Supplemental Data

Supplementary Fig. 1. Stable isotope labelling of major phospholipid synthesis pathways.

Supplementary Fig. 2. *c9,t11*-CLA does not affect PS synthesis.

(A) $^{13}C_2$-PE synthesis in untreated cells and cells treated with 10µM CLA or linoleic acid for 4h, quantified by ESI-MS/MS.

(B) $^{13}C_3$-PS synthesis in untreated cells and cells treated with 10µM CLA or linoleic acid for 4h, quantified by ESI-MS/MS.

(C) $^{13}C_2$-PE species profile for untreated cells and cells treated with 10µM CLA or linoleic acid for 4h, quantified by ESI-MS/MS.

(D) $^{13}C_3$-PS species profile for untreated cells and cells treated with 10µM CLA or linoleic acid for 4h, quantified by ESI-MS/MS.

Values are mean ± S.D. of one representative experiment from three, each performed in triplicate ($p(*)<0.01$).

Supplementary Fig. 3. CLAs are metabolized to conjugated fatty acids (CFAs). Scheme illustrating potential geometrical and positional isomers of detected CFAs (Table 1) generated after elongation and delta-5 and delta-6 desaturation of *c9,t11*- and *t9,t11*-CLA in macrophages.

Supplementary Fig. 4. Expression of genes required for PC and PE synthesis in untreated cells and cells treated with 10µM CLA or linoleic acid for 4h, analyzed with qRT-PCR; 18S rRNA was used as reference gene.

(RNA isolation, cDNA generation and qRT-PCR analysis was performed as described previously; Reference: Ecker, J., Liebisch, G., Englmaier, M., Grandl, M., Robenek, H. & Schmitz, G. (2010) Induction of fatty acid synthesis is a key requirement for phagocytic differentiation of human monocytes. *Proc. Natl. Acad. Sci. U. S. A* **107**, 7817-7822.)

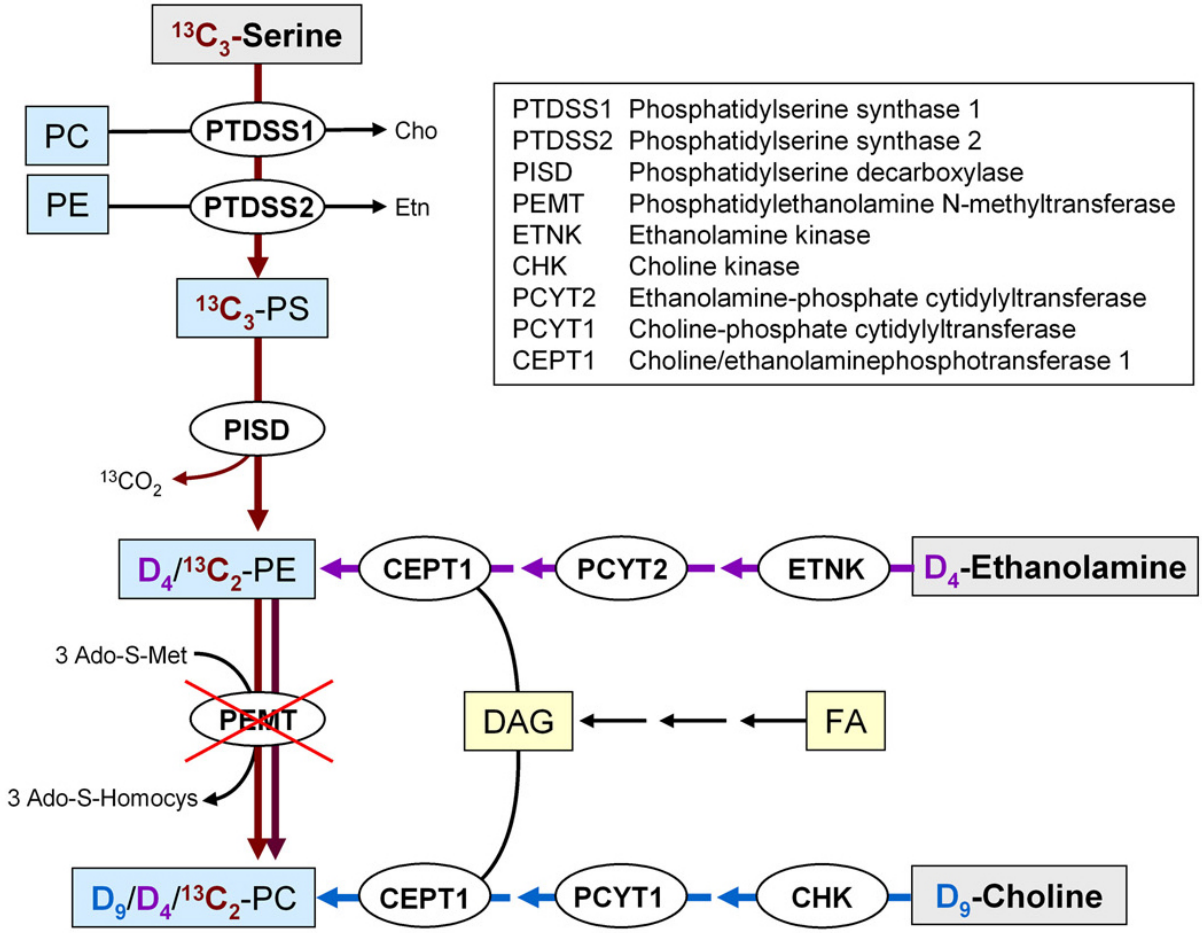
Supplementary Figure 5. Structures of CLAs and linoleic acid. The arrow indicates the first single carbon bond in the molecule that is free to rotate after the double bond (system), generated with the Chem Draw 4.0 Software.

(A) Structure of t9,t11-CLA.

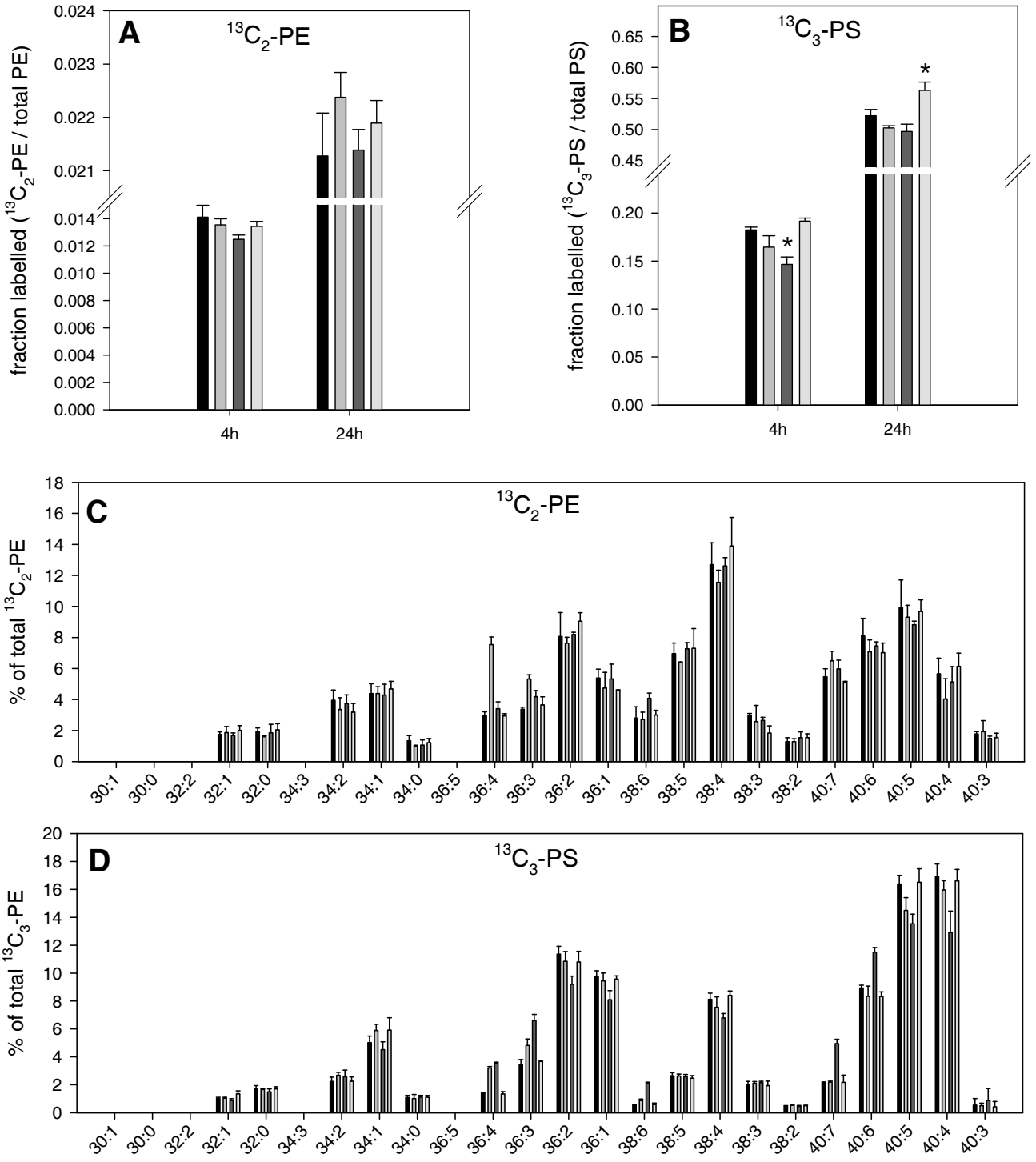
(B) Structure of c9,t11-CLA.

(C) Structure of linoleic acid.

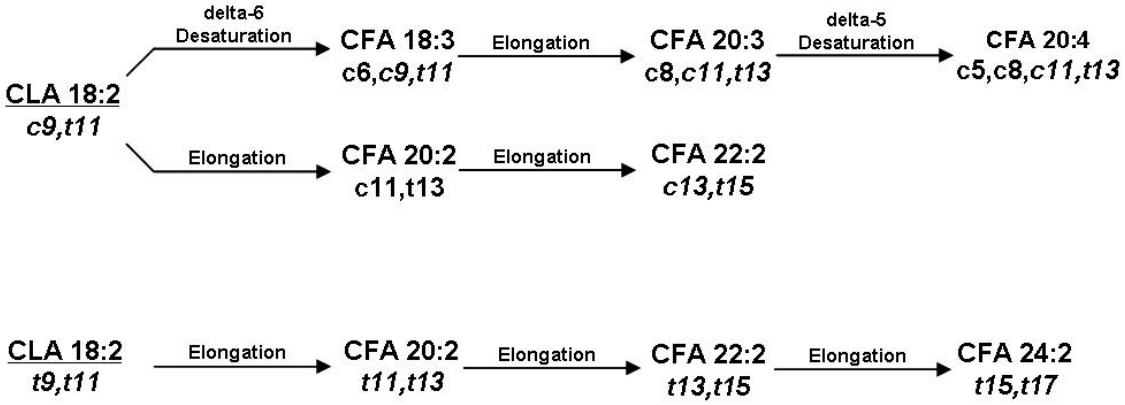
Supplementary Fig. 1



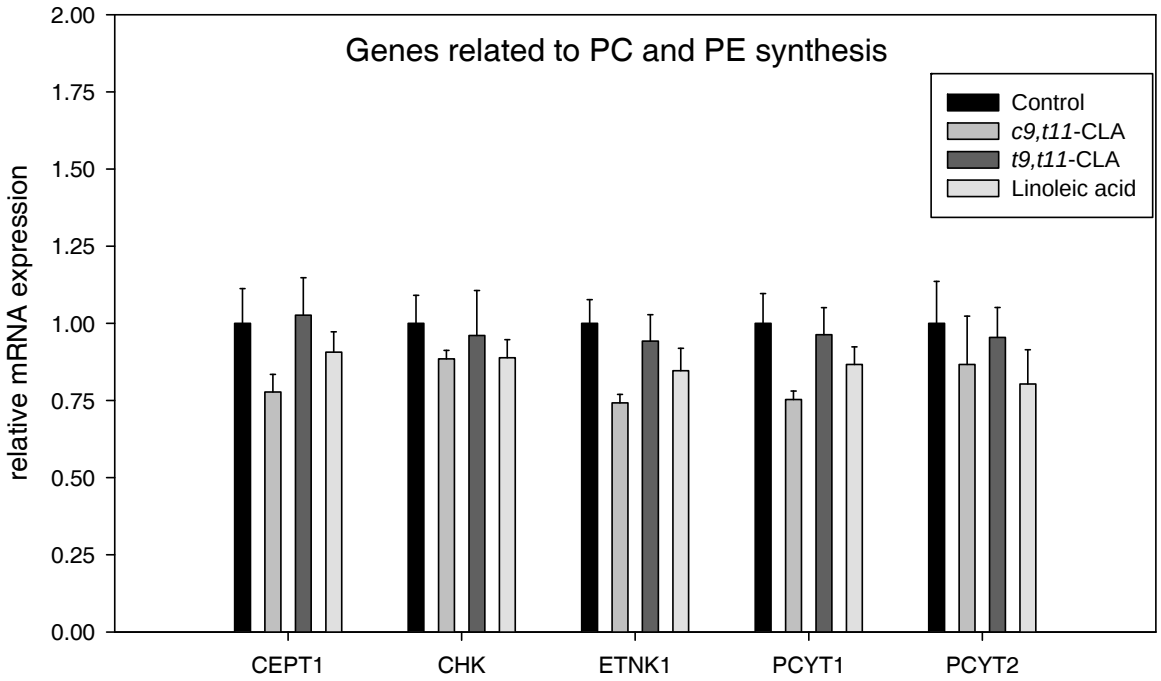
Supplementary Fig. 2



Supplementary Fig. 3



Supplementary Fig. 4



Supplementary Fig. 5