## **Supplementary Material**

Frontal Cortex Lipid Alterations During the Onset of Alzheimer's Disease

Supplementary Figure 1. MALDI-MSI ion distribution images show discrete lipid patches in the frontal cortex gray matter. Images showed lipid intensities for (A) PC 32:0, (B) PC 30:0, (C) PC 36:4, (D) PA 36:2, (E) DG 34:0, (F) PA 36:4, (G) PE 44:12, and (H) PE 40:7 in AD. Scale bar in panel H = 4 mm. Multicolored scale bar below panel H indicates changes in intensity level. I) Histogram displays percentage of changes in lipid intensity. Percent change in lipid intensity was determined by comparing areas within the GM with no accumulation (100%) to those with lipid accumulations. Red dashed line indicates background level. PI, phosphatidylinositol; PE, phosphatidylethanolamine; PC, phosphatidylcholine; SM, sphingomyelin.

