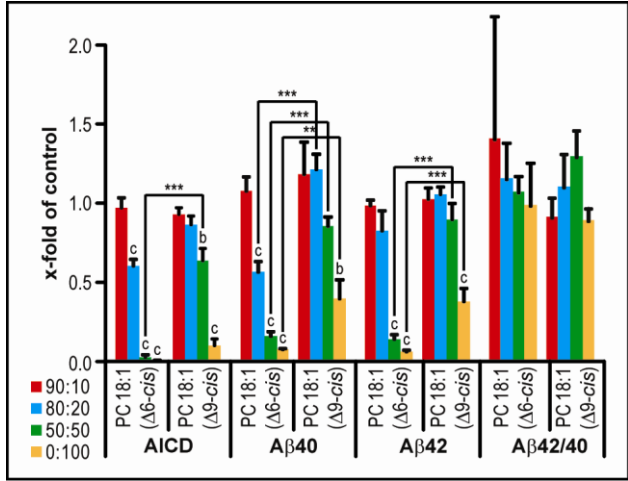
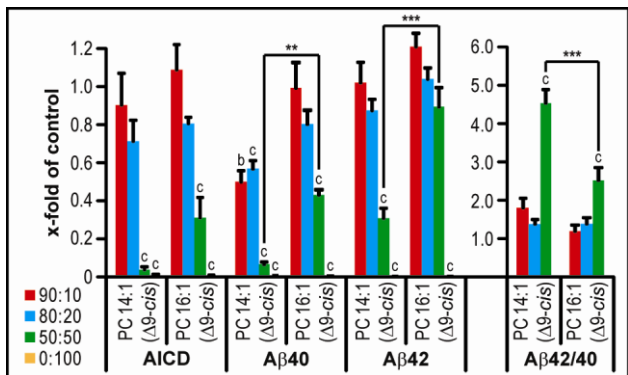


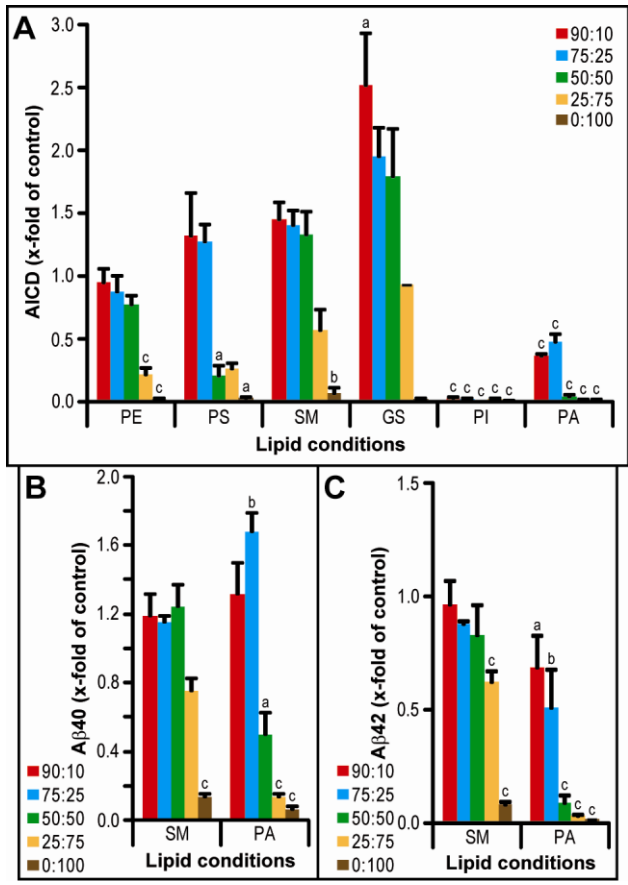
**Supplementary Figure 1. The effect of shifting double bond position in PC 18:1 ( $\Delta$ -cis) on  $\gamma$ -secretase activity.** Activity assay samples were analyzed by the same method as in Figures 2a-d.



**Supplementary Figure 2. The effect of PC 14:1 ( $\Delta 9$ -cis) vs. PC 16:1 ( $\Delta 9$ -cis) on  $\gamma$ -secretase activity.**  
Activity assay samples were analyzed by the same method as in Figures 2a-d.



**Supplementary Figure 3. The effect of lipid head groups on  $\gamma$ -secretase activity.** Activity assay samples were analyzed by the same method as in Figures 2a-c.



**Supplementary Figure 4. The effect of lipid head groups on  $\gamma$ -secretase processivity.** Activity assay samples were analyzed by the same method as in Figures 2d.

