

Supplementary Table 3.

Orbitrap high-resolution (QE) mass spectrometry lipid analysis.

Lipid species	Precursor Ion	Product Ion
<i>Dihydroceramide (DHCer)</i>		
DHCer 18:0/18:0	568.5663	266.2896
DHCer 18:0/20:0	596.5975	266.2842
DHCer 18:0/22:0	624.6298	266.2839
DHCer 18:0/24:0	652.6602	266.2838
DHCer 18:0/24:1	650.6445	266.2843
<i>Ceramide (Cer)</i>		
Cer 18:1/18:0	566.5506	264.2684
Cer 18:1/20:0	594.5819	264.2684
Cer 18:1/20:1	592.5663	264.2684
Cer 18:1/22:0	622.6132	264.2684
Cer 18:1/22:1	620.5975	264.2684
Cer 18:1/23:0	636.6289	264.2685
Cer 18:1/24:0	650.6445	264.2685
Cer 18:1/24:1	648.6289	264.2686
<i>Deoxy-dihydroceramide (deoxyDHCer)</i>		
deoxyDHCer m18:0/20:0	580.6027	268.2995
deoxyDHCer m18:0/22:0	608.6340	268.3000
deoxyDHCer m18:0/24:0	636.6652	268.2997
<i>Deoxy-ceramide (deoxyCer)</i>		
deoxyCer m18:1/20:0	576.5714	264.2684
deoxyCer m18:1/22:0	604.6027	264.2686
deoxyCer m18:1/23:0	618.6183	264.2683
<i>Glucosyl/Galactosyl-Ceramide (Gluc/Gal-Cer)</i>		
Gluc/Gal-Cer 18:1/16:0	700.5722	264.2686
Gluc/Gal-Cer 18:1/18:0	728.6035	264.2684
Gluc/Gal-Cer 18:1/20:0	756.6347	264.2685
Gluc/Gal-Cer 18:1/22:0	784.6660	264.2684
Gluc/Gal-Cer 18:1/24:0	812.6973	264.2684
Gluc/Gal-Cer 18:1/26:0	840.7286	264.2683
<i>Sphingomyelin (SM)</i>		
SM 32:1	675.5435	184.0735
SM 33:1	689.5592	184.0735
SM 34:0	705.5905	184.0734
SM 34:1	703.5748	184.0735
SM 34:2	701.5592	184.0736
SM 35:1	717.5905	184.0734
SM 36:1	731.6061	184.0735
SM 36:2	729.5905	184.0733

SM 37:1	745.6218	184.0734
SM 38:0	761.6530	184.0734
SM 38:2	757.6218	184.0734
SM 39:1	773.6530	184.0735
SM 40:0	789.6843	184.0735
SM 40:1	787.6687	184.0734
SM 40:2	785.6530	184.0735

Sulfatide

Mono-Sulfo Galactosyl(β) Ceramide 18:1/16:0	780.5289	264.2679
Mono-Sulfo Galactosyl(β) Ceramide 18:1/18:0	808.5603	264.2679
Mono-Sulfo Galactosyl(β) Ceramide 18:1/20:0	836.5916	264.2680
Mono-Sulfo Galactosyl(β) Ceramide 18:1/22:0	864.6229	264.2681
Mono-Sulfo Galactosyl(β) Ceramide 18:1/22:1	862.6072	264.2680
Mono-Sulfo Galactosyl(β) Ceramide 18:1/24:0	892.6542	264.2678
Mono-Sulfo Galactosyl(β) Ceramide 18:1/24:1	890.6385	264.2680

Ganglioside

GM3 18:1/18:0	1181.7517
GM3 18:1/20:0	1209.7830
GM3 18:1/22:0	1237.8143
GM3 18:1/24:0	1265.8455
GM3 18:1/24:1	1263.8299

Phosphatidylserine (PS)

PS 34:1	762.5279	577.5175
PS 35:1	776.5436	591.5331
PS 36:1	790.5592	605.5493
PS 36:2	788.5436	603.5329
PS 36:3	786.5279	601.5178
PS 38:5	810.5279	625.5177
PS 40:6	836.5436	651.5322

Phosphatidylethanolamine (PE)

PE 34:2	716.5224	575.5018
PE 36:1	746.5695	605.5439
PE 36:2	744.5537	603.5335
PE 36:3	742.5381	601.5178
PE 36:4	740.5224	599.5022
PE 36:5	738.5068	597.4870
PE 38:2	772.5850	631.5640
PE 38:3	770.5694	629.5482
PE 38:4	768.5537	627.5327
PE 38:5	766.5381	625.5175

PE 38:6	764.5224	623.5018
PE 40:1	802.6320	661.6115
PE 40:2	800.6163	659.5960
PE 40:4	796.5850	655.5647
PE 40:6	792.5537	651.5335
PE 42:2	828.6477	687.6265
PE 42:3	826.6320	685.6112
PE 42:5	822.6007	681.5800
PE 44:1	830.6633	689.6428
PE 44:4	852.6477	711.6248

Phosphatidylcholine (PC)

PC 33:0	748.5058	184.0734
PC 33:1	746.5694	184.0734
PC 34:0	762.6007	184.0733
PC 34:1	760.5850	184.0733
PC 34:2	758.5694	184.0735
PC 34:3	756.5537	184.0735
PC 35:1	774.6007	184.0735
PC 35:2	772.5850	184.0734
PC 36:0	790.6320	184.0734
PC 36:1	788.6163	184.0733
PC 36:2	786.6007	184.0734
PC 36:3	784.5850	184.0734
PC 36:4	782.5694	184.0733
PC 38:0	818.6633	184.0734
PC 38:1	816.6477	184.0734
PC 38:2	814.6320	184.0733
PC 38:3	812.6163	184.0734
PC O-34:1	746.6058	184.0735
PC O-36:1	774.6371	184.0734

Diacylglycerol (DAG)

DAG 34:1	612.5561	313.2734
DAG 34:2	610.5405	313.2734
DAG 34:4	606.5092	311.2580
DAG 36:1	640.5874	339.2891
DAG 36:2	638.5717	339.2890
DAG 36:4	634.5405	337.2738

Triacylglycerol (TAG)

TAG 42:0	740.6762	495.4401
TAG 43:1	752.6762	479.4079
TAG 44:0	768.7075	495.4407
TAG 44:1	766.6918	495.4404
TAG 44:2	764.6762	493.4250
TAG 45:0	782.7232	509.4536
TAG 45:1	780.7075	507.4385
TAG 45:2	778.6918	507.4416
TAG 46:0	796.7388	523.4715
TAG 47:0	810.7545	537.4888

TAG 47:1	808.7388	535.4720
TAG 47:2	806.7232	535.4735
TAG 47:3	804.7075	533.4564
TAG 48:0	824.7701	551.5028
TAG 48:1	822.7545	549.4877
TAG 48:2	820.7388	549.4877
TAG 48:3	818.7232	547.4722
TAG 49:0	838.7838	565.5184
TAG 50:0	852.8014	579.5345
TAG 50:1	850.7858	577.5193
TAG 50:2	848.7701	549.4880
TAG 50:3	846.7545	575.5037
TAG 50:4	844.7388	573.4885
TAG 50:5	842.7232	571.4736
TAG 51:0	866.8171	593.5485
TAG 52:0	880.8327	579.5343
TAG 52:1	878.8171	577.5186
TAG 52:2	876.8014	577.5186
TAG 52:3	874.7858	575.5036
TAG 52:4	872.7701	575.5026
TAG 52:5	870.7545	573.4888
TAG 52:6	868.7388	573.4873
TAG 54:0	908.8640	607.5637
TAG 54:1	906.8483	605.5502
TAG 54:2	904.8327	605.5495
TAG 54:3	902.8171	603.5350
TAG 54:4	900.8014	601.5190
TAG 54:5	898.7858	601.5189
TAG 54:6	896.7701	599.4973