

**Supplementary Table 2B: Fetal Sheep Cerebral White Matter Lipids
Identified by MALDI-Mass Spectrometry-Negative Ion Mode: Organized
by M/Z**

m/z	Lipid Assignment
627.6	PA(31:3); PI(20:0)
648.8	PS(26:1)
649.8	PG(27:1)
653.5	PI(33:1); PA(33:4)
654.5	PE(30:4)
661.4	PG(28:2); PA(33:0); PA(O-34:0)
667.5	PA(34:4)
668.4	PE(31:4)
669.4	PA(34:3)
670.4	PE(31:3)
675.4	PG(29:2); PA(34:0)
676.4	PC(28:0); PE(31:0)
681.4	PA(35:4); PA(P-36:3)
683.4	PA(35:3)
697.4	PI(24:0); PA(36:3)
698.4	PE(33:3); PS(30:4)
699.4	PA(36:2)
700.9	PE(P-34:1)
728.8	PlsEtn(36:1)
746.8	PE(P-38:6)
766.8	PE(38:4)

774.8	PlsEtn(40:7)
775.7	PG(36:1)
776.8	ST(34:2)
788.7	PS(36:1)
789.7	C13 isotope of PS(36:1)
790.7	PS(36:0)
806.7	ST(36:1)
807.7	PI(32:1)
808.7	PS(38:5)
809.7	C13 isotope of PS(38:5)
810.7	PS(38:4)
822.7	ST(36:1)(OH)
823.7	ST(36:1)(2OH)
824.7	C13 isotope of ST(36:1)(2OH)
834.7	PS(40:6)
835.7	PI(34:1)
836.7	C13 isotope of PI(34:1)
838.7	PS(40:4)
857.6	PI(36:4)
858.7	PE(44:0); PS(41:1); PS(42:8)
859.5	PI(36:3)
860.7	ST(40:2)
862.7	ST(40:1)
863.7	PI(36:1)
864.7	ST(40:0)

883.7	PI(38:5)
884.7	PE(46:1); PS(43:2)
885.7	PI(38:4)
886.7	ST(42:3)
887.7	PI(38:3)
888.7	ST(42:2)
889.7	PI(38:2)
890.7	ST(42:1)
891.7	PI(38:1)
892.7	C13 isotope of PI(38:1)
893.7	PI(38:0)
904.7	ST(42:2)(OH)
906.7	ST(42:1)(OH)
912.7	LacCer(d38:3)
913.7	PI(40:4)
914.7	LacCer(d38:2)

Lipids identified in fetal sheep brain white matter. Lipids extracted from fresh frozen tissue were analyzed with an Ultraflex extreme MALDI-time-of-flight (TOF)/TOF (Bruker Daltonics, Bremen, Germany) mass spectrometer in the negative ion mode with DHB as matrix. MALDI data were processed using FlexAnalysis v3.4. Lipid assignment were made using LIPIDMAPS and based on previous publications. Abbreviations: LacCer = Lactosylceramide; DG = Diacylglycerols; PA = Phosphatidic Acid; PC = Phosphatidylcholine ; PE = Phosphatidylethanolamine; PG = Phosphatidylglycerol; PI = Phosphatidylinositide; PlsEtn = ethanolamine plasmalogen; PS = Phosphatidylserine; ST = Sulfatide.