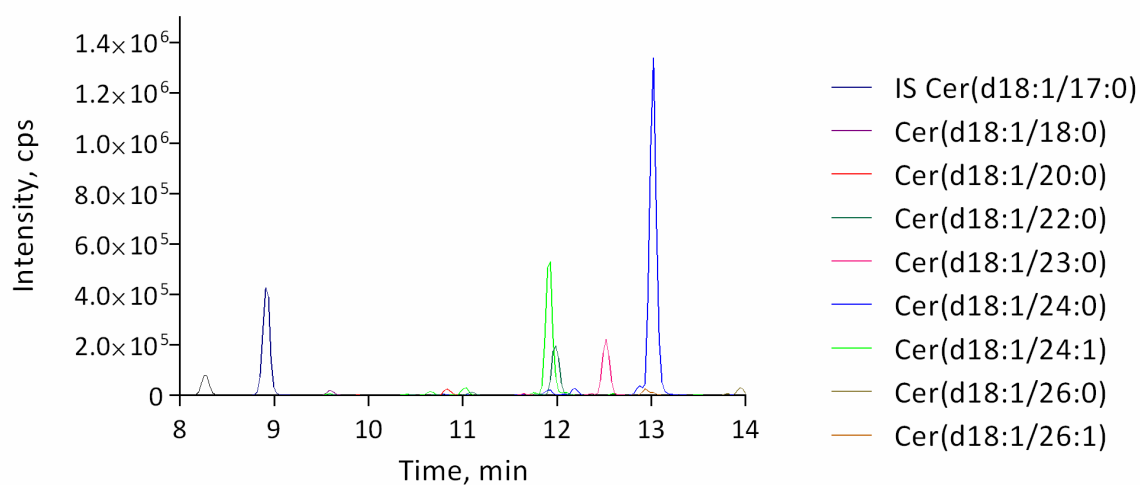


**Figure S2A. Shotgun lipidomics analysis example.** Identification of internal standards by precursor ion scan of  $m/z$  269.3 (FA 17:0) acquired in negative ion mode. Equimolar mixture of LPC 17:0, PA 17:0/17:0, PE 17:0/17:0, PG 17:0/17:0, PS 17:0/17:0 and PC 17:0/17:0 was analyzed. For clarity only internal standards representing each lipid class are included.



**Figure S2B. Targeted lipidomics analysis exemplified for ceramide class.** Multiple reaction monitoring chromatogram of ceramide lipid species from human serum acquired in positive ion mode. For clarity only ceramide lipid species are included.