Supporting Information

Nonhydrolyzable Analogs of Phosphatidylinositol as Ligands of Phospholipases C

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Figure 1. 500 MHz NOESY spectrum of the lactone 23 in Py-d$_5$; mixing time 250 ms.
Figure 2. Expanded partial 400 MHz $^1$H NMR spectrum of lactone 23 in pyridine-d$_6$.

Figure 3. Expanded partial 400 MHz $^1$H NMR spectrum of lactone 23 in pyridine-d$_6$. 
**Figure 4.** 500 MHz $^1$H NMR spectrum of ligand 10 in methanol-d$_4$.

**Figure 5.** HR ES MS spectrum of ligand 10.
(2R)-3-O-Benzyl-1,2-di-O-hexyl-sn-glycerol (25). A suspension of (R)-3-benzyloxy-1,2-propanediol (1g, 5.5 mmol), 1-bromohexane (3.6 g, 22 mmol) and powdered potassium hydroxide (1.23 g, 22 mmol) in toluene (25 mL) was heated at reflux using a Dean-Stark drying tube for 24 hours. When reaction was complete (TLC in hexane-ethyl acetate, 4:1), the reaction mixture was cooled at room temperature and washed twice with water. The organic extract was concentrated and the residue was purified by chromatography (hexane-ethyl acetate, 8:1) to afford pure 25 (1.8 g, 95%) as colorless oil. $R_f = 0.75$ (hexane-ethyl acetate, 4:1); $^1$H NMR (CDCl$_3$) δ 0.85 (t, 6H), 1.28-1.49 (m, 12H), 1.52-1.61 (m, 4H), 3.44 (t, 2H), 3.48-3.64 (m, 7H), 4.54 (s, 2H), 7.21-7.32 (m, 5H); $^{13}$C NMR (CDCl$_3$) δ 14.13, 22.73, 25.87, 25.89, 29.72, 30.16, 31.78, 31.80, 70.36, 70.66, 70.82, 71.69, 73.41, 78.02, 127.54, 127.62, 128.35, 138.53.

(2R)-1,2-Di-O-hexyl-sn-glycerol (17). Into the solution of 17 (1.67 g, 4.8 mmol) in dry methanol (25 mL) was added palladium on charcoal (300 mg). The mixture was shaken in Parr apparatus overnight. The subsequent filtration of catalyst through a layer of Celite and concentration afforded pure 17 (1.2 g, 97%) as colorless oil. $R_f = 0.35$ (hexane-ethyl acetate, 3:1); $^1$H NMR (CDCl$_3$) δ 0.82 (t, 6H), 1.14-1.25 (m, 12H), 1.51 (m, 4H), 2.48 (br s, 1H), 3.37-3.65 (m, 9H).