For phospholipid analysis, lipid extracts (2 µL injection volume in $CHCl_3$:MeOH 2:1) were separated over an 8 minute gradient at a flow rate of 200 µL/min on a HILIC Kinetex Column (2.6lm, 2.1 Å~ 50 mm2) on a Shimadzu Prominence UFPLC xr system (Tokyo, Japan). Mobile phase A was acetonitrile:methanol 10:1 (v/v) containing 10 mM ammonium formate and 0.5% formic acid while mobile phase B was deionized water containing 10 mM ammonium formate and 0.5% formic acid. The elution of the gradient began with 5% B at a 200 µL/min flow and increased linearly to 50% B over 7 min, then the elution continued at 50% B for 1.5 min and finally, the column was re-equilibrated for 2.5 min.