

Supporting information

Extended methods section

S1. RP-LC-MS elution profile of four isotopically labeled lipids and their natural analogues

S2. Comparison of the theoretical ^{13}C isotopic enrichment and the observed isotopic pattern of PE 34:1

S3. Fragmentation pattern of labeled and unlabeled PA 34:1 and PS 34:1.

S4. Trueness of observed fold changes for 20 lipids analyzed by a RP-LC-MS method based on Full-MS quantification

S5. Calibration curves of PA 34:1 with and without internal standardization

S6. List of ^{13}C isotopically enriched lipids identified in *Pichia pastoris*