Immobilized POPC vesicles by SPR Desorption Adsorption 80 Relative SPR Response (RU) buffer wash 40 0 0 10 20 30 **POPC** 80 Relative SPR Response (RU) **Sphingomyelin** Adsorption Desorption 40 buffer wash

C2-Domain Adsorption & Desorption to

Figure 4-S2. (**Upper panel**) SPR data showing cPLA₂ C2-domain adsorption/desorption to/from immobilized POPC vesicles at varying protein concentrations (0.1, 0.2, 0.4, 0.6, 1, 2, and 4 μM; bottom to top) and 5 μl/min flow rate. The two-headed arrow indicates switch to buffer containing no protein. The same approach was used to assess C2-domain adsorption to immobilized 18:1-SM vesicles shown in Fig. 4C & 4D. The K_d values calculated from the binding isotherms for C2-domain and the point mutants are reported in Table 1. (**Lower panel**) SPR data showing the time-dependence for cPLA₂ C2-domain adsorption/desorption to/from immobilized 18:1 SM vesicles at 0.6 μM protein concentration.

Time (min)

20

30

10

0

0