

**Supporting Information.** LIPID11 residue atom names, atom types, and atom charges.

# LIPID11: A Modular Framework for Lipid

## Simulations using Amber

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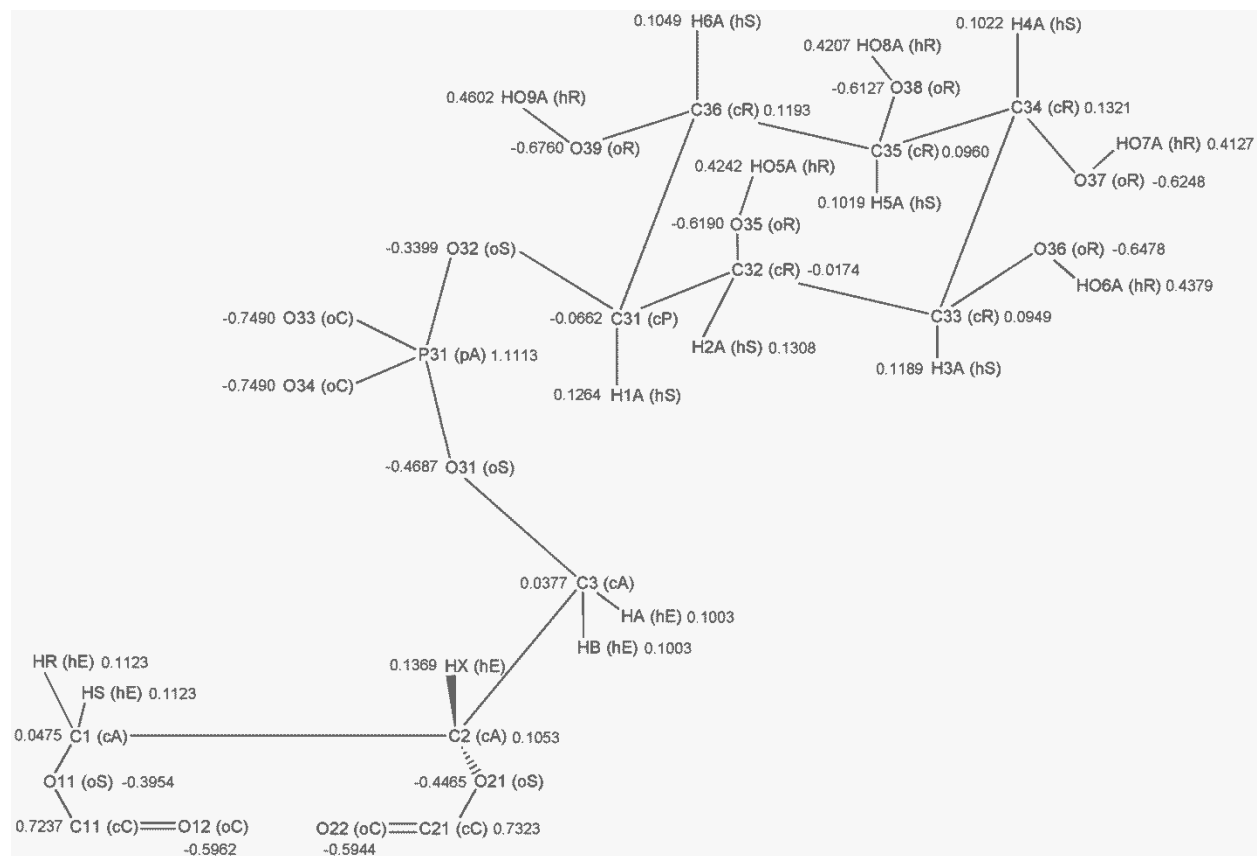


Figure S1. Phosphatidylinositol atom names, atom types, and atom charges. The LIPID11 residue name is PI. The head group residue PI contains an inositol ring with parameters based on the Glycam force field.



Figure S2. Cholesterol atom names, atom types, and atom charges. The LIPID11 residue name is CHL.

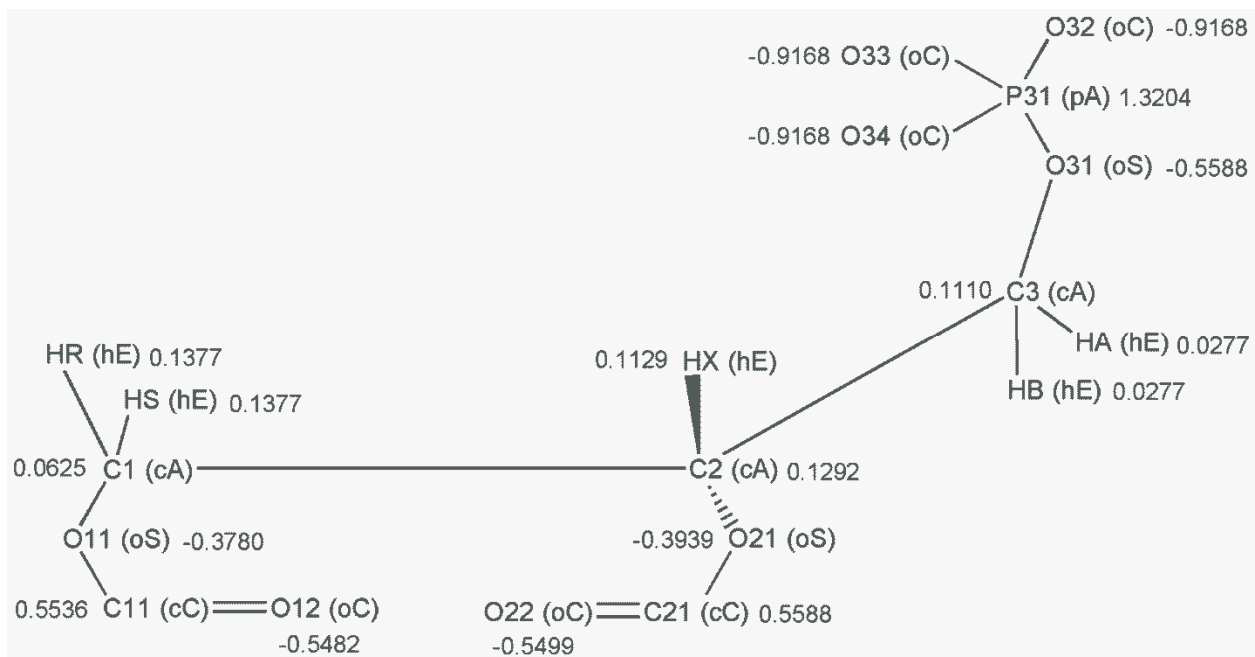


Figure S3. Phosphatidic acid (PO42-) atom names, atom types, and atom charges. The LIPID11 residue name is P2-.

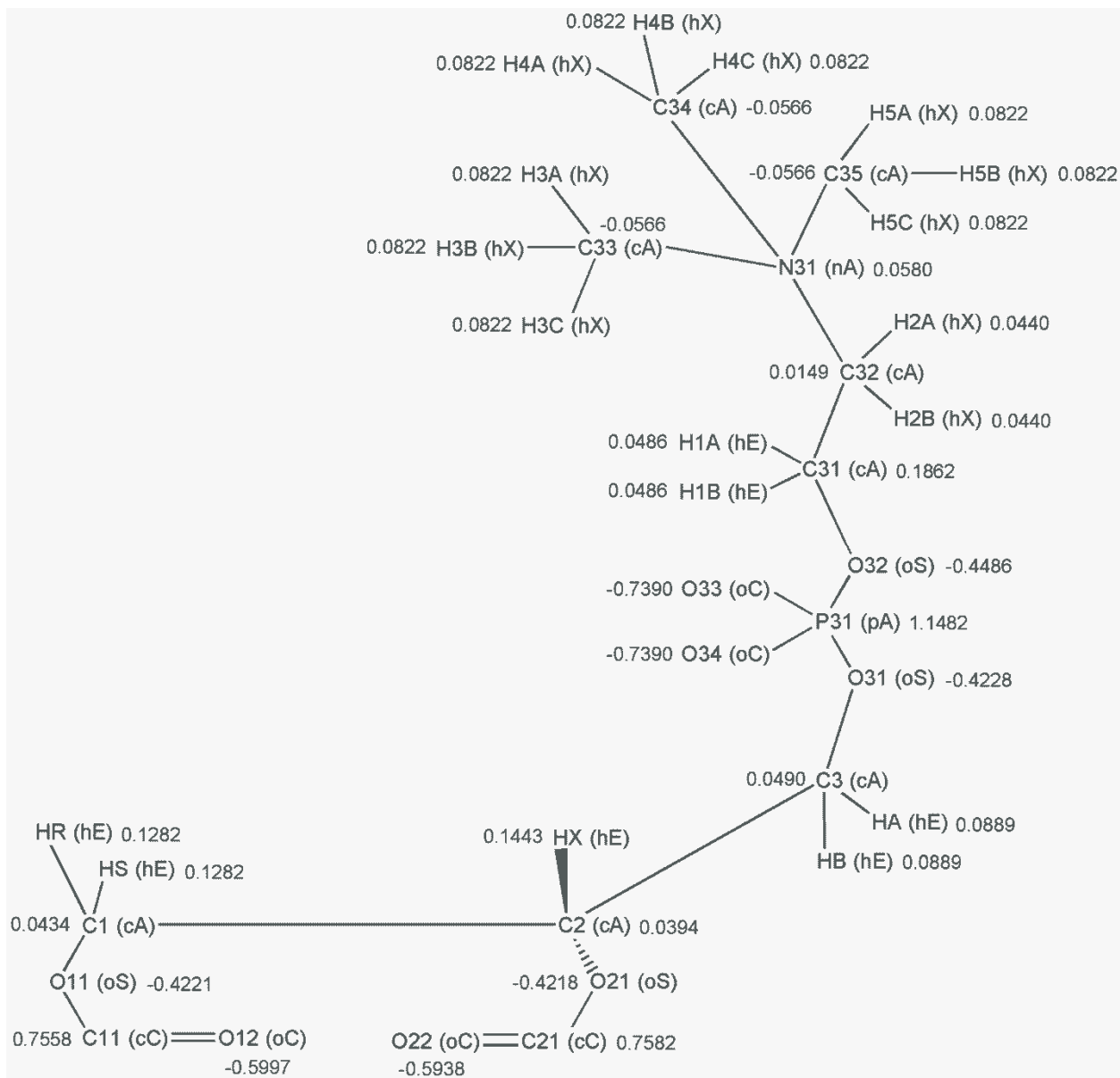


Figure S4. Phosphatidylcholine atom names, atom types, and atom charges. The LIPID11 residue name is PC.

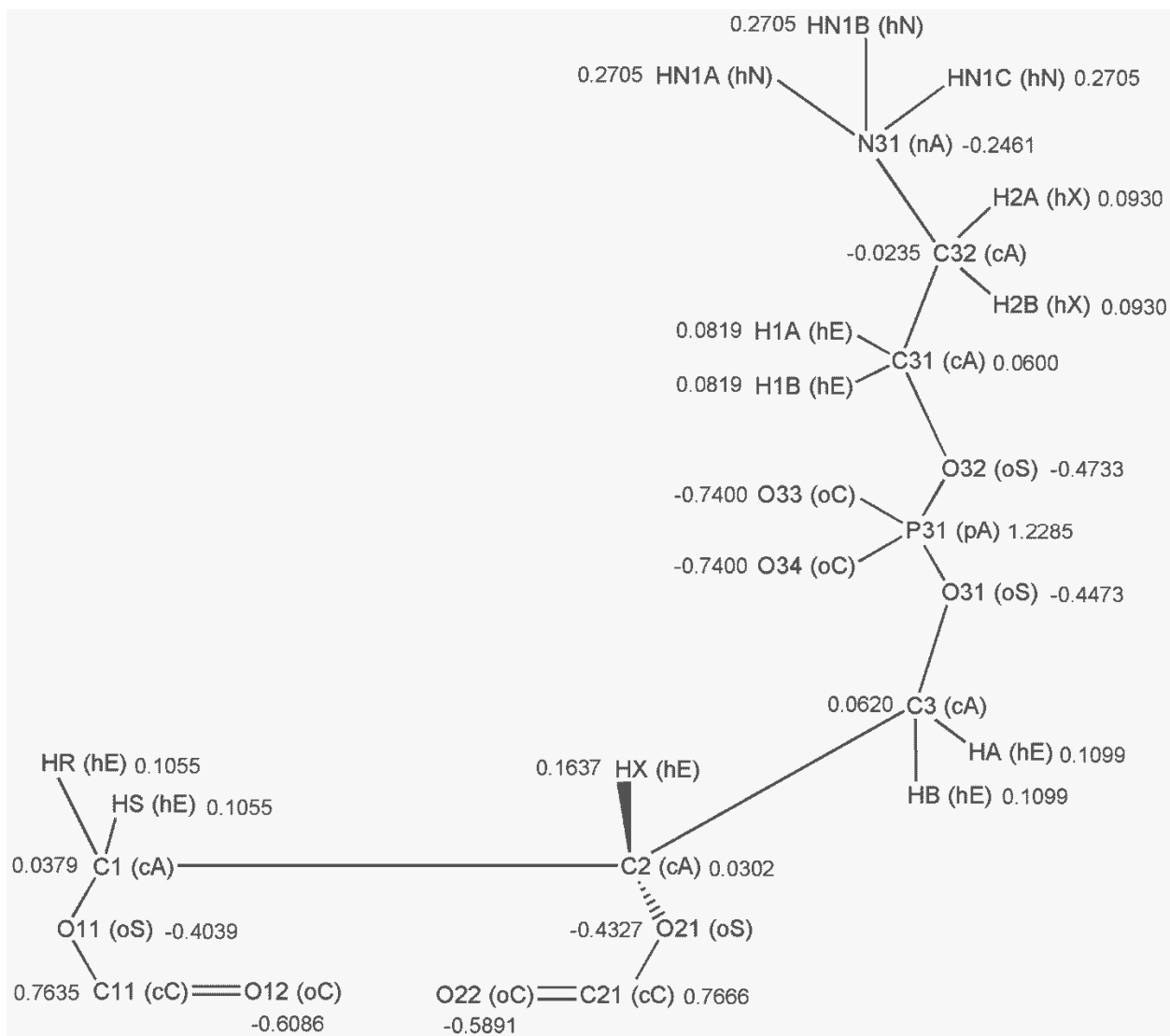
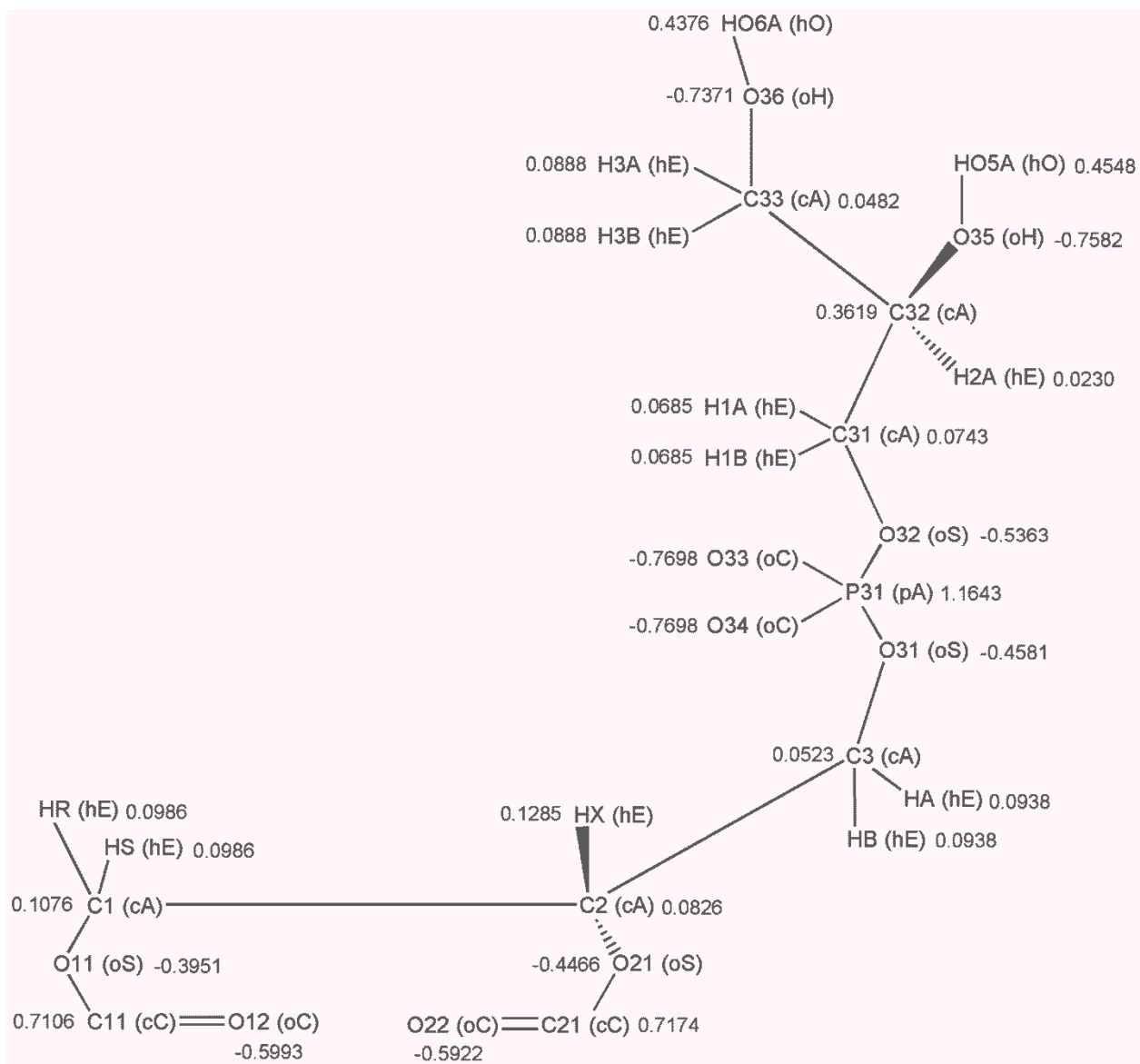
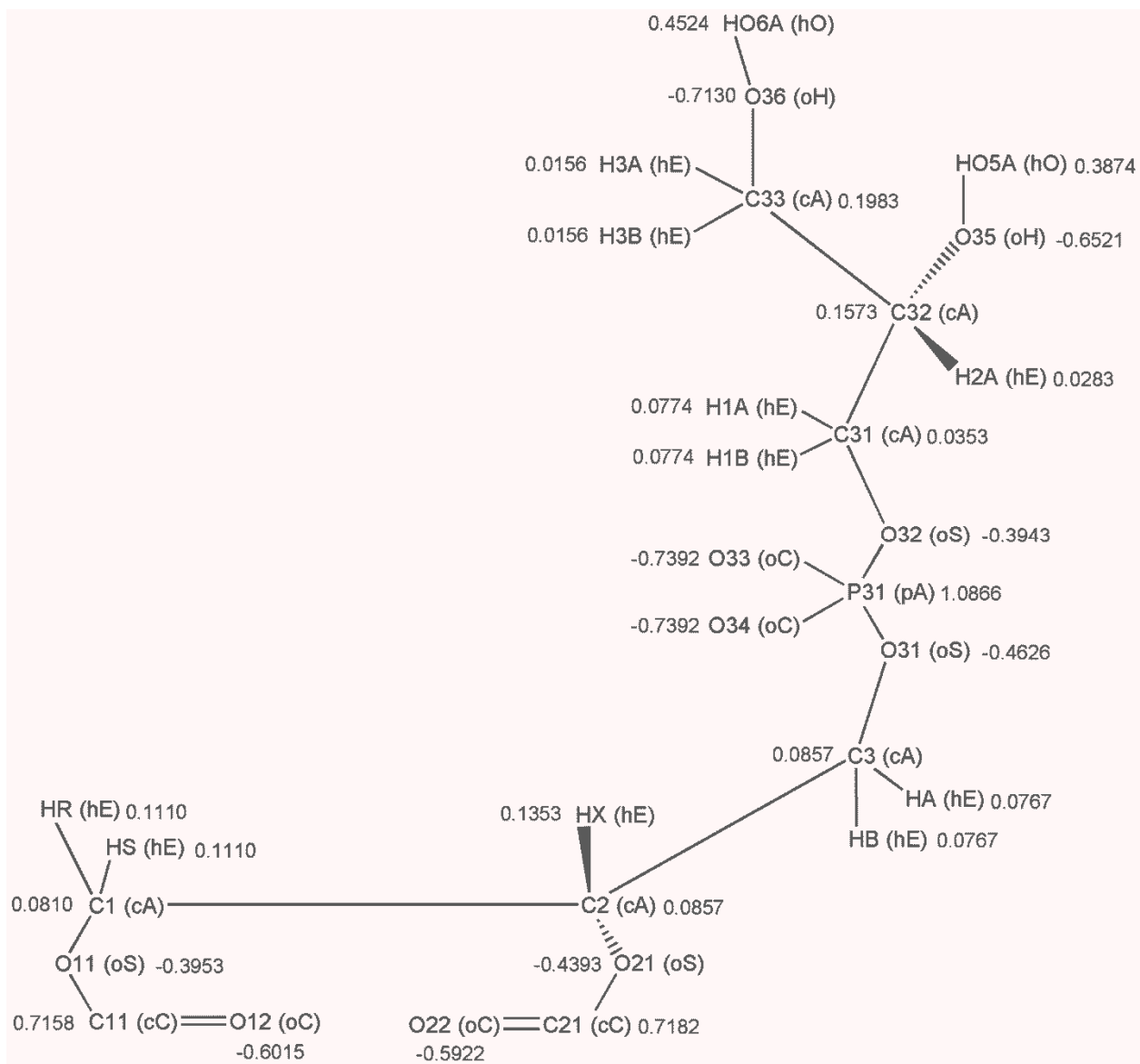


Figure S5. Phosphatidylethanolamine atom names, atom types, and atom charges. The LIPID11 residue name is PE.







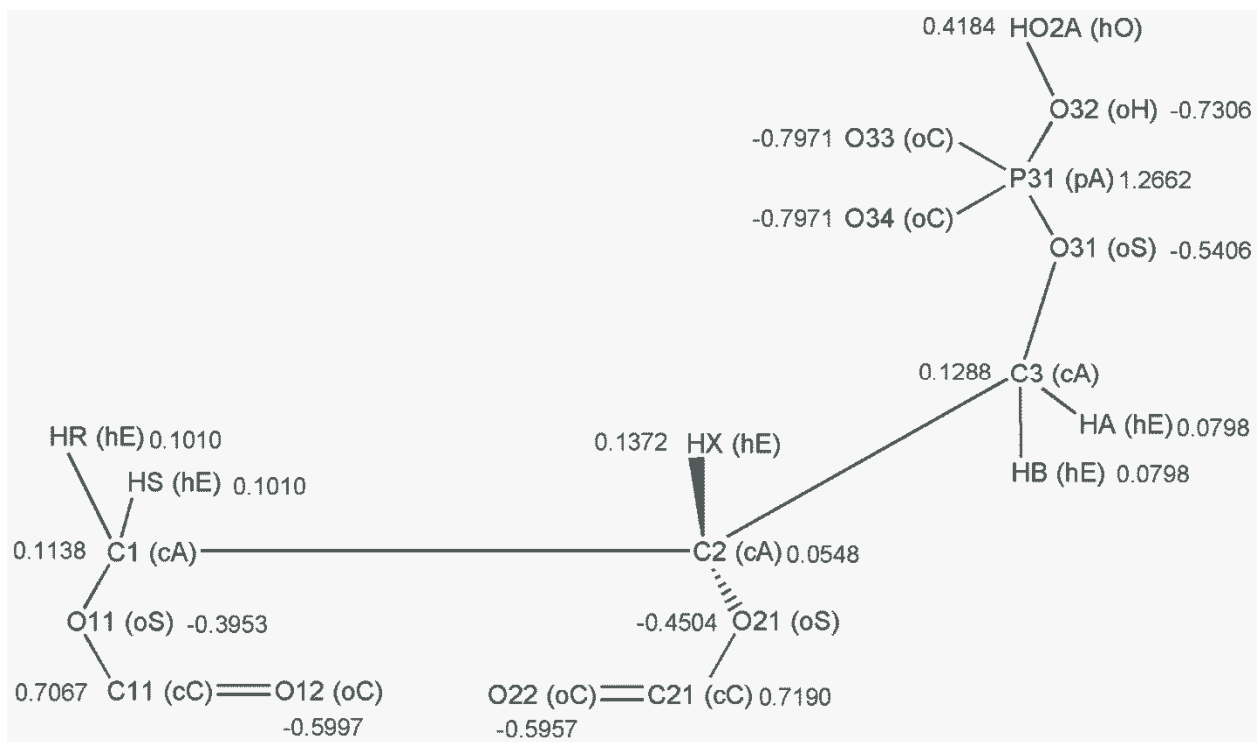
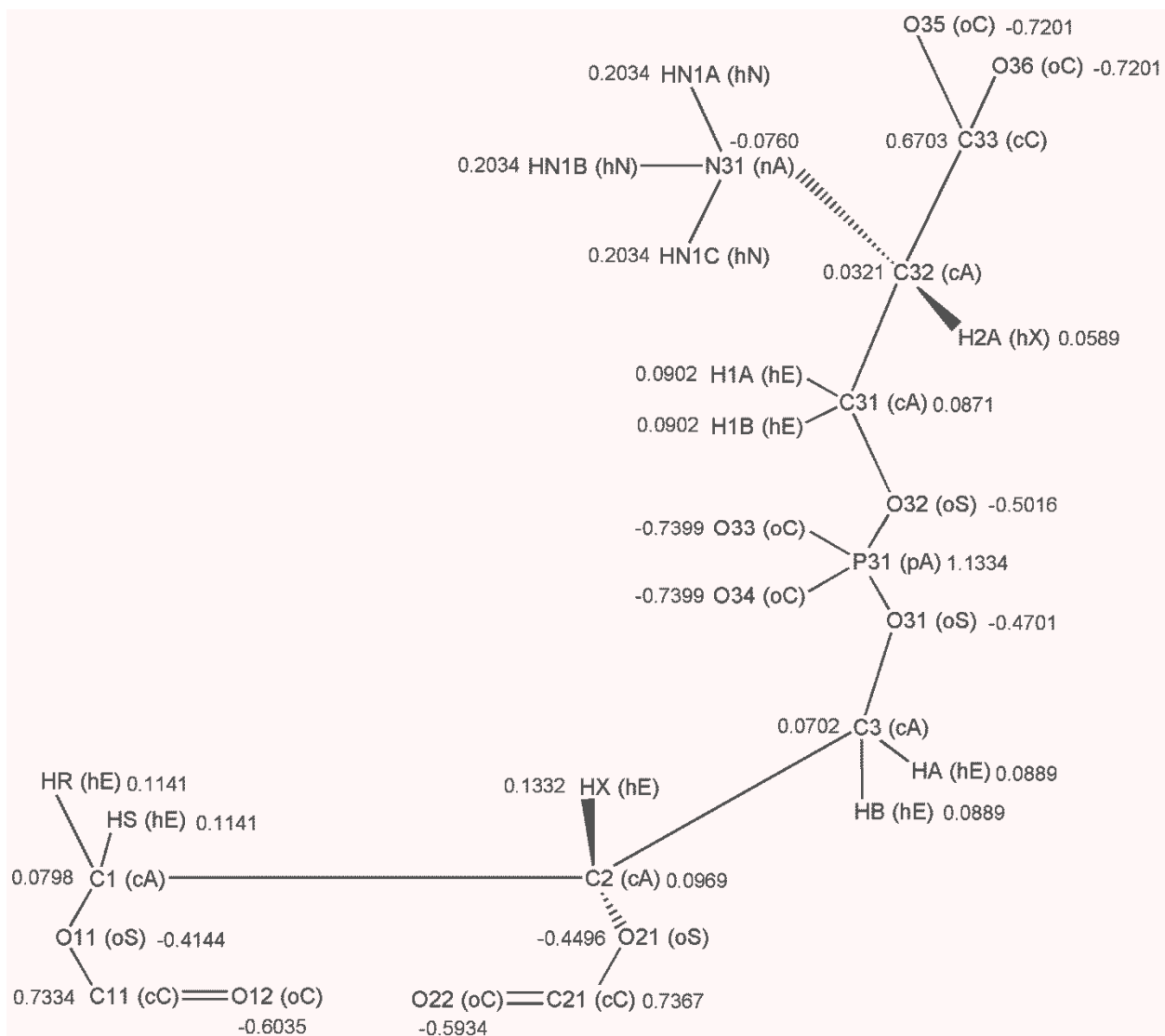


Figure S8. Phosphatidic acid (PHO4-) atom names, atom types, and atom charges. The LIPID11 residue name is PH-.



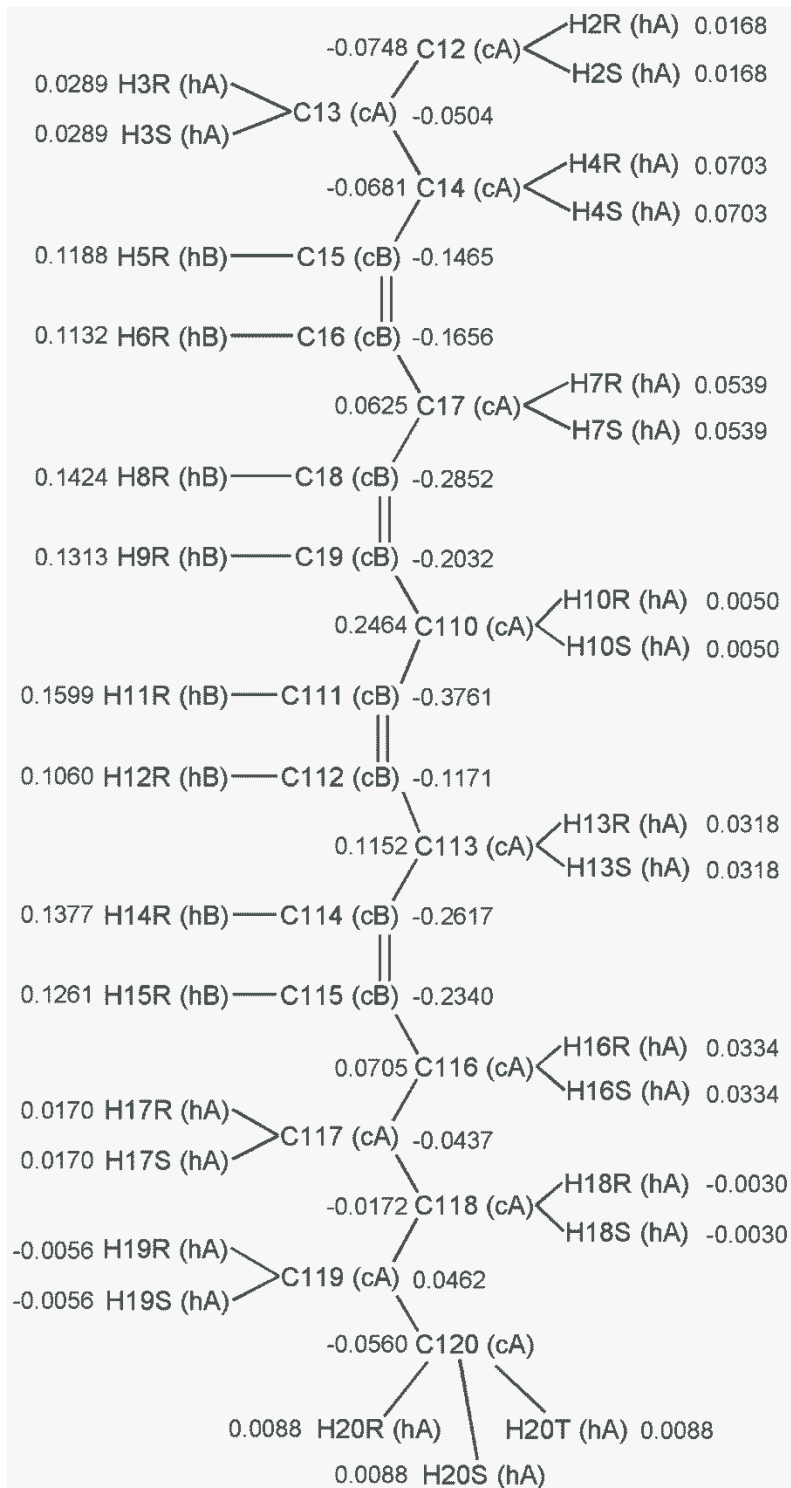


Figure S10. Arachidonoyl atom names, atom types, and atom charges. The LIPID11 residue name is AR.

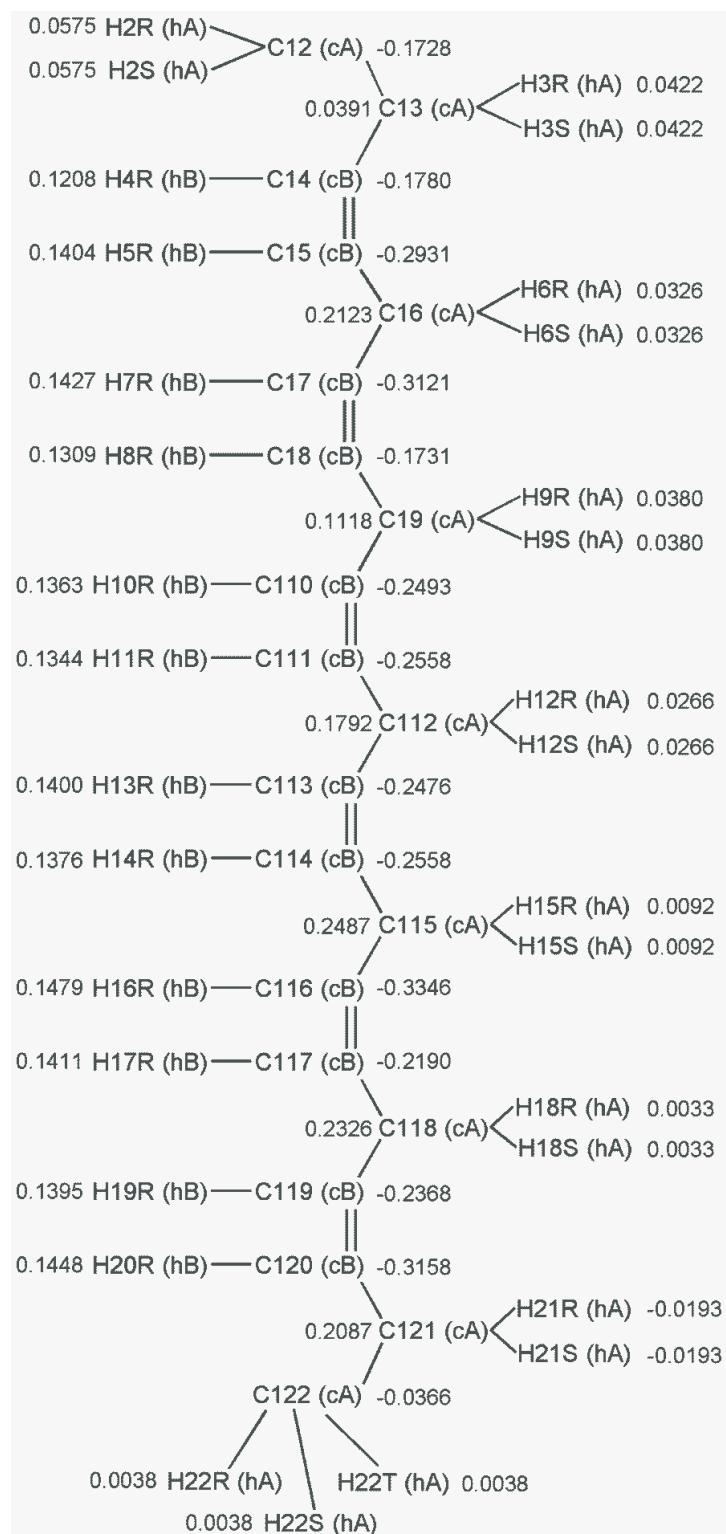


Figure S11. Docosahexaenoyl atom names, atom types, and atom charges. The LIPID11 residue name is DHA.

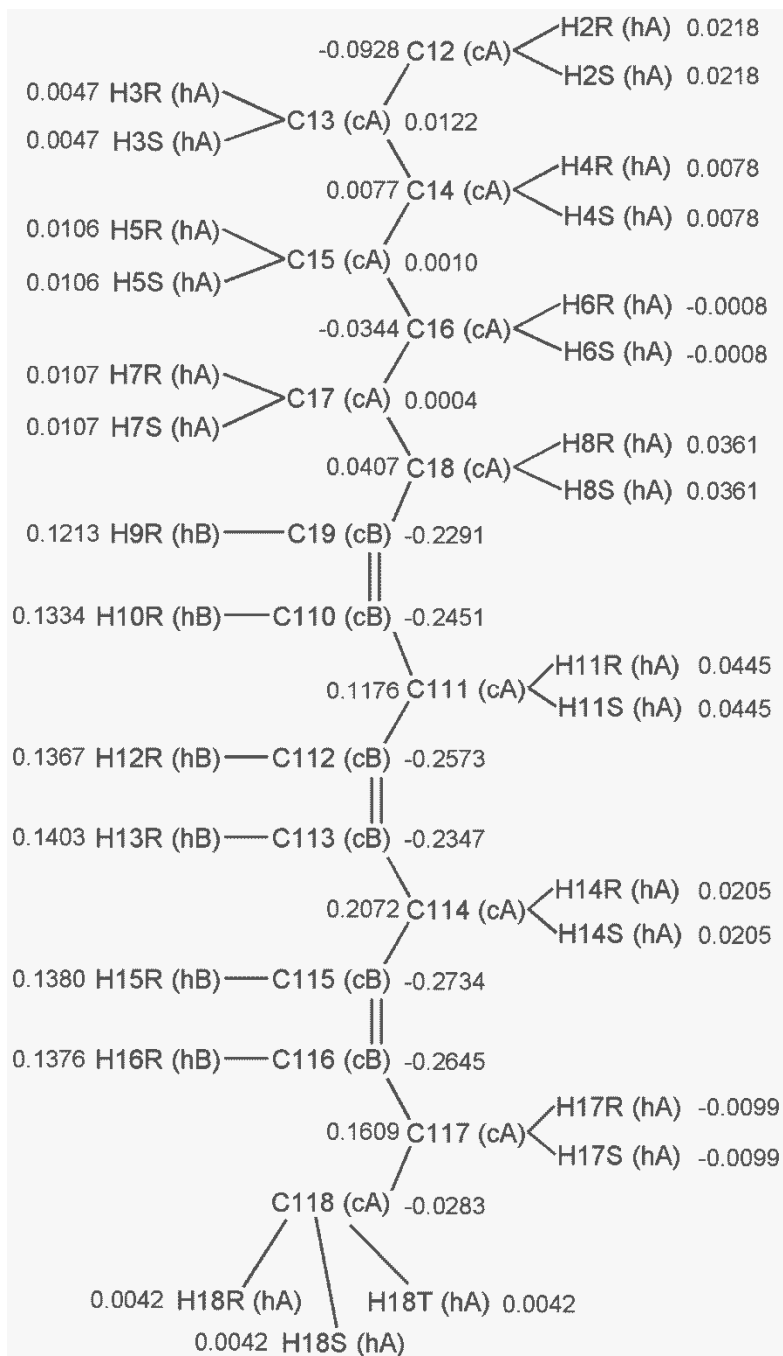


Figure S12. Linolenoyl atom names, atom types, and atom charges. The LIPID11 residue name is LEN.

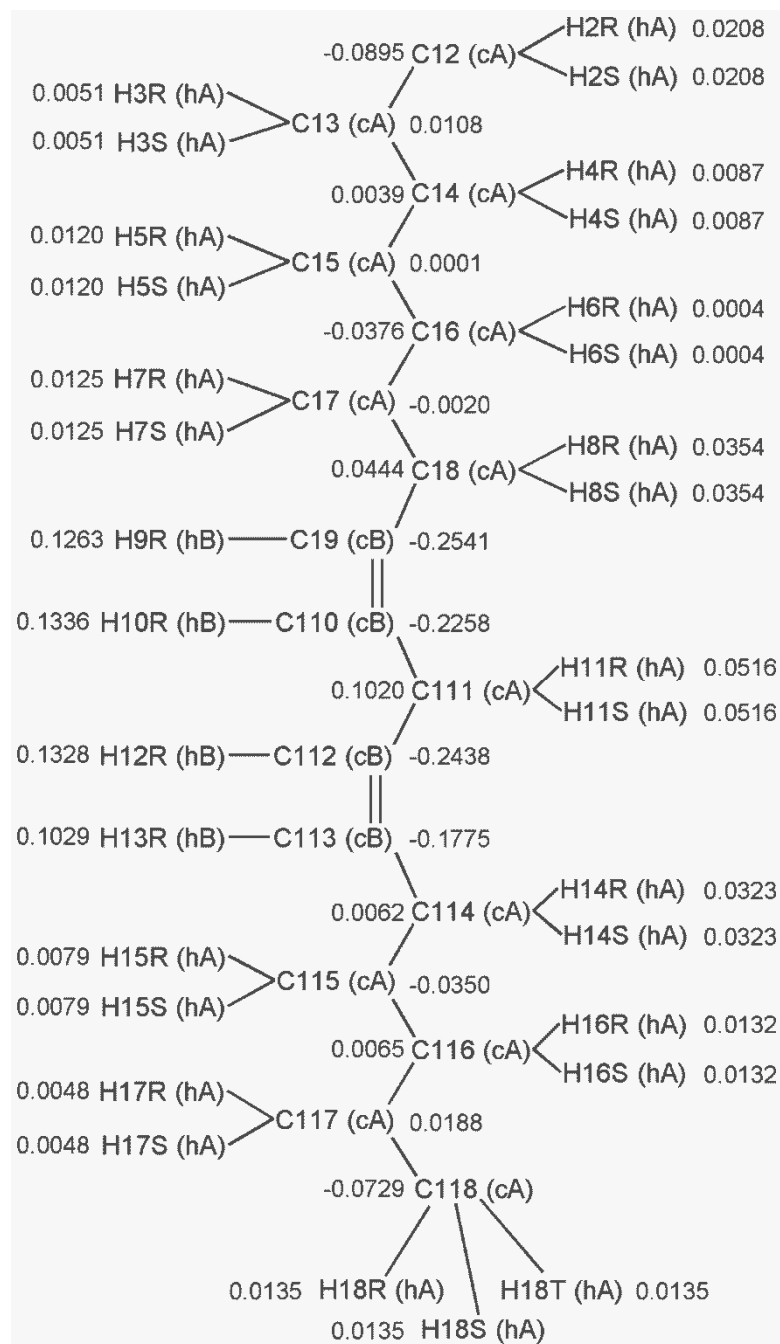


Figure S13. Linoleoyl atom names, atom types, and atom charges. The LIPID11 residue name is LEO.

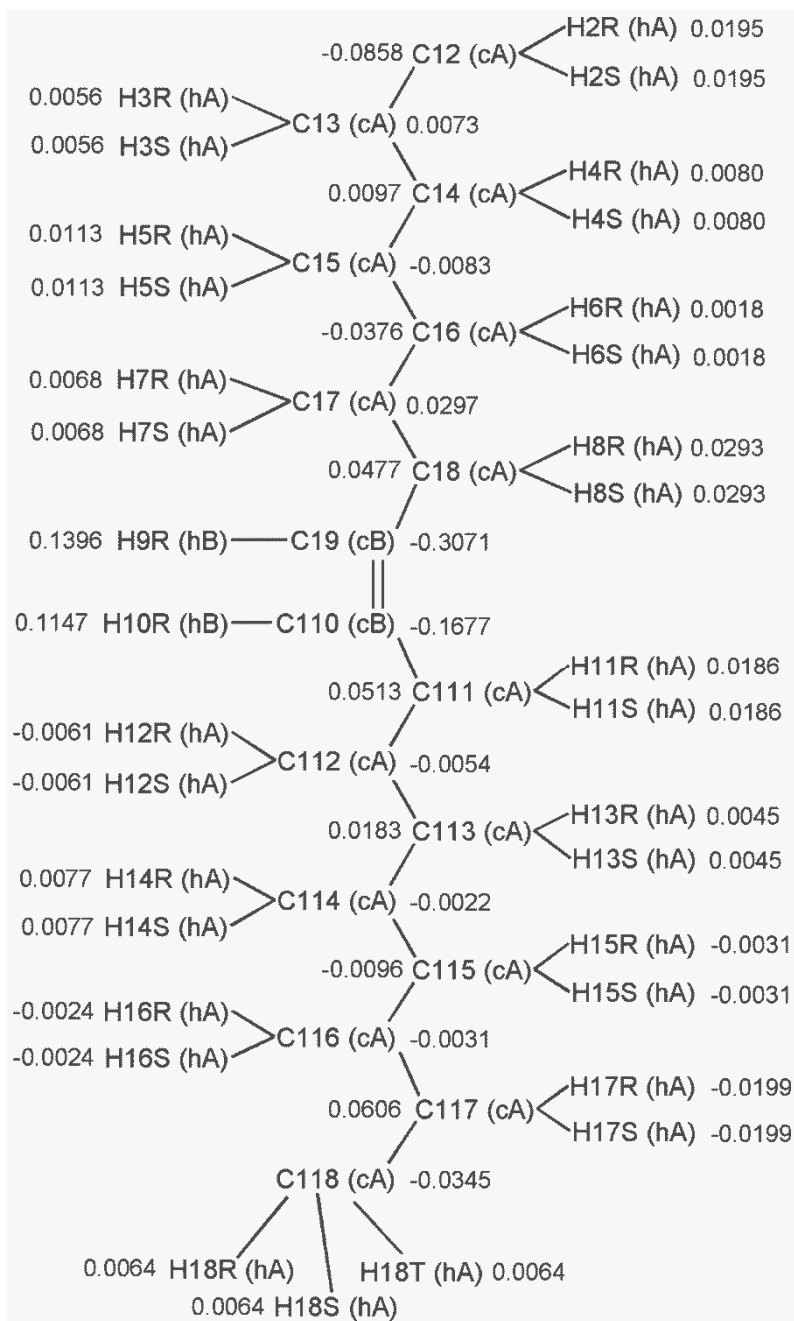


Figure S14. Oleoyl atom names, atom types, and atom charges. The LIPID11 name is OL.



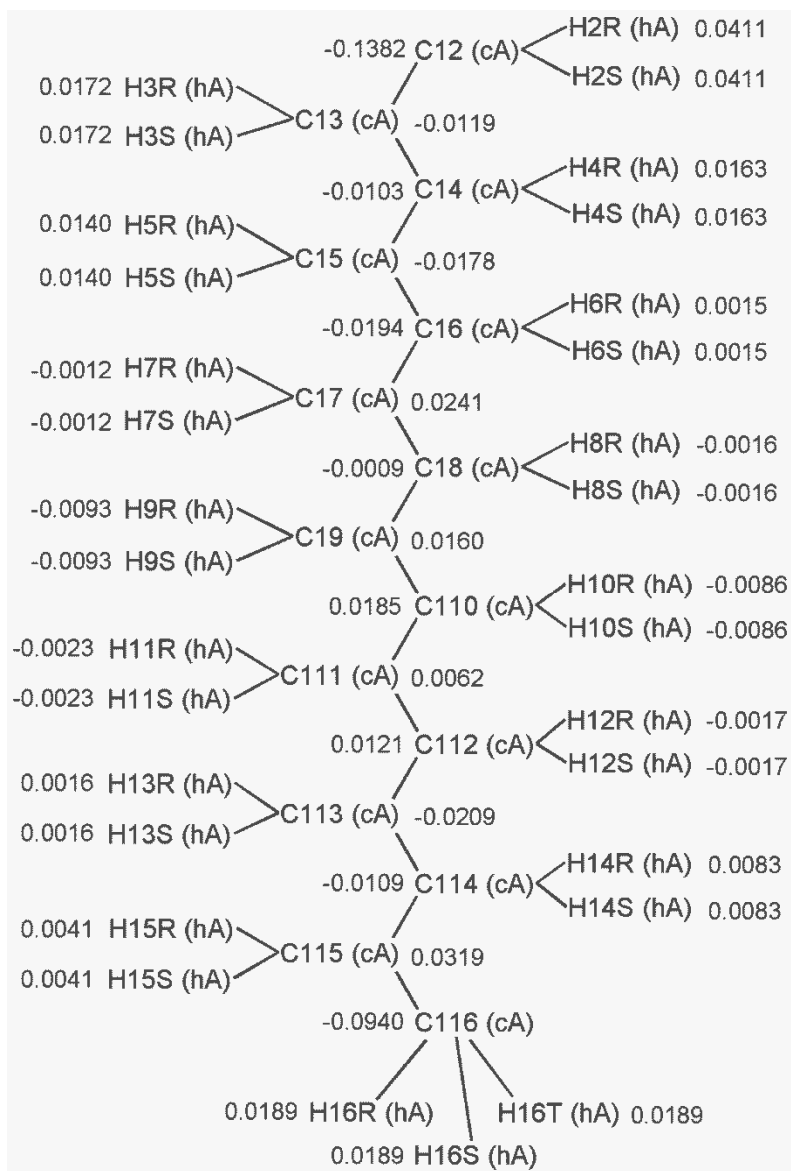


Figure S15. Palmitoyl atom names, atom types, and atom charges. The LIPID11 residue name is PA.

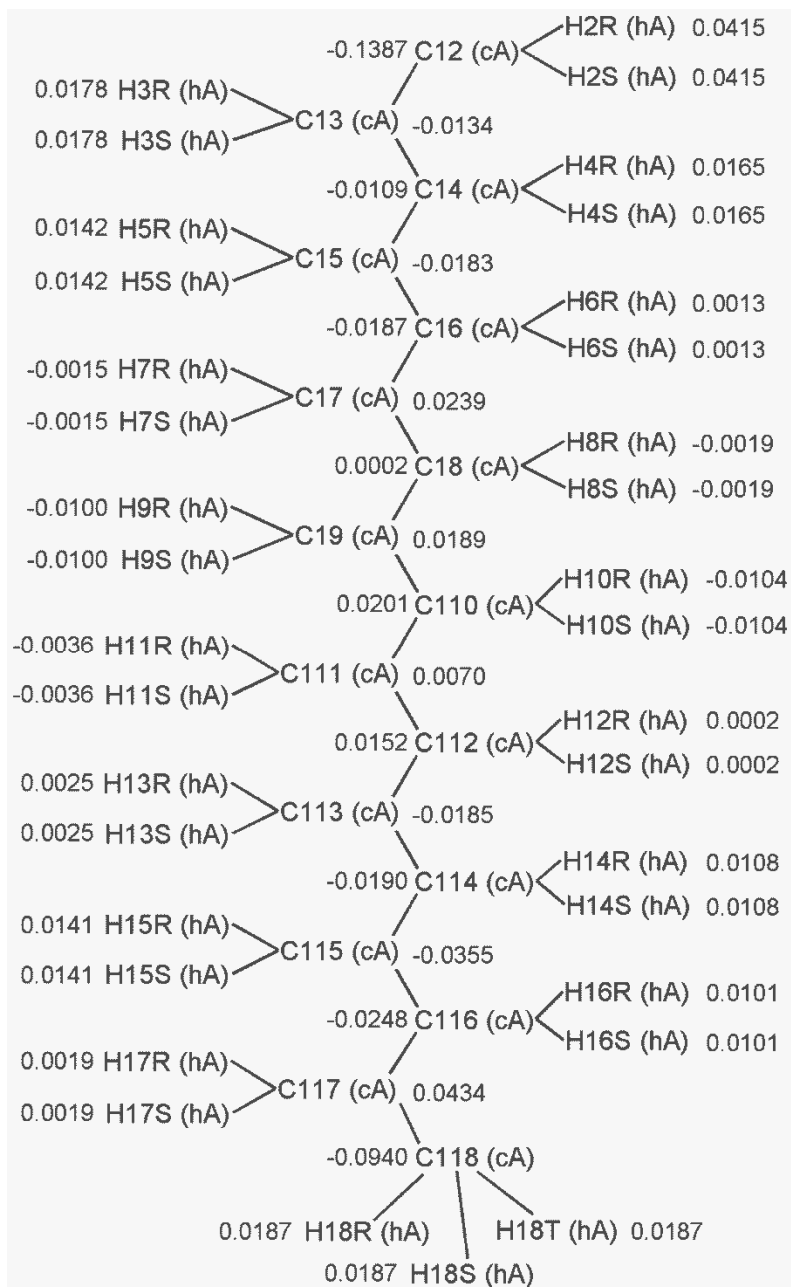


Figure S16. Stearoyl atom names, atom types, and atom charges. The LIPID11 name is ST.