

## Electronic Supplementary Information

for

### Multimodal Imaging of Biological Tissues Using Combined MALDI and NAPA-LDI

### Mass Spectrometry for Enhanced Molecular Coverage

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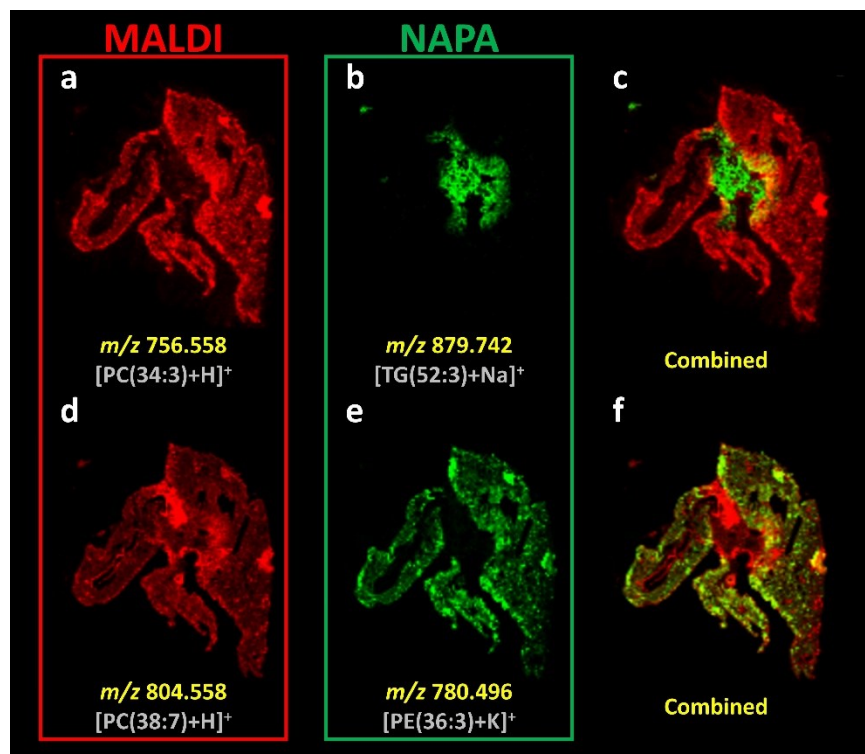
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**Figure S1.** Overlaid chemical images from consecutive MALDI- and NAPA-LDI-MSI analysis of the same mouse lung tissue section. Images were overlaid using ImageJ software.

**Table S1.** Tentative lipid identifications based on mass accuracy tolerance of  $\Delta m/z \leq \pm 5$  mDa from analysis of mouse brain tissue sections analyzed by MALDI- and NAPA-LDI-MSI. For  $m/z$  values with multiple potential interpretations, all possibilities are listed.

Sample	Meas. $m/z$	Calc. $m/z$	$\Delta m$ (mDa)	Tentative identification
Brain_MALDI	305.1283	305.1280	0.3	[ FA(14:0) +2K-H]+
Brain_MALDI	319.1434	319.1436	-0.2	[ FA(15:0) +2K-H]+
Brain_MALDI	331.1441	331.1436	0.5	[ FA(16:1) +2K-H]+
Brain_MALDI	333.1593	333.1593	0.0	[ FA(16:0) +2K-H]+
Brain_MALDI	361.1899	361.1906	-0.7	[ FA(18:0) +2K-H]+
Brain_MALDI	369.3516	369.3516	0.0	[ Cholesterol (-H <sub>2</sub> O) +H]+
Brain_MALDI	496.3403	496.3398	0.5	[ LysoPC(16:0) +H]+
Brain_MALDI	530.2020	530.2046	-2.6	[ LysoPE(16:0) +2K-H]+
Brain_MALDI	570.2576	570.2567	0.9	[ LysoPE(22:6) +2Na-H]+
Brain_MALDI	666.4839	666.4833	0.6	[ CerP(d18:1/18:1) +Na]+
Brain_MALDI	682.4577	682.4572	0.4	[ CerP(d18:1/18:1) +K]+
Brain_MALDI	697.4787	697.4803	-1.6	[ PA(36:4) +H]+
Brain_MALDI	697.4787	697.4779	0.9	[ PA(34:1) +Na]+
Brain_MALDI	709.4198	709.4205	-0.7	[ PA(34:3) +K]+
Brain_MALDI	713.4518	713.4518	0.0	[ PA(34:1) +K]+
Brain_MALDI	723.4941	723.4935	0.6	[ PA(36:2) +Na]+
Brain_MALDI	723.4941	723.4959	-1.8	[ PA(38:5) +H]+
Brain_MALDI	725.3930	725.3921	1.0	[ PA(32:0) +2K-H]+
Brain_MALDI	725.5105	725.5116	-1.1	[ PA(38:4) +H]+
Brain_MALDI	725.5105	725.5092	1.3	[ PA(36:1) +Na]+
Brain_MALDI	725.5577	725.5568	0.9	[ SM(d34:1) +Na]+
Brain_MALDI	735.4351	735.4362	-1.0	[ PA(36:4) +K]+
Brain_MALDI	737.4536	737.4518	1.8	[ PA(36:3) +K]+
Brain_MALDI	739.4095	739.4101	-0.6	[ DG(40:9) +2K-H]+
Brain_MALDI	739.4680	739.4675	0.5	[ PA(36:2) +K]+
Brain_MALDI	741.4858	741.4831	2.6	[ PA(36:1) +K]+
Brain_MALDI	741.5313	741.5307	0.5	[ SM(d34:1) +K]+
Brain_MALDI	745.4787	745.4755	3.2	[ PA(36:2) +2Na-H]+
Brain_MALDI	745.4787	745.4779	0.8	[ PA(38:5) +Na]+
Brain_MALDI	745.4787	745.4803	-1.6	[ PA(40:8) +H]+
Brain_MALDI	748.5858	748.5851	0.8	[ PE(36:0) +H]+
Brain_MALDI	750.5834	750.5854	-2.1	[ HexCer(d36:1) +Na]+
Brain_MALDI	751.4083	751.4077	0.6	[ PA(34:1) +2K-H]+
Brain_MALDI	751.5263	751.5272	-1.0	[ PA(40:5) +H]+
Brain_MALDI	751.5263	751.5248	1.4	[ PA(38:2) +Na]+
Brain_MALDI	753.5892	753.5881	1.1	[ SM(d36:1) +Na]+
Brain_MALDI	753.5892	753.5905	-1.3	[ SM(d38:4) +H]+
Brain_MALDI	756.5525	756.5538	-1.3	[ PC(34:3) +H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_MALDI	760.5863	760.5851	1.2	[ PC(34:1) +H]+
Brain_MALDI	761.4521	761.4518	0.3	[ PA(38:5) +K]+
Brain_MALDI	762.6020	762.6007	1.2	[ PC(34:0) +H]+
Brain_MALDI	763.4684	763.4675	1.0	[ PA(38:4) +K]+
Brain_MALDI	765.4848	765.4831	1.7	[ PA(38:3) +K]+
Brain_MALDI	766.5527	766.5511	1.5	[ CerP(d42:2) +K]+
Brain_MALDI	767.4991	767.4988	0.3	[ PA(38:2) +K]+
Brain_MALDI	769.5627	769.5620	0.7	[ SM(d36:1) +K]+
Brain_MALDI	770.5087	770.5097	-0.9	[ PC(32:1) +K]+
Brain_MALDI	770.5087	770.5071	1.6	[ PE 36:3p +2Na-H]+
Brain_MALDI	770.5087	770.5095	-0.8	[ PE 38:6p +Na]+
Brain_MALDI	772.5263	772.5228	3.5	[ PE 36:2p +2Na-H]+
Brain_MALDI	772.5263	772.5252	1.1	[ PE 38:5p +Na]+
Brain_MALDI	774.6010	774.6007	0.2	[ PE(38:1) +H]+
Brain_MALDI	775.5296	775.5272	2.4	[ PA(42:7) +H]+
Brain_MALDI	777.4249	777.4234	1.5	[ PA(36:2) +2K-H]+
Brain_MALDI	778.4766	778.4784	-1.8	[ PE(36:4) +K]+
Brain_MALDI	779.4410	779.4390	2.0	[ PA(36:1) +2K-H]+
Brain_MALDI	780.4936	780.4940	-0.4	[ PE(36:3) +K]+
Brain_MALDI	782.5682	782.5694	-1.3	[ PC(36:4) +H]+
Brain_MALDI	782.5682	782.5670	1.1	[ PC(34:1) +Na]+
Brain_MALDI	783.4582	783.4573	0.9	[ PG(34:3) +K]+
Brain_MALDI	784.5271	784.5253	1.8	[ PE(36:1) +K]+
Brain_MALDI	784.5838	784.5851	-1.3	[ PC(36:3) +H]+
Brain_MALDI	784.5838	784.5827	1.1	[ PC(34:0) +Na]+
Brain_MALDI	785.4527	785.4518	0.9	[ PA(40:7) +K]+
Brain_MALDI	787.4675	787.4675	0.0	[ PA(40:6) +K]+
Brain_MALDI	789.4830	789.4831	-0.1	[ PA(40:5) +K]+
Brain_MALDI	794.4509	794.4499	1.0	[ PE(34:1) +2K-H]+
Brain_MALDI	796.4674	796.4656	1.9	[ PE(34:0) +2K-H]+
Brain_MALDI	796.5262	796.5253	0.9	[ PC(34:2) +K]+
Brain_MALDI	796.5262	796.5228	3.5	[ PE 38:4p +2Na-H]+
Brain_MALDI	797.5939	797.5933	0.5	[ SM(d38:1) +K]+
Brain_MALDI	798.5422	798.5410	1.2	[ PC(34:1) +K]+
Brain_MALDI	798.5422	798.5408	1.4	[ PE 40:6p +Na]+
Brain_MALDI	798.5422	798.5384	3.8	[ PE 38:3p +2Na-H]+
Brain_MALDI	800.4376	800.4393	-1.8	[ PE 36:4p +2K-H]+
Brain_MALDI	800.5591	800.5589	0.2	[ PE 42:8p +H]+
Brain_MALDI	800.5591	800.5566	2.4	[ PC(34:0) +K]+
Brain_MALDI	800.5591	800.5565	2.6	[ PE 40:5p +Na]+
Brain_MALDI	801.4240	801.4234	0.7	[ PA(38:4) +2K-H]+
Brain_MALDI	802.4796	802.4784	1.2	[ PE(38:6) +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_MALDI	804.4904	804.4940	-3.6	[ PE(38:5) +K]+
Brain_MALDI	804.5524	804.5538	-1.4	[ PC(38:7) +H]+
Brain_MALDI	804.5524	804.5514	1.0	[ PC(36:4) +Na]+
Brain_MALDI	804.5524	804.5490	3.4	[ PC(34:1) +2Na-H]+
Brain_MALDI	806.5102	806.5097	0.5	[ PE(38:4) +K]+
Brain_MALDI	808.4655	808.4656	0.0	[ PC(32:1) +2K-H]+
Brain_MALDI	808.5828	808.5851	-2.3	[ PC(38:5) +H]+
Brain_MALDI	808.5828	808.5827	0.1	[ PC(36:2) +Na]+
Brain_MALDI	809.6512	809.6507	0.5	[ SM(d40:1) +Na]+
Brain_MALDI	810.5995	810.5983	1.2	[ PC(36:1) +Na]+
Brain_MALDI	810.5995	810.6007	-1.2	[ PC(38:4) +H]+
Brain_MALDI	813.4834	813.4831	0.2	[ PA(42:7) +K]+
Brain_MALDI	814.5123	814.5148	-2.4	[ PE 40:6p +K]+
Brain_MALDI	815.5184	815.5199	-1.5	[ PG(36:1) +K]+
Brain_MALDI	816.4354	816.4343	1.2	[ PE(36:4) +2K-H]+
Brain_MALDI	820.4668	820.4656	1.2	[ PE(36:2) +2K-H]+
Brain_MALDI	820.5258	820.5253	0.5	[ PC(36:4) +K]+
Brain_MALDI	820.5258	820.5228	3.0	[ PE 40:6p +2Na-H]+
Brain_MALDI	822.4828	822.4812	1.6	[ PE(36:1) +2K-H]+
Brain_MALDI	822.4828	822.4868	-4.0	[ PI-Cer(d34:2) +2Na-H]+
Brain_MALDI	822.6441	822.6430	1.1	[ HexCer(t40:1) +Na]+
Brain_MALDI	824.4386	824.4393	-0.7	[ PE 38:6p +2K-H]+
Brain_MALDI	824.5576	824.5566	1.0	[ PC(36:2) +K]+
Brain_MALDI	824.5576	824.5565	1.1	[ PE 42:7p +Na]+
Brain_MALDI	824.5576	824.5541	3.5	[ PE 40:4p +2Na-H]+
Brain_MALDI	825.4227	825.4234	-0.6	[ PA(40:6) +2K-H]+
Brain_MALDI	825.6266	825.6246	1.9	[ SM(d40:1) +K]+
Brain_MALDI	826.5729	826.5723	0.6	[ PC(36:1) +K]+
Brain_MALDI	826.5729	826.5721	0.8	[ PE 42:6p +Na]+
Brain_MALDI	826.5729	826.5697	3.2	[ PE 40:3p +2Na-H]+
Brain_MALDI	828.4945	828.4940	0.5	[ PE(40:7) +K]+
Brain_MALDI	828.4945	828.4973	-2.8	[ PI-Cer(t33:0) +2Na-H]+
Brain_MALDI	828.5555	828.5538	1.8	[ PC(40:9) +H]+
Brain_MALDI	830.5104	830.5097	0.7	[ PE(40:6) +K]+
Brain_MALDI	832.5838	832.5803	3.5	[ PC(36:1) +2Na-H]+
Brain_MALDI	832.5838	832.5851	-1.3	[ PC(40:7) +H]+
Brain_MALDI	832.5838	832.5827	1.1	[ PC(38:4) +Na]+
Brain_MALDI	832.6648	832.6637	1.2	[ HexCer(d42:2) +Na]+
Brain_MALDI	834.6819	834.6793	2.5	[ HexCer(d42:1) +Na]+
Brain_MALDI	836.4959	836.4969	-0.9	[ PC(34:1) +2K-H]+
Brain_MALDI	838.6170	838.6168	0.3	[ PI-Cer(38:0) +H]+
Brain_MALDI	838.6170	838.6169	0.1	[ HexCer(t40:1) +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_MALDI	840.4352	840.4343	0.9	[ PE(38:6) +2K-H]+
Brain_MALDI	842.4534	842.4499	3.5	[ PE(38:5) +2K-H]+
Brain_MALDI	844.4664	844.4656	0.8	[ PE(38:4) +2K-H]+
Brain_MALDI	844.5269	844.5253	1.5	[ PC(38:6) +K]+
Brain_MALDI	844.5269	844.5228	4.1	[ PE 42:8p +2Na-H]+
Brain_MALDI	846.4681	846.4682	-0.1	[ PS(38:6) +K]+
Brain_MALDI	846.5372	846.5384	-1.2	[ PE 42:7p +2Na-H]+
Brain_MALDI	846.5372	846.5410	-3.8	[ PC(38:5) +K]+
Brain_MALDI	848.5577	848.5541	3.7	[ PE 42:6p +2Na-H]+
Brain_MALDI	848.5577	848.5566	1.1	[ PC(38:4) +K]+
Brain_MALDI	848.6371	848.6376	-0.6	[ HexCer(d42:2) +K]+
Brain_MALDI	850.6759	850.6743	1.6	[ HexCer(d42:1(2OH)) +Na]+
Brain_MALDI	856.5832	856.5803	2.9	[ PC(38:3) +2Na-H]+
Brain_MALDI	856.5832	856.5827	0.5	[ PC(40:6) +Na]+
Brain_MALDI	864.6331	864.6325	0.6	[ HexCer(d42:2(2OH)) +K]+
Brain_MALDI	866.4502	866.4499	0.3	[ PE(40:7) +2K-H]+
Brain_MALDI	866.6493	866.6482	1.1	[ HexCer(d42:1(2OH)) +K]+
Brain_MALDI	866.6493	866.6481	1.2	[ PI-Cer(40:0) +H]+
Brain_MALDI	868.4669	868.4656	1.3	[ PE(40:6) +2K-H]+
Brain_MALDI	872.4980	872.4969	1.2	[ PE(40:4) +2K-H]+
Brain_MALDI	872.5578	872.5566	1.2	[ PC(40:6) +K]+
Brain_MALDI	874.5015	874.4995	2.0	[ PS(40:6) +K]+
Brain_MALDI	912.4572	912.4554	1.8	[ PS(40:6) +2K-H]+
Brain_MALDI	912.6398	912.6429	-3.1	[ PC(42:3) +2Na-H]+
Brain_MALDI	963.4779	963.4762	1.7	[ PI(38:4) +2K-H]+
Brain_NAPA	333.1594	333.1593	0.1	[ FA(16:0) +2K-H]+
Brain_NAPA	369.3516	369.3516	0.0	[ Cholesterol (-H2O) +H]+
Brain_NAPA	381.1585	381.1593	-0.8	[ FA(20:4) +2K-H]+
Brain_NAPA	405.1594	405.1593	0.1	[ FA(22:6) +2K-H]+
Brain_NAPA	502.2702	502.2696	0.7	[ Carnitine(18:1) +2K-H]+
Brain_NAPA	544.2193	544.2202	-1.0	[ LysoPC(14:0) +2K-H]+
Brain_NAPA	556.2189	556.2202	-1.4	[ LysoPE(18:1) +2K-H]+
Brain_NAPA	558.2349	558.2359	-1.0	[ LysoPE(18:0) +2K-H]+
Brain_NAPA	564.2489	564.2487	0.1	[ LysoPE(22:6) +K]+
Brain_NAPA	568.2804	568.2800	0.4	[ LysoPE(22:4) +K]+
Brain_NAPA	578.2046	578.2046	0.0	[ LysoPE(20:4) +2K-H]+
Brain_NAPA	584.2528	584.2515	1.2	[ LysoPE(20:1) +2K-H]+
Brain_NAPA	602.2048	602.2046	0.2	[ LysoPE(22:6) +2K-H]+
Brain_NAPA	602.3609	602.3583	2.7	[ LysoPE(24:1) +K]+
Brain_NAPA	604.5065	604.5066	-0.1	[ Cer(36:1) +K]+
Brain_NAPA	620.5963	620.5976	-1.4	[ Cer(d40:2) +H]+
Brain_NAPA	637.2727	637.2750	-2.3	[ LysoPI(18:1) +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	646.6124	646.6109	1.5	[ Cer(d40:0) +Na]+
Brain_NAPA	648.6283	648.6289	-0.6	[ Cer(d42:2) +H]+
Brain_NAPA	670.6100	670.6109	-0.9	[ Cer(d42:2) +Na]+
Brain_NAPA	682.4572	682.4572	-0.1	[ CerP(d36:2) +K]+
Brain_NAPA	683.5005	683.5011	-0.6	[ DG(38:4) +K]+
Brain_NAPA	691.5261	691.5248	1.3	[ DG(38:3) +2Na-H]+
Brain_NAPA	697.4768	697.4779	-1.1	[ PA(34:1) +Na]+
Brain_NAPA	709.4192	709.4205	-1.4	[ PA(34:3) +K]+
Brain_NAPA	709.5140	709.5168	-2.7	[ DG(40:5) +K]+
Brain_NAPA	710.3581	710.3560	2.1	[ PE(28:1) +2K-H]+
Brain_NAPA	713.4518	713.4518	0.0	[ PA(34:1) +K]+
Brain_NAPA	721.4751	721.4779	-2.8	[ PA(36:3) +Na]+
Brain_NAPA	721.4751	721.4755	-0.4	[ PA(34:0) +2Na-H]+
Brain_NAPA	723.4925	723.4935	-1.1	[ PA(36:2) +Na]+
Brain_NAPA	723.4925	723.4959	-3.5	[ PA(38:5) +H]+
Brain_NAPA	725.3930	725.3921	0.9	[ PA(32:0) +2K-H]+
Brain_NAPA	729.4823	729.4855	-3.2	[ DG(42:9) +K]+
Brain_NAPA	730.4800	730.4784	1.6	[ PE(32:0) +K]+
Brain_NAPA	735.4341	735.4362	-2.1	[ PA(36:4) +K]+
Brain_NAPA	737.4528	737.4518	1.0	[ PA(36:3) +K]+
Brain_NAPA	739.4093	739.4101	-0.7	[ DG(40:9) +2K-H]+
Brain_NAPA	739.4671	739.4675	-0.4	[ PA(36:2) +K]+
Brain_NAPA	741.4855	741.4831	2.4	[ PA(36:1) +K]+
Brain_NAPA	743.4858	743.4834	2.5	[ PG(32:1) +Na]+
Brain_NAPA	747.3769	747.3764	0.5	[ PA(34:3) +2K-H]+
Brain_NAPA	747.4727	747.4727	0.0	[ DG(40:5) +2K-H]+
Brain_NAPA	748.4504	748.4527	-2.3	[ HexCer(d32:1) +2K-H]+
Brain_NAPA	748.5843	748.5851	-0.8	[ PE(36:0) +H]+
Brain_NAPA	749.5055	749.5036	1.9	[ CE(20:4) +2K-H]+
Brain_NAPA	749.5055	749.5068	-1.3	[ PA(36:0) +2Na-H]+
Brain_NAPA	749.5055	749.5092	-3.7	[ PA(38:3) +Na]+
Brain_NAPA	750.4496	750.4471	2.5	[ PE(34:4) +K]+
Brain_NAPA	750.5424	750.5408	1.6	[ PE 36:2p +Na]+
Brain_NAPA	750.5424	750.5432	-0.8	[ PE 38:5p +H]+
Brain_NAPA	750.5846	750.5854	-0.8	[ HexCer(d36:1) +Na]+
Brain_NAPA	751.4079	751.4077	0.2	[ PA(34:1) +2K-H]+
Brain_NAPA	751.5221	751.5248	-2.7	[ PA(38:2) +Na]+
Brain_NAPA	751.5221	751.5192	2.9	[ CE(20:3) +2K-H]+
Brain_NAPA	753.5875	753.5905	-3.1	[ SM(d38:4) +H]+
Brain_NAPA	753.5875	753.5881	-0.6	[ SM(d36:1) +Na]+
Brain_NAPA	756.4937	756.4940	-0.3	[ PE(34:1) +K]+
Brain_NAPA	756.5509	756.5538	-2.9	[ PC(34:3) +H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	757.4192	757.4205	-1.3	[ PA(38:7) +K]+
Brain_NAPA	758.5103	758.5097	0.6	[ PE(34:0) +K]+
Brain_NAPA	759.4360	759.4362	-0.1	[ PA(38:6) +K]+
Brain_NAPA	760.5851	760.5851	0.0	[ PC(34:1) +H]+
Brain_NAPA	761.4511	761.4518	-0.7	[ PA(38:5) +K]+
Brain_NAPA	763.4664	763.4675	-1.1	[ PA(38:4) +K]+
Brain_NAPA	764.4027	764.4030	-0.3	[ PE(32:2) +2K-H]+
Brain_NAPA	764.5422	764.5437	-1.5	[ HexCer(d36:2) +K]+
Brain_NAPA	765.4846	765.4831	1.5	[ PA(38:3) +K]+
Brain_NAPA	766.5136	766.5148	-1.2	[ PE 36:2p +K]+
Brain_NAPA	766.5589	766.5594	-0.4	[ HexCer(d36:1) +K]+
Brain_NAPA	767.4430	767.4414	1.6	[ DG(42:9) +2K-H]+
Brain_NAPA	767.4979	767.4988	-0.9	[ PA(38:2) +K]+
Brain_NAPA	768.4367	768.4343	2.4	[ PE(32:0) +2K-H]+
Brain_NAPA	768.5281	768.5304	-2.3	[ PE 36:1p +K]+
Brain_NAPA	769.4734	769.4755	-2.1	[ PA(38:4) +2Na-H]+
Brain_NAPA	770.5077	770.5097	-2.0	[ PC(32:1) +K]+
Brain_NAPA	770.5077	770.5095	-1.8	[ PE 38:6p +Na]+
Brain_NAPA	770.5077	770.5071	0.6	[ PE 36:3p +2Na-H]+
Brain_NAPA	770.5636	770.5670	-3.4	[ PE(36:0) +Na]+
Brain_NAPA	772.5248	772.5228	2.0	[ PE 36:2p +2Na-H]+
Brain_NAPA	772.5248	772.5252	-0.4	[ PE 38:5p +Na]+
Brain_NAPA	773.3925	773.3921	0.4	[ PA(36:4) +2K-H]+
Brain_NAPA	774.6009	774.6007	0.1	[ PE(38:1) +H]+
Brain_NAPA	775.4087	775.4077	1.0	[ PA(36:3) +2K-H]+
Brain_NAPA	777.4230	777.4234	-0.4	[ PA(36:2) +2K-H]+
Brain_NAPA	778.4527	778.4550	-2.2	[ PE 34:1p +2K-H]+
Brain_NAPA	778.6163	778.6167	-0.5	[ HexCer(d38:1) +Na]+
Brain_NAPA	779.4389	779.4390	-0.1	[ PA(36:1) +2K-H]+
Brain_NAPA	779.5547	779.5561	-1.4	[ PA(40:2) +Na]+
Brain_NAPA	780.4932	780.4940	-0.9	[ PE(36:3) +K]+
Brain_NAPA	780.5373	780.5386	-1.3	[ HexCer(d36:2(2OH)) +K]+
Brain_NAPA	782.5101	782.5097	0.4	[ PE(36:2) +K]+
Brain_NAPA	782.5552	782.5543	0.9	[ HexCer(d36:1(2OH)) +K]+
Brain_NAPA	783.4334	783.4362	-2.8	[ PA(40:8) +K]+
Brain_NAPA	784.5267	784.5253	1.3	[ PE(36:1) +K]+
Brain_NAPA	785.4508	785.4518	-1.0	[ PA(40:7) +K]+
Brain_NAPA	786.3900	786.3873	2.7	[ PE(34:5) +2K-H]+
Brain_NAPA	786.4815	786.4835	-1.9	[ PE 38:6p +K]+
Brain_NAPA	787.4666	787.4675	-0.9	[ PA(40:6) +K]+
Brain_NAPA	788.4952	788.4991	-3.9	[ PE 38:5p +K]+
Brain_NAPA	790.5137	790.5148	-1.0	[ PE 38:4p +K]+



Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	792.4784	792.4789	-0.5	[ HexCer(d34:1(2OH)) +2K-H]+
Brain_NAPA	792.5282	792.5304	-2.2	[ PE 38:3p +K]+
Brain_NAPA	793.4956	793.4966	-1.0	[ PG(34:1) +2Na-H]+
Brain_NAPA	793.4956	793.4990	-3.4	[ PG(36:4) +Na]+
Brain_NAPA	794.4506	794.4499	0.7	[ PE(34:1) +2K-H]+
Brain_NAPA	794.5454	794.5461	-0.7	[ PE 38:2p +K]+
Brain_NAPA	794.6118	794.6117	0.2	[ HexCer(d38:1(2OH)) +Na]+
Brain_NAPA	795.3759	795.3764	-0.5	[ PA(38:7) +2K-H]+
Brain_NAPA	796.4673	796.4656	1.7	[ PE(34:0) +2K-H]+
Brain_NAPA	796.5259	796.5228	3.1	[ PE 38:4p +2Na-H]+
Brain_NAPA	796.5259	796.5253	0.6	[ PC(34:2) +K]+
Brain_NAPA	797.3927	797.3921	0.7	[ PA(38:6) +2K-H]+
Brain_NAPA	798.4667	798.4682	-1.5	[ PS(34:2) +K]+
Brain_NAPA	798.5404	798.5408	-0.4	[ PE 40:6p +Na]+
Brain_NAPA	798.5404	798.5410	-0.6	[ PC(34:1) +K]+
Brain_NAPA	798.5404	798.5384	2.0	[ PE 38:3p +2Na-H]+
Brain_NAPA	799.4082	799.4077	0.5	[ PA(38:5) +2K-H]+
Brain_NAPA	800.5572	800.5565	0.7	[ PE 40:5p +Na]+
Brain_NAPA	800.5572	800.5541	3.1	[ PE 38:2p +2Na-H]+
Brain_NAPA	800.5572	800.5566	0.6	[ PC(34:0) +K]+
Brain_NAPA	800.5572	800.5589	-1.7	[ PE 42:8p +H]+
Brain_NAPA	801.4225	801.4234	-0.9	[ PA(38:4) +2K-H]+
Brain_NAPA	801.5635	801.5640	-0.5	[ PG(38:3) +H]+
Brain_NAPA	801.5635	801.5616	1.9	[ PG(36:0) +Na]+
Brain_NAPA	802.4783	802.4784	-0.1	[ PE(38:6) +K]+
Brain_NAPA	804.4695	804.4706	-1.1	[ PE 36:2p +2K-H]+
Brain_NAPA	804.5498	804.5490	0.9	[ PC(34:1) +2Na-H]+
Brain_NAPA	804.5498	804.5514	-1.5	[ PC(36:4) +Na]+
Brain_NAPA	804.5498	804.5538	-3.9	[ PC(38:7) +H]+
Brain_NAPA	804.6327	804.6324	0.3	[ HexCer(d40:2) +Na]+
Brain_NAPA	806.5084	806.5097	-1.3	[ PE(38:4) +K]+
Brain_NAPA	806.6471	806.6480	-0.9	[ HexCer(d42:1) +Na]+
Brain_NAPA	808.4634	808.4656	-2.2	[ PC(32:1) +2K-H]+
Brain_NAPA	808.5692	808.5699	-0.8	[ HexCer(d38:2(2OH)) +K]+
Brain_NAPA	808.6304	808.6273	3.1	[ HexCer(d39:1(2OH)) +Na]+
Brain_NAPA	810.5436	810.5410	2.6	[ PE(38:2) +K]+
Brain_NAPA	810.5841	810.5856	-1.5	[ HexCer(d38:1(2OH)) +K]+
Brain_NAPA	811.4862	811.4886	-2.4	[ PG(36:3) +K]+
Brain_NAPA	813.5036	813.5043	-0.6	[ PG(36:2) +K]+
Brain_NAPA	814.5135	814.5148	-1.2	[ PE 40:6p +K]+
Brain_NAPA	816.4337	816.4343	-0.6	[ PE(36:4) +2K-H]+
Brain_NAPA	816.5286	816.5304	-1.8	[ PE 40:5p +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	818.5454	818.5461	-0.6	[ PE 40:4p +K]+
Brain_NAPA	818.6482	818.6480	0.2	[ HexCer(d41:2) +Na]+
Brain_NAPA	820.4654	820.4656	-0.1	[ PE(36:2) +2K-H]+
Brain_NAPA	820.5258	820.5228	3.0	[ PE 40:6p +2Na-H]+
Brain_NAPA	820.5258	820.5253	0.5	[ PC(36:4) +K]+
Brain_NAPA	820.6037	820.6063	-2.7	[ HexCer(d42:2) +K]+
Brain_NAPA	820.6037	820.6062	-2.6	[ PS(38:0) +H]+
Brain_NAPA	821.3937	821.3921	1.6	[ PA(40:8) +2K-H]+
Brain_NAPA	822.4820	822.4812	0.8	[ PE(36:1) +2K-H]+
Brain_NAPA	822.6444	822.6430	1.4	[ HexCer(t40:1) +Na]+
Brain_NAPA	823.4074	823.4077	-0.3	[ PA(40:7) +2K-H]+
Brain_NAPA	824.4367	824.4393	-2.7	[ PE 38:6p +2K-H]+
Brain_NAPA	824.5559	824.5541	1.9	[ PE 40:4p +2Na-H]+
Brain_NAPA	824.5559	824.5566	-0.7	[ PC(36:2) +K]+
Brain_NAPA	824.5559	824.5565	-0.5	[ PE 42:7p +Na]+
Brain_NAPA	824.6006	824.6012	-0.6	[ HexCer(d39:1(2OH)) +K]+
Brain_NAPA	825.4212	825.4234	-2.1	[ PA(40:6) +2K-H]+
Brain_NAPA	826.5724	826.5721	0.3	[ PE 42:6p +Na]+
Brain_NAPA	826.5724	826.5697	2.7	[ PE 40:3p +2Na-H]+
Brain_NAPA	826.5724	826.5723	0.1	[ PC(36:1) +K]+
Brain_NAPA	827.4574	827.4601	-2.8	[ PG(34:0) +2K-H]+
Brain_NAPA	828.4933	828.4973	-4.0	[ PI-Cer(t33:0) +2Na-H]+
Brain_NAPA	828.4933	828.4940	-0.7	[ PE(40:7) +K]+
Brain_NAPA	830.5097	830.5097	0.1	[ PE(40:6) +K]+
Brain_NAPA	830.6495	830.6456	3.9	[ HexCer(d40:0) +2Na-H]+
Brain_NAPA	831.4342	831.4362	-1.9	[ PA(44:12) +K]+
Brain_NAPA	832.5020	832.5019	0.1	[ PE 38:2p +2K-H]+
Brain_NAPA	832.5841	832.5851	-1.0	[ PC(40:7) +H]+
Brain_NAPA	832.5841	832.5827	1.4	[ PC(38:4) +Na]+
Brain_NAPA	832.5841	832.5803	3.8	[ PC(36:1) +2Na-H]+
Brain_NAPA	832.6634	832.6637	-0.3	[ HexCer(d42:2) +Na]+
Brain_NAPA	834.6184	834.6220	-3.6	[ HexCer(d41:2) +K]+
Brain_NAPA	834.6752	834.6793	-4.2	[ HexCer(d42:1) +Na]+
Brain_NAPA	836.4942	836.4969	-2.6	[ PC(34:1) +2K-H]+
Brain_NAPA	836.6038	836.6012	2.5	[ HexCer(d42:2(2OH)) +K]+
Brain_NAPA	838.4414	838.4397	1.6	[ PS(34:1) +2K-H]+
Brain_NAPA	838.5127	838.5148	-2.0	[ PE 42:8p +K]+
Brain_NAPA	838.5127	838.5125	0.2	[ PC(34:0) +2K-H]+
Brain_NAPA	838.6164	838.6168	-0.4	[ PI-Cer(38:0) +H]+
Brain_NAPA	838.6164	838.6169	-0.5	[ HexCer(t40:1) +K]+
Brain_NAPA	840.4340	840.4343	-0.3	[ PE(38:6) +2K-H]+
Brain_NAPA	840.5281	840.5304	-2.3	[ PE 42:7p +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	842.4518	842.4499	1.9	[ PE(38:5) +2K-H]+
Brain_NAPA	844.4653	844.4656	-0.2	[ PE(38:4) +2K-H]+
Brain_NAPA	844.5264	844.5253	1.0	[ PC(38:6) +K]+
Brain_NAPA	844.5264	844.5228	3.6	[ PE 42:8p +2Na-H]+
Brain_NAPA	846.4656	846.4682	-2.6	[ PS(38:6) +K]+
Brain_NAPA	846.5421	846.5410	1.2	[ PC(38:5) +K]+
Brain_NAPA	846.5421	846.5384	3.7	[ PE 42:7p +2Na-H]+
Brain_NAPA	848.4970	848.4929	4.1	[ Sulfatide(d36:3) +2Na-H]+
Brain_NAPA	848.4970	848.4969	0.1	[ PE(38:2) +2K-H]+
Brain_NAPA	848.5585	848.5566	1.9	[ PC(38:4) +K]+
Brain_NAPA	848.6348	848.6376	-2.8	[ HexCer(d42:2) +K]+
Brain_NAPA	850.5109	850.5125	-1.6	[ PE(38:1) +2K-H]+
Brain_NAPA	850.5109	850.5086	2.4	[ Sulfatide(d36:2) +2Na-H]+
Brain_NAPA	851.4586	851.4601	-1.6	[ PG(36:2) +2K-H]+
Brain_NAPA	854.4858	854.4863	-0.5	[ PE 40:5p +2K-H]+
Brain_NAPA	855.6332	855.6351	-1.9	[ SM(d44:6) +Na]+
Brain_NAPA	856.4983	856.5019	-3.6	[ PE 40:4p +2K-H]+
Brain_NAPA	856.5822	856.5803	1.9	[ PC(38:3) +2Na-H]+
Brain_NAPA	856.5822	856.5827	-0.5	[ PC(40:6) +Na]+
Brain_NAPA	858.4826	858.4812	1.4	[ PC(36:4) +2K-H]+
Brain_NAPA	860.6913	860.6950	-3.7	[ HexCer(d44:2) +Na]+
Brain_NAPA	861.5325	861.5366	-4.1	[ LysylPG(30:0) +K]+
Brain_NAPA	862.4423	862.4397	2.5	[ PS(36:3) +2K-H]+
Brain_NAPA	862.5310	862.5333	-2.3	[ PE(42:7) +2Na-H]+
Brain_NAPA	862.6244	862.6272	-2.8	[ PC(38:0) +2Na-H]+
Brain_NAPA	862.6244	862.6250	-0.6	[ LacCer (d34:1) +H]+
Brain_NAPA	864.4545	864.4554	-0.9	[ PS(36:2) +2K-H]+
Brain_NAPA	864.6310	864.6325	-1.6	[ HexCer(d42:2(2OH)) +K]+
Brain_NAPA	866.4477	866.4499	-2.2	[ PE(40:7) +2K-H]+
Brain_NAPA	866.6459	866.6481	-2.2	[ PI-Cer(40:0) +H]+
Brain_NAPA	866.6459	866.6482	-2.3	[ HexCer(d42:1(2OH)) +K]+
Brain_NAPA	868.4639	868.4656	-1.6	[ PE(40:6) +2K-H]+
Brain_NAPA	869.3926	869.3921	0.5	[ PA(44:12) +2K-H]+
Brain_NAPA	870.5392	870.5410	-1.7	[ PC(40:7) +K]+
Brain_NAPA	872.4969	872.4969	0.1	[ PE(40:4) +2K-H]+
Brain_NAPA	872.5561	872.5566	-0.6	[ PC(40:6) +K]+
Brain_NAPA	874.5007	874.4995	1.2	[ PS(40:6) +K]+
Brain_NAPA	874.5900	874.5935	-3.5	[ HexCer(d41:1) +2K-H]+
Brain_NAPA	876.6462	876.6429	3.3	[ PE(42:0) +2Na-H]+
Brain_NAPA	878.6463	878.6482	-1.9	[ HexCer(d43:2(2OH)) +K]+
Brain_NAPA	880.4696	880.4656	4.1	[ PC(38:7) +2K-H]+
Brain_NAPA	881.4691	881.4730	-3.9	[ PG(42:10) +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Brain_NAPA	884.4695	884.4721	-2.6	[ Sulfatide(d36:1) +2K-H]+
Brain_NAPA	885.4677	885.4653	2.4	[ PG(42:11) +2Na-H]+
Brain_NAPA	888.4513	888.4554	-4.1	[ PS(38:4) +2K-H]+
Brain_NAPA	890.5924	890.5906	1.9	[ PS(44:7) +H]+
Brain_NAPA	892.4661	892.4656	0.5	[ PE(42:8) +2K-H]+
Brain_NAPA	894.4799	894.4812	-1.3	[ PE(42:7) +2K-H]+
Brain_NAPA	901.4778	901.4758	2.1	[ PG(40:5) +2K-H]+
Brain_NAPA	904.6056	904.6041	1.5	[ HexCer(d42:1(2OH)) +2K-H]+
Brain_NAPA	904.6056	904.6040	1.6	[ PI-Cer(40:0) +K]+
Brain_NAPA	906.5692	906.5712	-2.0	[ Sulfatide(d40:2) +2Na-H]+
Brain_NAPA	911.4453	911.4449	0.4	[ PI(34:2) +2K-H]+
Brain_NAPA	912.4571	912.4554	1.7	[ PS(40:6) +2K-H]+
Brain_NAPA	916.6075	916.6041	3.4	[ HexCer(d43:2(2OH)) +2K-H]+
Brain_NAPA	923.5045	923.5046	-0.2	[ PI(38:5) +K]+
Brain_NAPA	925.5208	925.5203	0.5	[ PI(38:4) +K]+
Brain_NAPA	930.6127	930.6101	2.6	[ Sulfatide(d42:1) +K]+
Brain_NAPA	934.5997	934.6025	-2.8	[ Sulfatide(d42:2) +2Na-H]+
Brain_NAPA	935.4418	935.4449	-3.0	[ PI(36:4) +2K-H]+
Brain_NAPA	938.5145	938.5190	-4.5	[ Sulfatide(d40:2) +2K-H]+
Brain_NAPA	943.4270	943.4288	-1.9	[ PG(44:12) +2K-H]+
Brain_NAPA	959.4470	959.4449	2.2	[ PI(38:6) +2K-H]+
Brain_NAPA	960.5284	960.5282	0.2	[ PC(44:9) +2K-H]+
Brain_NAPA	961.4617	961.4605	1.2	[ PI(38:5) +2K-H]+
Brain_NAPA	963.4755	963.4762	-0.6	[ PI(38:4) +2K-H]+
Brain_NAPA	964.5310	964.5347	-3.7	[ Sulfatide(d42:3) +2K-H]+
Brain_NAPA	966.5485	966.5503	-1.9	[ Sulfatide(d42:2) +2K-H]+
Brain_NAPA	987.4742	987.4762	-1.9	[ PI(40:6) +2K-H]+
Brain_NAPA	1047.6245	1047.6241	0.4	[ TG(62:16) +2K-H]+

**Table S2.** Tentative lipid identifications based on mass accuracy tolerance of  $\Delta m/z \leq \pm 5$  mDa from analysis of mouse lung tissue sections by MALDI- and NAPA-LDI-MSI. For  $m/z$  values with multiple potential interpretations, all possibilities are listed.

Sample	Meas. $m/z$	Calc. $m/z$	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	327.2271	327.2271	0.0	[ FA(18:1) +2Na-H]+
Lung_MALDI	329.2428	329.2427	0.1	[ FA(18:0) +2Na-H]+
Lung_MALDI	333.1592	333.1593	0.0	[ FA(16:0) +2K-H]+
Lung_MALDI	369.3515	369.3516	-0.1	[ Cholesterol (-H <sub>2</sub> O) +H]+
Lung_MALDI	479.0949	479.0938	1.0	[ FMN +Na]+
Lung_MALDI	496.3386	496.3398	-1.2	[ LysoPC(16:0) +H]+
Lung_MALDI	498.2554	498.2567	-1.3	[ LysoPE(16:0) +2Na-H]+
Lung_MALDI	518.3202	518.3217	-1.6	[ LysoPC(16:0) +Na]+
Lung_MALDI	524.3697	524.3711	-1.3	[ LysoPC(18:0) +H]+
Lung_MALDI	526.2865	526.2880	-1.6	[ LysoPE(18:0) +2Na-H]+
Lung_MALDI	534.2966	534.2957	1.0	[ LysoPC(16:0) +K]+
Lung_MALDI	546.3517	546.3530	-1.3	[ LysoPC(18:0) +Na]+
Lung_MALDI	554.2668	554.2644	2.5	[ LysoPC(18:4) +K]+
Lung_MALDI	558.2982	558.2957	2.6	[ LysoPC(18:2) +K]+
Lung_MALDI	558.4836	558.4857	-2.1	[ Cer(d34:2) +Na]+
Lung_MALDI	560.5007	560.5013	-0.6	[ Cer(d34:1) +Na]+
Lung_MALDI	561.2013	561.1992	2.1	[ LysoPG(16:0) +2K-H]+
Lung_MALDI	562.3274	562.3270	0.4	[ LysoPC(18:0) +K]+
Lung_MALDI	568.2817	568.2800	1.7	[ LysoPE(22:4) +K]+
Lung_MALDI	592.2817	592.2800	1.7	[ LysoPE(24:6) +K]+
Lung_MALDI	610.3281	610.3270	1.1	[ LysoPC(22:4) +K]+
Lung_MALDI	615.4958	615.4959	-0.1	[ DG(34:2) +Na]+
Lung_MALDI	617.5117	617.5140	-2.2	[ DG(36:4) +H]+
Lung_MALDI	617.5117	617.5116	0.2	[ DG(34:1) +Na]+
Lung_MALDI	618.3900	618.3896	0.5	[ LysoPC(22:0) +K]+
Lung_MALDI	637.4790	637.4778	1.2	[ DG(34:2) +2Na-H]+
Lung_MALDI	639.4951	639.4935	1.6	[ DG(34:1) +2Na-H]+
Lung_MALDI	639.4951	639.4959	-0.8	[ DG(36:4) +Na]+
Lung_MALDI	641.5108	641.5140	-3.1	[ DG(38:6) +H]+
Lung_MALDI	641.5108	641.5116	-0.7	[ DG(36:3) +Na]+
Lung_MALDI	643.5266	643.5272	-0.6	[ DG(36:2) +Na]+
Lung_MALDI	643.5266	643.5296	-3.0	[ DG(38:5) +H]+
Lung_MALDI	656.4245	656.4262	-1.6	[ PE(28:1) +Na]+
Lung_MALDI	661.4784	661.4778	0.6	[ DG(36:4) +2Na-H]+
Lung_MALDI	662.4488	662.4496	-0.8	[ CerP(d34:1) +2Na-H]+
Lung_MALDI	663.4950	663.4935	1.6	[ DG(36:3) +2Na-H]+
Lung_MALDI	663.4950	663.4959	-0.9	[ DG(38:6) +Na]+
Lung_MALDI	663.4950	663.4983	-3.3	[ DG(40:9) +H]+
Lung_MALDI	665.5093	665.5116	-2.2	[ DG(38:5) +Na]+
Lung_MALDI	665.5093	665.5091	0.2	[ DG(36:2) +2Na-H]+
Lung_MALDI	666.4819	666.4833	-1.4	[ CerP(d36:2) +Na]+
Lung_MALDI	666.5756	666.5772	-1.6	[ Cer(d40:1) +2Na-H]+
Lung_MALDI	668.5906	668.5928	-2.2	[ Cer(d40:0) +2Na-H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	669.4471	669.4490	-1.9	[ PA(34:4) +H]+
Lung_MALDI	669.4471	669.4466	0.5	[ PA(32:1) +Na]+
Lung_MALDI	670.6092	670.6109	-1.7	[ Cer(d42:2) +Na]+
Lung_MALDI	672.4557	672.4575	-1.8	[ PC(26:0) +Na]+
Lung_MALDI	682.4568	682.4572	-0.5	[ CerP(d36:2) +K]+
Lung_MALDI	685.4190	685.4205	-1.6	[ PA(32:1) +K]+
Lung_MALDI	688.4638	688.4652	-1.4	[ CerP(d36:2) +2Na-H]+
Lung_MALDI	689.5095	689.5091	0.3	[ DG(38:4) +2Na-H]+
Lung_MALDI	691.4286	691.4309	-2.3	[ PA(34:4) +Na]+
Lung_MALDI	691.4286	691.4285	0.1	[ PA(32:1) +2Na-H]+
Lung_MALDI	693.4441	693.4466	-2.5	[ PA(34:3) +Na]+
Lung_MALDI	693.4441	693.4442	0.0	[ PA(32:0) +2Na-H]+
Lung_MALDI	695.4613	695.4646	-3.4	[ PA(36:5) +H]+
Lung_MALDI	697.4765	697.4779	-1.4	[ PA(34:1) +Na]+
Lung_MALDI	707.4587	707.4622	-3.5	[ DG(40:9) +2Na-H]+
Lung_MALDI	709.4184	709.4205	-2.1	[ PA(34:3) +K]+
Lung_MALDI	709.5132	709.5168	-3.5	[ DG(40:5) +K]+
Lung_MALDI	713.4505	713.4518	-1.3	[ PA(34:1) +K]+
Lung_MALDI	717.4431	717.4466	-3.4	[ PA(36:5) +Na]+
Lung_MALDI	719.4585	719.4598	-1.3	[ PA(34:1) +2Na-H]+
Lung_MALDI	720.4127	720.4131	-0.5	[ CerP(d36:2) +2K-H]+
Lung_MALDI	721.3582	721.3608	-2.5	[ PA(32:2) +2K-H]+
Lung_MALDI	721.4763	721.4755	0.8	[ PA(34:0) +2Na-H]+
Lung_MALDI	721.4763	721.4779	-1.6	[ PA(36:3) +Na]+
Lung_MALDI	723.4923	723.4935	-1.2	[ PA(36:2) +Na]+
Lung_MALDI	725.3922	725.3921	0.1	[ PA(32:0) +2K-H]+
Lung_MALDI	725.5552	725.5568	-1.6	[ SM(d34:1) +Na]+
Lung_MALDI	726.5094	726.5068	2.5	[ PC(32:4) +H]+
Lung_MALDI	728.5183	728.5201	-1.8	[ PC(30:0) +Na]+
Lung_MALDI	729.4821	729.4855	-3.4	[ DG(42:9) +K]+
Lung_MALDI	731.4014	731.4049	-3.5	[ PA(36:6) +K]+
Lung_MALDI	732.5516	732.5538	-2.2	[ PC(32:1) +H]+
Lung_MALDI	733.4176	733.4205	-2.9	[ PA(36:5) +K]+
Lung_MALDI	735.4333	735.4362	-2.9	[ PA(36:4) +K]+
Lung_MALDI	737.4510	737.4518	-0.8	[ PA(36:3) +K]+
Lung_MALDI	739.4661	739.4675	-1.3	[ PA(36:2) +K]+
Lung_MALDI	741.4830	741.4831	-0.1	[ PA(36:1) +K]+
Lung_MALDI	741.5293	741.5307	-1.5	[ SM(d34:1) +K]+
Lung_MALDI	742.5334	742.5357	-2.3	[ PE(34:0) +Na]+
Lung_MALDI	743.4594	743.4598	-0.5	[ PA(36:3) +2Na-H]+
Lung_MALDI	743.4594	743.4622	-2.9	[ PA(38:6) +Na]+
Lung_MALDI	744.4909	744.4915	-0.5	[ PE 34:2p +2Na-H]+
Lung_MALDI	744.4909	744.4940	-3.1	[ PC(30:0) +K]+
Lung_MALDI	745.4758	745.4755	0.3	[ PA(36:2) +2Na-H]+
Lung_MALDI	745.4758	745.4779	-2.1	[ PA(38:5) +Na]+
Lung_MALDI	746.5668	746.5694	-2.7	[ PE(36:1) +H]+
Lung_MALDI	747.3748	747.3764	-1.6	[ PA(34:3) +2K-H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	747.4912	747.4911	0.1	[ PA(36:1) +2Na-H]+
Lung_MALDI	747.4912	747.4935	-2.3	[ PA(38:4) +Na]+
Lung_MALDI	747.4912	747.4879	3.3	[ CE(20:5) +2K-H]+
Lung_MALDI	748.5818	748.5851	-3.3	[ PE(36:0) +H]+
Lung_MALDI	749.5095	749.5116	-2.1	[ PA(40:6) +H]+
Lung_MALDI	749.5095	749.5092	0.3	[ PA(38:3) +Na]+
Lung_MALDI	749.5095	749.5068	2.7	[ PA(36:0) +2Na-H]+
Lung_MALDI	750.5753	750.5772	-1.9	[ CerP(d42:2) +Na]+
Lung_MALDI	751.4070	751.4077	-0.7	[ PA(34:1) +2K-H]+
Lung_MALDI	751.5240	751.5248	-0.8	[ PA(38:2) +Na]+
Lung_MALDI	751.5240	751.5272	-3.2	[ PA(40:5) +H]+
Lung_MALDI	753.5864	753.5881	-1.7	[ SM(d36:1) +Na]+
Lung_MALDI	754.5339	754.5357	-1.8	[ PC(32:1) +Na]+
Lung_MALDI	757.4175	757.4205	-3.0	[ PA(38:7) +K]+
Lung_MALDI	758.5076	758.5097	-2.0	[ PE(34:0) +K]+
Lung_MALDI	759.4335	759.4362	-2.7	[ PA(38:6) +K]+
Lung_MALDI	760.5828	760.5851	-2.3	[ PC(34:1) +H]+
Lung_MALDI	761.4494	761.4518	-2.4	[ PA(38:5) +K]+
Lung_MALDI	763.4657	763.4675	-1.8	[ PA(38:4) +K]+
Lung_MALDI	764.5151	764.5177	-2.5	[ PE(34:0) +2Na-H]+
Lung_MALDI	765.4836	765.4831	0.4	[ PA(38:3) +K]+
Lung_MALDI	766.5505	766.5511	-0.7	[ CerP(d42:2) +K]+
Lung_MALDI	767.4593	767.4598	-0.5	[ PA(38:5) +2Na-H]+
Lung_MALDI	767.4593	767.4622	-2.9	[ PA(40:8) +Na]+
Lung_MALDI	767.4986	767.4988	-0.2	[ PA(38:2) +K]+
Lung_MALDI	768.4904	768.4915	-1.1	[ PE 36:4p +2Na-H]+
Lung_MALDI	768.4904	768.4940	-3.6	[ PC(32:2) +K]+
Lung_MALDI	768.5510	768.5514	-0.4	[ PE(36:1) +Na]+
Lung_MALDI	768.5510	768.5538	-2.8	[ PE(38:4) +H]+
Lung_MALDI	769.4746	769.4755	-0.9	[ PA(38:4) +2Na-H]+
Lung_MALDI	769.4746	769.4779	-3.3	[ PA(40:7) +Na]+
Lung_MALDI	769.5604	769.5620	-1.6	[ SM(d36:1) +K]+
Lung_MALDI	770.5046	770.5071	-2.5	[ PE 36:3p +2Na-H]+
Lung_MALDI	770.5645	770.5670	-2.5	[ PE(36:0) +Na]+
Lung_MALDI	771.3749	771.3764	-1.5	[ PA(36:5) +2K-H]+
Lung_MALDI	772.5232	772.5252	-1.9	[ PE 38:5p +Na]+
Lung_MALDI	772.5232	772.5228	0.5	[ PE 36:2p +2Na-H]+
Lung_MALDI	773.3897	773.3921	-2.3	[ PA(36:4) +2K-H]+
Lung_MALDI	774.5757	774.5748	0.9	[ CerP(d42:1) +2Na-H]+
Lung_MALDI	775.4074	775.4077	-0.3	[ PA(36:3) +2K-H]+
Lung_MALDI	775.5227	775.5248	-2.1	[ PA(40:4) +Na]+
Lung_MALDI	775.5227	775.5224	0.3	[ PA(38:1) +2Na-H]+
Lung_MALDI	775.5227	775.5192	3.5	[ CE(22:5) +2K-H]+
Lung_MALDI	777.4222	777.4234	-1.1	[ PA(36:2) +2K-H]+
Lung_MALDI	778.4751	778.4784	-3.3	[ PE(36:4) +K]+
Lung_MALDI	778.5325	778.5357	-3.2	[ PC(34:3) +Na]+
Lung_MALDI	779.4385	779.4390	-0.5	[ PA(36:1) +2K-H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	780.4907	780.4940	-3.3	[ PE(36:3) +K]+
Lung_MALDI	780.5492	780.5514	-2.2	[ PC(34:2) +Na]+
Lung_MALDI	781.6173	781.6194	-2.1	[ SM(d38:1) +Na]+
Lung_MALDI	782.5649	782.5670	-2.2	[ PC(34:1) +Na]+
Lung_MALDI	783.4344	783.4362	-1.7	[ PA(40:8) +K]+
Lung_MALDI	784.5800	784.5827	-2.7	[ PC(34:0) +Na]+
Lung_MALDI	785.4481	785.4518	-3.7	[ PA(40:7) +K]+
Lung_MALDI	787.4666	787.4675	-0.9	[ PA(40:6) +K]+
Lung_MALDI	789.4814	789.4831	-1.8	[ PA(40:5) +K]+
Lung_MALDI	792.4820	792.4789	3.1	[ HexCer(d34:1(2OH)) +2K-H]+
Lung_MALDI	793.4777	793.4755	2.2	[ PA(40:6) +2Na-H]+
Lung_MALDI	793.4777	793.4803	-2.6	[ PA(44:12) +H]+
Lung_MALDI	794.4499	794.4460	3.9	[ Sulfatide(d32:2) +2Na-H]+
Lung_MALDI	794.4499	794.4499	0.0	[ PE(34:1) +2K-H]+
Lung_MALDI	795.4878	795.4911	-3.4	[ PA(40:5) +2Na-H]+
Lung_MALDI	796.4659	796.4656	0.3	[ PE(34:0) +2K-H]+
Lung_MALDI	796.5221	796.5228	-0.6	[ PE 38:4p +2Na-H]+
Lung_MALDI	796.5221	796.5253	-3.2	[ PC(34:2) +K]+
Lung_MALDI	796.5798	796.5827	-2.9	[ PE(38:1) +Na]+
Lung_MALDI	797.3945	797.3921	2.4	[ PA(38:6) +2K-H]+
Lung_MALDI	797.5903	797.5933	-3.0	[ SM(d38:1) +K]+
Lung_MALDI	798.5384	798.5410	-2.5	[ PC(34:1) +K]+
Lung_MALDI	798.5384	798.5408	-2.4	[ PE 40:6p +Na]+
Lung_MALDI	798.5384	798.5384	0.0	[ PE 38:3p +2Na-H]+
Lung_MALDI	799.4075	799.4077	-0.2	[ PA(38:5) +2K-H]+
Lung_MALDI	801.4200	801.4234	-3.3	[ PA(38:4) +2K-H]+
Lung_MALDI	801.5408	801.5381	2.7	[ PA(40:2) +2Na-H]+
Lung_MALDI	804.5490	804.5490	0.1	[ PC(34:1) +2Na-H]+
Lung_MALDI	804.5490	804.5514	-2.3	[ PC(36:4) +Na]+
Lung_MALDI	806.5067	806.5097	-2.9	[ PE(38:4) +K]+
Lung_MALDI	806.5653	806.5646	0.6	[ PC(34:0) +2Na-H]+
Lung_MALDI	806.5653	806.5670	-1.8	[ PC(36:3) +Na]+
Lung_MALDI	807.6322	807.6351	-2.8	[ SM(d40:2) +Na]+
Lung_MALDI	808.5808	808.5827	-1.9	[ PC(36:2) +Na]+
Lung_MALDI	809.6489	809.6507	-1.8	[ SM(d40:1) +Na]+
Lung_MALDI	810.5975	810.6007	-3.3	[ PC(38:4) +H]+
Lung_MALDI	810.5975	810.5983	-0.9	[ PC(36:1) +Na]+
Lung_MALDI	812.5159	812.5177	-1.8	[ PE(38:4) +2Na-H]+
Lung_MALDI	815.4611	815.4622	-1.1	[ PA(44:12) +Na]+
Lung_MALDI	816.5450	816.5490	-4.0	[ PE(38:2) +2Na-H]+
Lung_MALDI	818.5608	818.5646	-3.8	[ PE(38:1) +2Na-H]+
Lung_MALDI	820.4636	820.4656	-1.9	[ PE(36:2) +2K-H]+
Lung_MALDI	820.5229	820.5228	0.1	[ PE 40:6p +2Na-H]+
Lung_MALDI	820.5229	820.5253	-2.5	[ PC(36:4) +K]+
Lung_MALDI	822.4790	822.4773	1.7	[ Sulfatide(d34:2) +2Na-H]+
Lung_MALDI	822.4790	822.4812	-2.2	[ PE(36:1) +2K-H]+
Lung_MALDI	822.5377	822.5408	-3.2	[ PE 42:8p +Na]+



Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	822.5377	822.5384	-0.8	[ PE 40:5p +2Na-H]+
Lung_MALDI	822.5377	822.5410	-3.3	[ PC(36:3) +K]+
Lung_MALDI	824.5543	824.5541	0.3	[ PE 40:4p +2Na-H]+
Lung_MALDI	824.5543	824.5566	-2.3	[ PC(36:2) +K]+
Lung_MALDI	824.5543	824.5565	-2.1	[ PE 42:7p +Na]+
Lung_MALDI	824.6116	824.6140	-2.3	[ PE(40:1) +Na]+
Lung_MALDI	825.6215	825.6246	-3.1	[ SM(d40:1) +K]+
Lung_MALDI	826.4586	826.4550	3.6	[ PE 38:5p +2K-H]+
Lung_MALDI	826.5707	826.5697	1.0	[ PE 40:3p +2Na-H]+
Lung_MALDI	826.5707	826.5723	-1.6	[ PC(36:1) +K]+
Lung_MALDI	826.5707	826.5721	-1.4	[ PE 42:6p +Na]+
Lung_MALDI	827.4368	827.4390	-2.2	[ PA(40:5) +2K-H]+
Lung_MALDI	827.7080	827.7099	-1.9	[ TG(48:1) +Na]+
Lung_MALDI	828.4903	828.4940	-3.7	[ PE(40:7) +K]+
Lung_MALDI	828.5496	828.5490	0.7	[ PC(36:3) +2Na-H]+
Lung_MALDI	828.5496	828.5514	-1.7	[ PC(38:6) +Na]+
Lung_MALDI	829.7236	829.7256	-1.9	[ TG(48:0) +Na]+
Lung_MALDI	830.5647	830.5646	0.1	[ PC(36:2) +2Na-H]+
Lung_MALDI	830.5647	830.5670	-2.3	[ PC(38:5) +Na]+
Lung_MALDI	832.5813	832.5827	-1.4	[ PC(38:4) +Na]+
Lung_MALDI	832.5813	832.5803	1.0	[ PC(36:1) +2Na-H]+
Lung_MALDI	832.5813	832.5851	-3.8	[ PC(40:7) +H]+
Lung_MALDI	833.6478	833.6483	-0.5	[ SM(d40:0) +2Na-H]+
Lung_MALDI	834.5192	834.5232	-3.9	[ PS(36:1) +2Na-H]+
Lung_MALDI	835.6642	835.6664	-2.1	[ SM(d42:2) +Na]+
Lung_MALDI	836.5176	836.5177	-0.1	[ PE(40:6) +2Na-H]+
Lung_MALDI	836.6105	836.6140	-3.5	[ PC(38:2) +Na]+
Lung_MALDI	837.6802	837.6820	-1.8	[ SM(d42:1) +Na]+
Lung_MALDI	838.5295	838.5333	-3.8	[ PE(40:5) +2Na-H]+
Lung_MALDI	840.4329	840.4343	-1.4	[ PE(38:6) +2K-H]+
Lung_MALDI	840.5461	840.5490	-2.9	[ PE(40:4) +2Na-H]+
Lung_MALDI	842.4482	842.4499	-1.7	[ PE(38:5) +2K-H]+
Lung_MALDI	844.4640	844.4656	-1.5	[ PE(38:4) +2K-H]+
Lung_MALDI	844.5230	844.5253	-2.3	[ PC(38:6) +K]+
Lung_MALDI	844.5230	844.5228	0.3	[ PE 42:8p +2Na-H]+
Lung_MALDI	845.6980	845.6995	-1.5	[ TG(48:0) +K]+
Lung_MALDI	846.5374	846.5384	-1.0	[ PE 42:7p +2Na-H]+
Lung_MALDI	846.5374	846.5410	-3.6	[ PC(38:5) +K]+
Lung_MALDI	848.5544	848.5566	-2.2	[ PC(38:4) +K]+
Lung_MALDI	848.5544	848.5541	0.4	[ PE 42:6p +2Na-H]+
Lung_MALDI	849.4406	849.4445	-3.8	[ PG(36:3) +2K-H]+
Lung_MALDI	851.6385	851.6403	-1.8	[ SM(d42:2) +K]+
Lung_MALDI	851.7091	851.7075	1.6	[ TG(48:0) +2Na-H]+
Lung_MALDI	851.7091	851.7123	-3.2	[ TG(52:6) +H]+
Lung_MALDI	851.7091	851.7099	-0.8	[ TG(50:3) +Na]+
Lung_MALDI	852.5461	852.5490	-2.9	[ PC(38:5) +2Na-H]+
Lung_MALDI	853.6541	853.6559	-1.9	[ SM(d42:1) +K]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	853.7240	853.7280	-4.0	[ TG(52:5) +H]+
Lung_MALDI	853.7240	853.7256	-1.6	[ TG(50:2) +Na]+
Lung_MALDI	854.5661	854.5670	-0.9	[ PC(40:7) +Na]+
Lung_MALDI	854.5661	854.5694	-3.3	[ PC(42:10) +H]+
Lung_MALDI	854.5661	854.5646	1.5	[ PC(38:4) +2Na-H]+
Lung_MALDI	855.7388	855.7412	-2.4	[ TG(50:1) +Na]+
Lung_MALDI	856.5242	856.5253	-1.1	[ PE(42:7) +K]+
Lung_MALDI	856.5811	856.5827	-1.6	[ PC(40:6) +Na]+
Lung_MALDI	856.5811	856.5803	0.8	[ PC(38:3) +2Na-H]+
Lung_MALDI	858.4565	858.4564	0.1	[ Sulfatide(d34:0) +2K-H]+
Lung_MALDI	860.6114	860.6116	-0.2	[ PC(38:1) +2Na-H]+
Lung_MALDI	860.6114	860.6140	-2.6	[ PC(40:4) +Na]+
Lung_MALDI	866.4677	866.4710	-3.3	[ PS(36:1) +2K-H]+
Lung_MALDI	868.4642	868.4656	-1.3	[ PE(40:6) +2K-H]+
Lung_MALDI	868.5231	868.5253	-2.2	[ PC(40:8) +K]+
Lung_MALDI	869.6976	869.6995	-1.9	[ TG(50:2) +K]+
Lung_MALDI	871.4256	871.4288	-3.2	[ PG(38:6) +2K-H]+
Lung_MALDI	871.7145	871.7152	-0.6	[ TG(50:1) +K]+
Lung_MALDI	872.5546	872.5566	-2.0	[ PC(40:6) +K]+
Lung_MALDI	875.7100	875.7123	-2.3	[ TG(54:8) +H]+
Lung_MALDI	875.7100	875.7099	0.1	[ TG(52:5) +Na]+
Lung_MALDI	875.7100	875.7075	2.5	[ TG(50:2) +2Na-H]+
Lung_MALDI	877.7241	877.7232	0.9	[ TG(50:1) +2Na-H]+
Lung_MALDI	877.7241	877.7280	-3.9	[ TG(54:7) +H]+
Lung_MALDI	877.7241	877.7256	-1.5	[ TG(52:4) +Na]+
Lung_MALDI	879.7388	879.7388	0.0	[ TG(50:0) +2Na-H]+
Lung_MALDI	879.7388	879.7412	-2.4	[ TG(52:3) +Na]+
Lung_MALDI	880.4857	880.4864	-0.6	[ PE(44:12) +2Na-H]+
Lung_MALDI	881.7538	881.7569	-3.0	[ TG(52:2) +Na]+
Lung_MALDI	882.4792	882.4812	-2.0	[ PC(38:6) +2K-H]+
Lung_MALDI	885.4664	885.4653	1.1	[ PG(42:11) +2Na-H]+
Lung_MALDI	887.4472	887.4449	2.3	[ PI(32:0) +2K-H]+
Lung_MALDI	888.4586	888.4554	3.2	[ PS(38:4) +2K-H]+
Lung_MALDI	891.7033	891.7048	-1.5	[ 22:1-Glc-cholesterol +Na]+
Lung_MALDI	893.4107	893.4132	-2.5	[ PG(40:9) +2K-H]+
Lung_MALDI	895.7137	895.7152	-1.4	[ TG(52:3) +K]+
Lung_MALDI	897.7282	897.7308	-2.6	[ TG(52:2) +K]+
Lung_MALDI	901.7242	901.7232	1.0	[ TG(52:3) +2Na-H]+
Lung_MALDI	901.7242	901.7280	-3.8	[ TG(56:9) +H]+
Lung_MALDI	901.7242	901.7256	-1.4	[ TG(54:6) +Na]+
Lung_MALDI	903.7402	903.7388	1.4	[ TG(52:2) +2Na-H]+
Lung_MALDI	903.7402	903.7412	-1.0	[ TG(54:5) +Na]+
Lung_MALDI	903.7402	903.7436	-3.4	[ TG(56:8) +H]+
Lung_MALDI	905.7554	905.7593	-3.9	[ TG(56:7) +H]+
Lung_MALDI	905.7554	905.7545	0.9	[ TG(52:1) +2Na-H]+
Lung_MALDI	905.7554	905.7569	-1.5	[ TG(54:4) +Na]+
Lung_MALDI	907.7696	907.7725	-2.9	[ TG(54:3) +Na]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_MALDI	908.4965	908.4969	-0.3	[ PC(40:7) +2K-H]+
Lung_MALDI	913.4647	913.4605	4.2	[ PI(34:1) +2K-H]+
Lung_MALDI	914.5282	914.5285	-0.3	[ PI-Cer(38:0) +2K-H]+
Lung_MALDI	921.7301	921.7308	-0.7	[ TG(54:4) +K]+
Lung_MALDI	931.5269	931.5283	-1.4	[ PI(38:4) +2Na-H]+
Lung_MALDI	935.4447	935.4449	-0.1	[ PI(36:4) +2K-H]+
Lung_MALDI	963.4744	963.4762	-1.7	[ PI(38:4) +2K-H]+
Lung_MALDI	967.5060	967.5075	-1.5	[ PI(38:2) +2K-H]+
Lung_MALDI	994.5865	994.5816	4.8	[ Sulfatide(d44:2) +2K-H]+
Lung_NAPA	327.2271	327.2271	0.0	[ FA(18:1) +2Na-H]+
Lung_NAPA	329.2429	329.2427	0.2	[ FA(18:0) +2Na-H]+
Lung_NAPA	369.3519	369.3516	0.3	[ Cholesterol (-H <sub>2</sub> O) +H]+
Lung_NAPA	457.1105	457.1119	-1.4	[ FMN +H]+
Lung_NAPA	479.0940	479.0938	0.2	[ FMN +Na]+
Lung_NAPA	500.2558	500.2539	1.9	[ Carnitine(18:2) +2K-H]+
Lung_NAPA	501.0781	501.0758	2.3	[ FMN +2Na-H]+
Lung_NAPA	516.2512	516.2487	2.5	[ LysoPE(18:2) +K]+
Lung_NAPA	518.2669	518.2644	2.6	[ LysoPE(18:1) +K]+
Lung_NAPA	526.2357	526.2332	2.5	[ Glycochenodeoxycholic acid +2K-H]+
Lung_NAPA	544.2821	544.2800	2.1	[ LysoPE(20:2) +K]+
Lung_NAPA	554.2663	554.2644	2.0	[ LysoPC(18:4) +K]+
Lung_NAPA	558.2976	558.2957	2.0	[ LysoPC(18:2) +K]+
Lung_NAPA	558.3503	558.3530	-2.7	[ LysoPE(22:1) +Na]+
Lung_NAPA	562.3296	562.3270	2.6	[ LysoPC(18:0) +K]+
Lung_NAPA	564.2510	564.2487	2.3	[ LysoPE(22:6) +K]+
Lung_NAPA	568.2806	568.2800	0.5	[ LysoPE(22:4) +K]+
Lung_NAPA	592.2816	592.2800	1.6	[ LysoPE(24:6) +K]+
Lung_NAPA	602.3604	602.3583	2.1	[ LysoPE(24:1) +K]+
Lung_NAPA	608.3132	608.3113	1.9	[ LysoPC(22:5) +K]+
Lung_NAPA	610.3273	610.3270	0.4	[ LysoPC(22:4) +K]+
Lung_NAPA	615.4950	615.4959	-0.9	[ DG(34:2) +Na]+
Lung_NAPA	617.5109	617.5140	-3.0	[ DG(36:4) +H]+
Lung_NAPA	617.5109	617.5116	-0.6	[ DG(34:1) +Na]+
Lung_NAPA	631.4695	631.4698	-0.3	[ DG(34:2) +K]+
Lung_NAPA	633.4856	633.4855	0.1	[ DG(34:1) +K]+
Lung_NAPA	637.4795	637.4778	1.7	[ DG(34:2) +2Na-H]+
Lung_NAPA	639.4950	639.4959	-0.9	[ DG(36:4) +Na]+
Lung_NAPA	639.4950	639.4935	1.5	[ DG(34:1) +2Na-H]+
Lung_NAPA	641.5106	641.5116	-1.0	[ DG(36:3) +Na]+
Lung_NAPA	643.5263	643.5272	-0.9	[ DG(36:2) +Na]+
Lung_NAPA	657.4862	657.4855	0.7	[ DG(36:3) +K]+
Lung_NAPA	659.5016	659.5011	0.5	[ DG(36:2) +K]+
Lung_NAPA	666.4817	666.4833	-1.6	[ CerP(d36:2) +Na]+
Lung_NAPA	667.5251	667.5272	-2.1	[ DG(38:4) +Na]+
Lung_NAPA	667.5251	667.5248	0.3	[ DG(36:1) +2Na-H]+
Lung_NAPA	669.4459	669.4466	-0.7	[ PA(32:1) +Na]+
Lung_NAPA	669.4459	669.4490	-3.1	[ PA(34:4) +H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_NAPA	670.6103	670.6109	-0.6	[ Cer(d42:2) +Na]+
Lung_NAPA	681.4848	681.4855	-0.7	[ DG(38:5) +K]+
Lung_NAPA	682.4564	682.4572	-0.9	[ CerP(d36:2) +K]+
Lung_NAPA	688.4626	688.4652	-2.6	[ CerP(d36:2) +2Na-H]+
Lung_NAPA	691.4275	691.4285	-1.0	[ PA(32:1) +2Na-H]+
Lung_NAPA	691.4275	691.4309	-3.4	[ PA(34:4) +Na]+
Lung_NAPA	693.4424	693.4442	-1.8	[ PA(32:0) +2Na-H]+
Lung_NAPA	697.4766	697.4779	-1.3	[ PA(34:1) +Na]+
Lung_NAPA	710.3550	710.3560	-1.0	[ PE(28:1) +2K-H]+
Lung_NAPA	713.4506	713.4518	-1.2	[ PA(34:1) +K]+
Lung_NAPA	719.4581	719.4598	-1.7	[ PA(34:1) +2Na-H]+
Lung_NAPA	721.4768	721.4779	-1.0	[ PA(36:3) +Na]+
Lung_NAPA	721.4768	721.4803	-3.4	[ PA(38:6) +H]+
Lung_NAPA	721.4768	721.4755	1.4	[ PA(34:0) +2Na-H]+
Lung_NAPA	722.5522	722.5541	-2.0	[ HexCer(d34:1) +Na]+
Lung_NAPA	723.4923	723.4935	-1.2	[ PA(36:2) +Na]+
Lung_NAPA	723.4923	723.4959	-3.6	[ PA(38:5) +H]+
Lung_NAPA	725.5549	725.5568	-1.9	[ SM(d34:1) +Na]+
Lung_NAPA	728.5177	728.5201	-2.4	[ PC(30:0) +Na]+
Lung_NAPA	731.4053	731.4049	0.5	[ PA(36:6) +K]+
Lung_NAPA	733.4169	733.4205	-3.6	[ PA(36:5) +K]+
Lung_NAPA	736.4834	736.4864	-3.0	[ PE(32:0) +2Na-H]+
Lung_NAPA	737.4519	737.4518	0.1	[ PA(36:3) +K]+
Lung_NAPA	739.4105	739.4101	0.4	[ DG(40:9) +2K-H]+
Lung_NAPA	739.4660	739.4675	-1.5	[ PA(36:2) +K]+
Lung_NAPA	740.4046	740.4030	1.6	[ PE(30:0) +2K-H]+
Lung_NAPA	741.4422	741.4442	-1.9	[ PA(36:4) +2Na-H]+
Lung_NAPA	741.5990	741.6004	-1.3	[ TG(42:2) +Na]+
Lung_NAPA	742.5336	742.5357	-2.1	[ PE(34:0) +Na]+
Lung_NAPA	743.4600	743.4598	0.2	[ PA(36:3) +2Na-H]+
Lung_NAPA	743.4600	743.4622	-2.2	[ PA(38:6) +Na]+
Lung_NAPA	745.4745	745.4779	-3.4	[ PA(38:5) +Na]+
Lung_NAPA	745.4745	745.4755	-1.0	[ PA(36:2) +2Na-H]+
Lung_NAPA	747.4899	747.4911	-1.2	[ PA(36:1) +2Na-H]+
Lung_NAPA	747.4899	747.4935	-3.6	[ PA(38:4) +Na]+
Lung_NAPA	747.4899	747.4879	2.0	[ CE(20:5) +2K-H]+
Lung_NAPA	748.5824	748.5851	-2.7	[ PE(36:0) +H]+
Lung_NAPA	751.4063	751.4077	-1.4	[ PA(34:1) +2K-H]+
Lung_NAPA	753.5855	753.5881	-2.6	[ SM(d36:1) +Na]+
Lung_NAPA	754.5334	754.5357	-2.4	[ PC(32:1) +Na]+
Lung_NAPA	756.4927	756.4940	-1.4	[ PE(34:1) +K]+
Lung_NAPA	757.4182	757.4205	-2.3	[ PA(38:7) +K]+
Lung_NAPA	758.5081	758.5097	-1.6	[ PE(34:0) +K]+
Lung_NAPA	759.4337	759.4362	-2.4	[ PA(38:6) +K]+
Lung_NAPA	763.4652	763.4675	-2.2	[ PA(38:4) +K]+
Lung_NAPA	764.5160	764.5177	-1.7	[ PE(34:0) +2Na-H]+
Lung_NAPA	766.4182	766.4186	-0.4	[ PE(32:1) +2K-H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_NAPA	766.4182	766.4147	3.6	[ Sulfatide(d30:2) +2Na-H]+
Lung_NAPA	767.4573	767.4598	-2.5	[ PA(38:5) +2Na-H]+
Lung_NAPA	768.4883	768.4915	-3.2	[ PE 36:4p +2Na-H]+
Lung_NAPA	769.4729	769.4755	-2.6	[ PA(38:4) +2Na-H]+
Lung_NAPA	771.4946	771.4911	3.4	[ PA(38:3) +2Na-H]+
Lung_NAPA	771.4946	771.4935	1.0	[ PA(40:6) +Na]+
Lung_NAPA	772.5229	772.5252	-2.3	[ PE 38:5p +Na]+
Lung_NAPA	772.5229	772.5228	0.1	[ PE 36:2p +2Na-H]+
Lung_NAPA	775.4042	775.4077	-3.5	[ PA(36:3) +2K-H]+
Lung_NAPA	777.4233	777.4234	-0.1	[ PA(36:2) +2K-H]+
Lung_NAPA	778.4217	778.4186	3.1	[ PC(30:2) +2K-H]+
Lung_NAPA	778.4752	778.4784	-3.2	[ PE(36:4) +K]+
Lung_NAPA	780.4902	780.4940	-3.8	[ PE(36:3) +K]+
Lung_NAPA	780.5481	780.5514	-3.3	[ PC(34:2) +Na]+
Lung_NAPA	782.5649	782.5670	-2.2	[ PC(34:1) +Na]+
Lung_NAPA	784.5219	784.5253	-3.4	[ PE(36:1) +K]+
Lung_NAPA	786.3897	786.3873	2.4	[ PE(34:5) +2K-H]+
Lung_NAPA	790.4205	790.4186	1.9	[ PE(34:3) +2K-H]+
Lung_NAPA	790.5311	790.5333	-2.3	[ PE(36:1) +2Na-H]+
Lung_NAPA	791.4635	791.4598	3.7	[ PA(40:7) +2Na-H]+
Lung_NAPA	792.4320	792.4343	-2.2	[ PE(34:2) +2K-H]+
Lung_NAPA	794.4491	794.4460	3.1	[ Sulfatide(d32:2) +2Na-H]+
Lung_NAPA	794.4491	794.4499	-0.8	[ PE(34:1) +2K-H]+
Lung_NAPA	794.5032	794.5071	-3.9	[ PE 38:5p +2Na-H]+
Lung_NAPA	794.6091	794.6117	-2.5	[ HexCer(d38:1(2OH)) +Na]+
Lung_NAPA	796.4646	796.4656	-1.0	[ PE(34:0) +2K-H]+
Lung_NAPA	796.4646	796.4616	3.0	[ Sulfatide(d32:1) +2Na-H]+
Lung_NAPA	796.5206	796.5228	-2.1	[ PE 38:4p +2Na-H]+
Lung_NAPA	798.5389	798.5410	-2.1	[ PC(34:1) +K]+
Lung_NAPA	798.5389	798.5408	-2.0	[ PE 40:6p +Na]+
Lung_NAPA	798.5389	798.5384	0.4	[ PE 38:3p +2Na-H]+
Lung_NAPA	799.6755	799.6786	-3.2	[ TG(46:1) +Na]+
Lung_NAPA	801.4211	801.4234	-2.3	[ PA(38:4) +2K-H]+
Lung_NAPA	801.6925	801.6943	-1.8	[ TG(46:0) +Na]+
Lung_NAPA	804.4903	804.4940	-3.7	[ PE(38:5) +K]+
Lung_NAPA	804.5483	804.5490	-0.7	[ PC(34:1) +2Na-H]+
Lung_NAPA	804.5483	804.5514	-3.1	[ PC(36:4) +Na]+
Lung_NAPA	804.6324	804.6324	0.0	[ HexCer(d18:2/22:0) +Na]+
Lung_NAPA	806.5069	806.5097	-2.8	[ PE(38:4) +K]+
Lung_NAPA	806.6459	806.6480	-2.1	[ HexCer(d18:1/22:0) +Na]+
Lung_NAPA	808.5808	808.5827	-1.8	[ PC(36:2) +Na]+
Lung_NAPA	809.6485	809.6507	-2.2	[ SM(d40:1) +Na]+
Lung_NAPA	810.5889	810.5856	3.3	[ HexCer(d38:1(2OH)) +K]+
Lung_NAPA	813.6007	813.5980	2.7	[ TG(46:5) +2Na-H]+
Lung_NAPA	815.4651	815.4622	2.8	[ PA(44:12) +Na]+
Lung_NAPA	815.6533	815.6526	0.8	[ TG(46:1) +K]+
Lung_NAPA	816.4318	816.4343	-2.5	[ PE(36:4) +2K-H]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_NAPA	817.6667	817.6682	-1.5	[ TG(46:0) +K]+
Lung_NAPA	818.5640	818.5646	-0.6	[ PE(38:1) +2Na-H]+
Lung_NAPA	818.5640	818.5670	-3.0	[ PE(40:4) +Na]+
Lung_NAPA	820.4635	820.4656	-2.0	[ PE(36:2) +2K-H]+
Lung_NAPA	820.5207	820.5228	-2.0	[ PE 40:6p +2Na-H]+
Lung_NAPA	822.4802	822.4812	-1.0	[ PE(36:1) +2K-H]+
Lung_NAPA	822.4802	822.4773	2.9	[ Sulfatide(d34:2) +2Na-H]+
Lung_NAPA	822.5359	822.5384	-2.5	[ PE 40:5p +2Na-H]+
Lung_NAPA	822.6411	822.6430	-1.9	[ HexCer(t40:1) +Na]+
Lung_NAPA	824.5530	824.5565	-3.5	[ PE 42:7p +Na]+
Lung_NAPA	824.5530	824.5541	-1.0	[ PE 40:4p +2Na-H]+
Lung_NAPA	824.5530	824.5566	-3.6	[ PC(36:2) +K]+
Lung_NAPA	825.6924	825.6943	-1.9	[ TG(48:2) +Na]+
Lung_NAPA	827.4359	827.4390	-3.1	[ PA(40:5) +2K-H]+
Lung_NAPA	827.7082	827.7099	-1.8	[ TG(48:1) +Na]+
Lung_NAPA	828.4910	828.4940	-3.0	[ PE(40:7) +K]+
Lung_NAPA	829.7237	829.7256	-1.8	[ TG(48:0) +Na]+
Lung_NAPA	830.6460	830.6456	0.4	[ HexCer(d40:0) +2Na-H]+
Lung_NAPA	832.5214	832.5253	-3.9	[ PE(40:5) +K]+
Lung_NAPA	832.5802	832.5827	-2.5	[ PC(38:4) +Na]+
Lung_NAPA	832.5802	832.5803	-0.1	[ PC(36:1) +2Na-H]+
Lung_NAPA	832.6614	832.6637	-2.2	[ HexCer(d42:2) +Na]+
Lung_NAPA	834.5379	834.5410	-3.1	[ PE(40:4) +K]+
Lung_NAPA	834.6764	834.6793	-3.0	[ HexCer(d42:1) +Na]+
Lung_NAPA	838.5108	838.5125	-1.7	[ PC(34:0) +2K-H]+
Lung_NAPA	838.5108	838.5148	-4.0	[ PE 42:8p +K]+
Lung_NAPA	838.6146	838.6168	-2.2	[ PI-Cer(38:0) +H]+
Lung_NAPA	838.6146	838.6169	-2.3	[ HexCer(t40:1) +K]+
Lung_NAPA	839.7031	839.7001	3.1	[ SM(d44:3) +H]+
Lung_NAPA	840.4338	840.4343	-0.5	[ PE(38:6) +2K-H]+
Lung_NAPA	841.6669	841.6682	-1.3	[ TG(48:2) +K]+
Lung_NAPA	842.4479	842.4499	-2.0	[ PE(38:5) +2K-H]+
Lung_NAPA	843.6822	843.6839	-1.6	[ TG(48:1) +K]+
Lung_NAPA	844.4643	844.4656	-1.2	[ PE(38:4) +2K-H]+
Lung_NAPA	845.6983	845.6995	-1.2	[ TG(48:0) +K]+
Lung_NAPA	848.4908	848.4929	-2.1	[ Sulfatide(d36:3) +2Na-H]+
Lung_NAPA	848.5534	848.5541	-0.7	[ PE 42:6p +2Na-H]+
Lung_NAPA	848.5534	848.5566	-3.3	[ PC(38:4) +K]+
Lung_NAPA	848.6590	848.6586	0.4	[ HexCer(d42:2(2OH)) +Na]+
Lung_NAPA	849.6915	849.6943	-2.8	[ TG(50:4) +Na]+
Lung_NAPA	849.6915	849.6919	-0.4	[ TG(48:1) +2Na-H]+
Lung_NAPA	850.6763	850.6743	2.1	[ HexCer(d42:1(2OH)) +Na]+
Lung_NAPA	851.7072	851.7075	-0.3	[ TG(48:0) +2Na-H]+
Lung_NAPA	851.7072	851.7099	-2.7	[ TG(50:3) +Na]+
Lung_NAPA	853.7237	853.7256	-1.9	[ TG(50:2) +Na]+
Lung_NAPA	854.5075	854.5097	-2.2	[ PE(42:8) +K]+
Lung_NAPA	855.7392	855.7412	-2.1	[ TG(50:1) +Na]+

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Lung_NAPA	856.5238	856.5253	-1.5	[ PE(42:7) +K]+
Lung_NAPA	858.4550	858.4564	-1.4	[ Sulfatide(d34:0) +2K-H]+
Lung_NAPA	863.6995	863.6977	1.8	[ SM(d44:2) +Na]+
Lung_NAPA	865.6671	865.6682	-1.1	[ TG(50:4) +K]+
Lung_NAPA	865.7130	865.7133	-0.3	[ SM(d44:1) +Na]+
Lung_NAPA	866.4747	866.4710	3.7	[ PS(36:1) +2K-H]+
Lung_NAPA	866.6486	866.6482	0.4	[ HexCer(d42:1(2OH)) +K]+
Lung_NAPA	866.6486	866.6481	0.5	[ PI-Cer(40:0) +H]+
Lung_NAPA	868.4628	868.4656	-2.7	[ PE(40:6) +2K-H]+
Lung_NAPA	869.6974	869.6995	-2.1	[ TG(50:2) +K]+
Lung_NAPA	871.4310	871.4288	2.1	[ PG(38:6) +2K-H]+
Lung_NAPA	871.7135	871.7152	-1.7	[ TG(50:1) +K]+
Lung_NAPA	872.4962	872.4969	-0.6	[ PE(40:4) +2K-H]+
Lung_NAPA	875.7083	875.7075	0.7	[ TG(50:2) +2Na-H]+
Lung_NAPA	875.7083	875.7123	-4.1	[ TG(54:8) +H]+
Lung_NAPA	875.7083	875.7099	-1.7	[ TG(52:5) +Na]+
Lung_NAPA	877.7235	877.7256	-2.0	[ TG(52:4) +Na]+
Lung_NAPA	877.7235	877.7232	0.4	[ TG(50:1) +2Na-H]+
Lung_NAPA	879.4530	879.4573	-4.3	[ PG(42:11) +K]+
Lung_NAPA	879.7388	879.7412	-2.4	[ TG(52:3) +Na]+
Lung_NAPA	879.7388	879.7388	0.0	[ TG(50:0) +2Na-H]+
Lung_NAPA	881.7538	881.7569	-3.1	[ TG(52:2) +Na]+
Lung_NAPA	884.6038	884.6070	-3.1	[ LacCer(d34:1) +Na]+
Lung_NAPA	885.4656	885.4653	0.3	[ PG(42:11) +2Na-H]+
Lung_NAPA	887.4810	887.4810	0.1	[ PG(42:10) +2Na-H]+
Lung_NAPA	891.6817	891.6839	-2.1	[ TG(52:5) +K]+
Lung_NAPA	895.7117	895.7152	-3.4	[ TG(52:3) +K]+
Lung_NAPA	897.7278	897.7308	-3.0	[ TG(52:2) +K]+
Lung_NAPA	901.7231	901.7232	-0.1	[ TG(52:3) +2Na-H]+
Lung_NAPA	901.7231	901.7256	-2.5	[ TG(54:6) +Na]+
Lung_NAPA	903.7399	903.7388	1.1	[ TG(52:2) +2Na-H]+
Lung_NAPA	903.7399	903.7412	-1.4	[ TG(54:5) +Na]+
Lung_NAPA	903.7399	903.7436	-3.8	[ TG(56:8) +H]+
Lung_NAPA	905.7553	905.7593	-3.9	[ TG(56:7) +H]+
Lung_NAPA	905.7553	905.7545	0.9	[ TG(52:1) +2Na-H]+
Lung_NAPA	905.7553	905.7569	-1.5	[ TG(54:4) +Na]+
Lung_NAPA	907.6761	907.6788	-2.7	[ 22:1-Glc-cholesterol +K]+
Lung_NAPA	907.7696	907.7725	-2.9	[ TG(54:3) +Na]+
Lung_NAPA	911.4444	911.4449	-0.5	[ PI(34:2) +2K-H]+
Lung_NAPA	912.4550	912.4554	-0.3	[ PS(40:6) +2K-H]+
Lung_NAPA	915.4736	915.4762	-2.6	[ PI(34:0) +2K-H]+
Lung_NAPA	917.4097	917.4132	-3.4	[ PG(42:11) +2K-H]+
Lung_NAPA	921.4881	921.4890	-0.9	[ PI(38:6) +K]+
Lung_NAPA	923.7434	923.7465	-3.1	[ TG(54:3) +K]+
Lung_NAPA	929.7552	929.7545	0.7	[ TG(54:3) +2Na-H]+
Lung_NAPA	929.7552	929.7593	-4.1	[ TG(58:9) +H]+
Lung_NAPA	929.7552	929.7569	-1.7	[ TG(56:6) +Na]+

Sample	Meas. m/z	Calc. m/z	$\Delta m$ (mDa)	Tentative identification
Lung_NAPA	931.7690	931.7725	-3.5	[ TG(56:5) +Na]+
Lung_NAPA	931.7690	931.7701	-1.1	[ TG(54:2) +2Na-H]+
Lung_NAPA	933.7857	933.7858	-0.1	[ TG(54:1) +2Na-H]+
Lung_NAPA	933.7857	933.7882	-2.5	[ TG(56:4) +Na]+
Lung_NAPA	935.7992	935.8038	-4.6	[ TG(56:3) +Na]+
Lung_NAPA	936.5006	936.5034	-2.8	[ Sulfatide(d40:3) +2K-H]+
Lung_NAPA	940.4833	940.4867	-3.4	[ PS(42:6) +2K-H]+
Lung_NAPA	945.7283	945.7308	-2.5	[ TG(56:6) +K]+
Lung_NAPA	947.7438	947.7465	-2.6	[ TG(56:5) +K]+
Lung_NAPA	959.4494	959.4449	4.5	[ PI(38:6) +2K-H]+
Lung_NAPA	963.4742	963.4762	-2.0	[ PI(38:4) +2K-H]+
Lung_NAPA	964.6507	964.6494	1.3	[ Sulfatide(d44:1) +2Na-H]+
Lung_NAPA	968.6965	968.7009	-4.4	[ LacCer(d40:1) +Na]+
Lung_NAPA	991.5117	991.5075	4.2	[ PI(40:4) +2K-H]+
Lung_NAPA	994.7138	994.7165	-2.7	[ LacCer(d42:2) +Na]+