPC 22:4	0.190179 ± 0.002336	0.12 ± 0.041	nmol/mL	8	
LPC 22:5	0.493878 ± 0.013088	0.43 ± 0.13	nmol/mL	12	
LPC 22:6	1.214027 ± 0.038036	0.77 ± 0.14	nmol/mL	17	
LPC 24:0	0.109521 ± 0.004187	0.046 ± 0.015	nmol/mL	5	
LPE 16:0	0.91224 ± 0.013581	0.91 ± 0.27	nmol/mL	14	
LPE 18:0	2.057618 ± 0.042155	1.6 ± 0.55	nmol/mL	15	
LPE 18:1	1.290066 ± 0.020299	1.4 ± 0.47	nmol/mL	14	
LPE 18:2	2.741344 ± 0.076354	1.9 ± 0.56	nmol/mL	16	
LPE 20:4	2.828394 ± 0.083155	1.1 ± 0.41	nmol/mL	14	
LPE 22:6	1.147379 ± 0.027013	0.52 ± 0.18	nmol/mL	12	
PC 30:0	3.154231 ± 0.10663	1.6 ± 0.32	nmol/mL	11	
PC 32:0	12.37464 ± 0.47037	7.2 ± 1.0	nmol/mL	18	
PC 32:1	22.85719 ± 0.901362	13 ± 1.9	nmol/mL	18	
PC 32:3	0.09277 ± 0.02035	0.42 ± 0.14	nmol/mL	8	
PC 34:0	3.364286 ± 0.073472	2.1 ± 0.37	nmol/mL	12	
PC 34:1	185.0315 ± 7.075365	120 ± 21	nmol/mL	19	
PC 34:5	0.25018 ± 0.002967	0.034 ± 0.0045	nmol/mL	5	
PC 36:1	50.78469 ± 2.68154	26 ± 4.6	nmol/mL	17	
PC 36:2	213.2753 ± 9.857716	140 ± 25	nmol/mL	18	
PC 36:3	75.9097 ± 2.073615	100 ± 14	nmol/mL	17	
PC 36:4	164.5265 ± 10.05446	150 ± 28	nmol/mL	19	
PC 36:5	10.33548 ± 0.251308	11 ± 1.8	nmol/mL	16	
PC 36:6	1.381812 ± 0.200871	0.28 ± 0.088	nmol/mL	8	
PC 38:2	5.763906 ± 0.158272	2.3 ± 0.20	nmol/mL	15	
PC 38:3	45.68145 ± 2.087451	26 ± 5.2	nmol/mL	14	
PC 38:4	98.87942 ± 4.423319	84 ± 14	nmol/mL	18	

PC 38:5	22.48156	±	0.548825	42	± 7.9	nmol/mL	18
PC 38:6	59.7013	±	2.620876	41	± 4.4	nmol/mL	18
PC 40:4	4.721277	±	0.172414	2.9	± 0.37	nmol/mL	18
PC 40:5	5.920207	±	0.363753	6.7	± 1.1	nmol/mL	18
PC 40:6	18.46319	±	0.917892	14	± 2.6	nmol/mL	17
PC 40:7	5.248522	±	0.491283	3.5	± 0.26	nmol/mL	16
PC 40:8	0.694274	±	0.020416	0.73	± 0.20	nmol/mL	14
PE 34:1	0.84685	±	0.10387	1.2	± 0.17	nmol/mL	14
PE 34:2	2.109879	±	0.127618	2.2	± 0.26	nmol/mL	16
PE 36:0	2.28429	±	0.127144	0.28	± 0.10	nmol/mL	11
PE 36:1	13.06553	±	0.735822	1.3	± 0.26	nmol/mL	14
PE 36:2	13.85908	±	0.682586	6.7	± 0.79	nmol/mL	16
PE 36:3	1.202068	±	0.078166	2.4	± 0.38	nmol/mL	16
PE 36:4	2.360414	±	0.153914	3.1	± 0.39	nmol/mL	16
PE 38:3	5.916747	±	0.049201	0.95	± 0.20	nmol/mL	14
PE 38:4	7.413555	±	0.283836	8.1	± 1.2	nmol/mL	16
PE 38:5	1.241572	±	0.076732	2.7	± 0.47	nmol/mL	12
PE 38:6	4.094684	±	0.24689	3.2	± 0.59	nmol/mL	15
PE 40:4	12.9413	±	2.039554	0.26	± 0.082	nmol/mL	10
PE 40:5	2.723566	±	0.522296	0.73	± 0.23	nmol/mL	12
PE 40:6	1.473234	±	0.082313	1.8	± 0.36	nmol/mL	14
PE 40:7	0.619428	±	0.074549	0.77	± 0.26	nmol/mL	11
PI 40:4	5.079067	±	1.09413	0.30	± 0.042	nmol/mL	7
CER d34:1	0.330007	±	0.039737	0.28	± 0.044	nmol/mL	17
CER d38:1	0.229982	±	0.022583	0.11	± 0.021	nmol/mL	16
CER d40:1	0.803463	±	0.082324	0.65	± 0.12	nmol/mL	18
CER d40:2	0.627728	±	0.042106	0.15	± 0.021	nmol/mL	6
CER d41:1	0.38943	±	0.066918	0.67	± 0.27	nmol/mL	7
CER d42:1	0.932198	±	0.148412	1.9	± 0.47	nmol/mL	19
CER d42:2	1.921306	±	0.160014	0.82	± 0.10	nmol/mL	19
SM d32:1	2.302496	±	0.02945	8.4	± 1.4	nmol/mL	14
SM d32:2	0.174652	±	0.003229	0.66	± 0.24	nmol/mL	10
SM d33:1	1.627442	±	0.009514	4.7	± 0.64	nmol/mL	14
SM d34:0	1.788929	±	0.067369	5.8	± 1.3	nmol/mL	14
SM d34:1	71.00368	±	1.886706	100	± 15	nmol/mL	21
SM d34:2	5.047294	±	0.138989	16	± 2.2	nmol/mL	17
SM d35:1	1.229048	±	0.044317	2.5	± 0.58	nmol/mL	9
SM d36:0	0.53878	±	0.031372	2.0	± 0.49	nmol/mL	11
SM d36:1	9.996026	±	0.38068	20	± 3.7	nmol/mL	22
SM d36:2	8.096502	±	0.107273	9.6	± 1.5	nmol/mL	22
SM d36:3	0.528882	±	0.005274	1.3	± 0.41	nmol/mL	13
SM d37:1	0.538983	±	0.012813	1.0	± 0.23	nmol/mL	11
SM d38:1	8.087987	±	0.315797	11	± 3.1	nmol/mL	17
SM d38:2	2.699714	±	0.033737	5.2	± 1.3	nmol/mL	17
SM d38:3	0.135151	±	0.007422	0.61	± 0.24	nmol/mL	8
SM d39:1	1.989061	±	0.049917	3.6	± 1.0	nmol/mL	14
SM d39:2	0.363151	±	0.007053	0.61	± 0.16	nmol/mL	9
SM d40:1	15.60196	±	1.046659	20	± 5.1	nmol/mL	17
SM d40:2	10.87109	±	0.272893	12	± 2.8	nmol/mL	15
SM d41:1	3.224488	±	0.296282	7.7	± 2.1	nmol/mL	14
SM d41:2	4.093372	±	0.046147	5.8	± 1.4	nmol/mL	14
SM d42:1	4.555663	±	0.550966	20	± 5.4	nmol/mL	21

SM d42:2	28.41162	±	1.289341	44	± 11	nmol/mL	18
SM d42:3	20.44846	±	0.534722	17	± 4.7	nmol/mL	12
SM d43:2	0.930349	±	0.190299	1.0	± 0.29	nmol/mL	10
SM d44:2	0.091864	±	0.010302	0.40	± 0.13	nmol/mL	9
CE 15:0	5.192106	±	1.239226	5.3	± 1.8	nmol/mL	6
CE 17:1	0.280467	±	0.092187	8.2	± 1.0	nmol/mL	9
CE 18:2	7.110323	±	1.5109	1,700	± 430	nmol/mL	14
CE 18:3	0.624985	±	0.094279	84	± 24	nmol/mL	13
CE 20:3	0.704388	±	0.135506	35	± 12	nmol/mL	13
CE 20:4	5.515381	±	0.859149	350	± 58	nmol/mL	14
CE 20:5	1.182781	±	0.1613	38	± 8.6	nmol/mL	12
CE 22:5	0.358199	±	0.079756	4.1	± 1.6	nmol/mL	6
CE 22:6	2.130874	±	0.439974	37	± 9.5	nmol/mL	11

* Measurement mean ± 1 standard deviation.

** Consensus mean ± standard uncertainty.