



Supplementary Figure 2. Electron density maps calculated without the palmitate molecule. Palmitate is in cyan and *cis*-vaccenate in magenta. The maps are  $2F_o$ - $F_c$  at  $2.5~\sigma$  (orange) and  $F_o$ - $F_c$  at  $5.0~\sigma$  contour level. Top: side view, bottom: view turned approximately  $100^\circ$  about the x-axis to show the position of the double bond in *cis*-vaccenate.