

# Supplementary Materials: Oxime Therapy for Brain AChE Re-activation and Neuroprotection after Organophosphate Poisoning

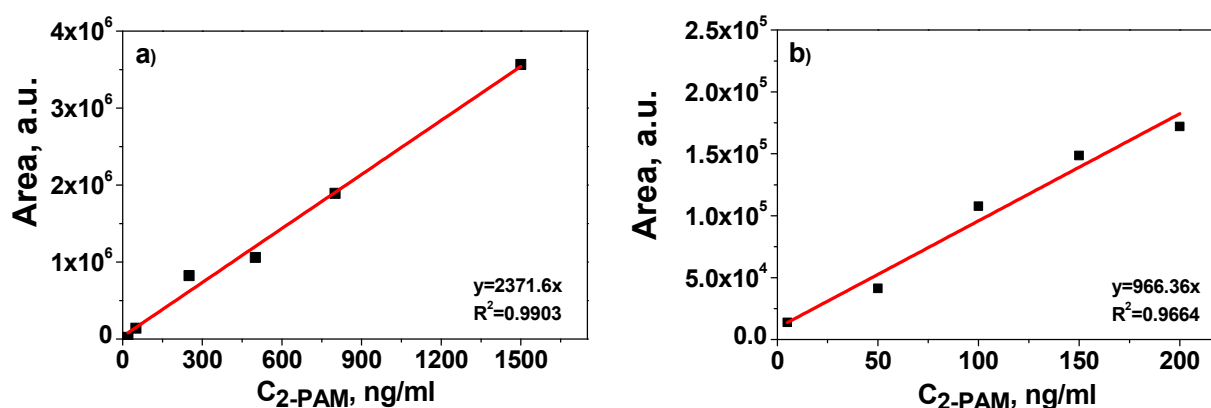


Figure S1. Calibration curve of 2-PAM in rat plasma (a) and in rat brain (b).

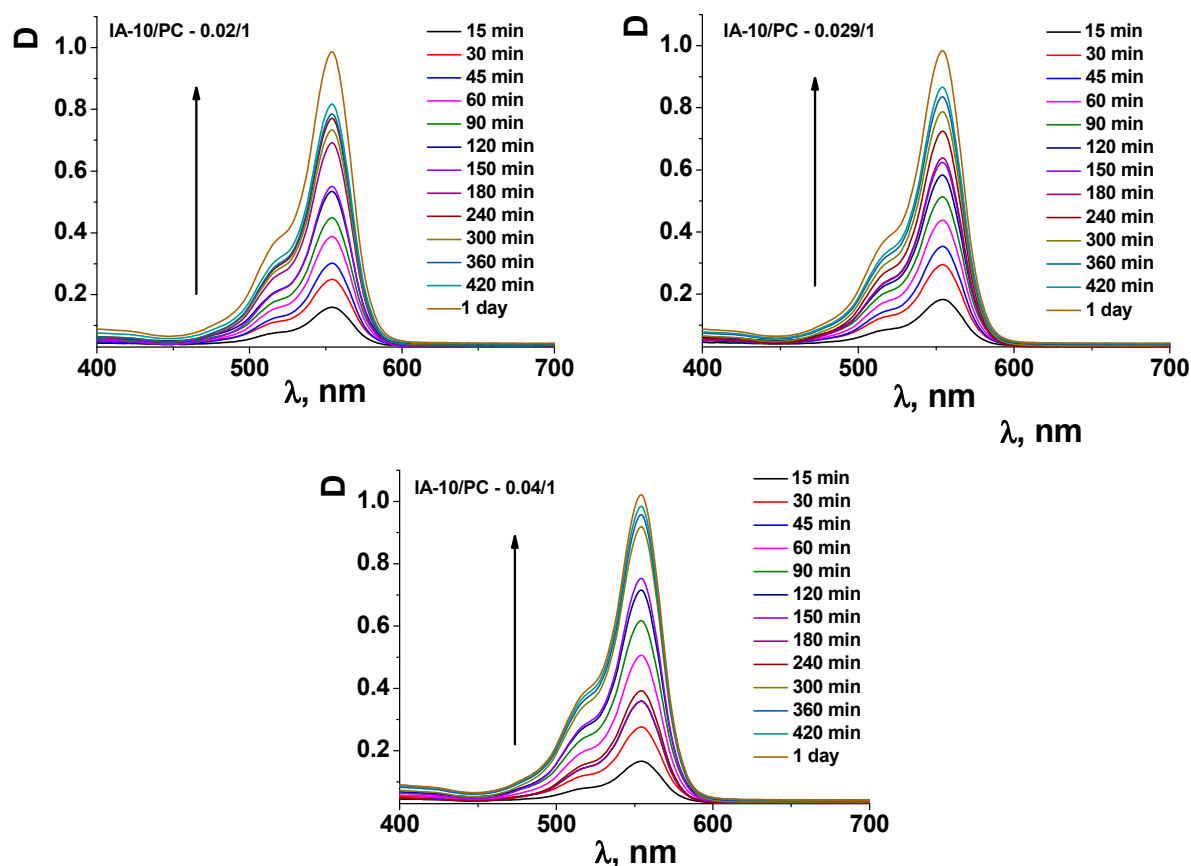
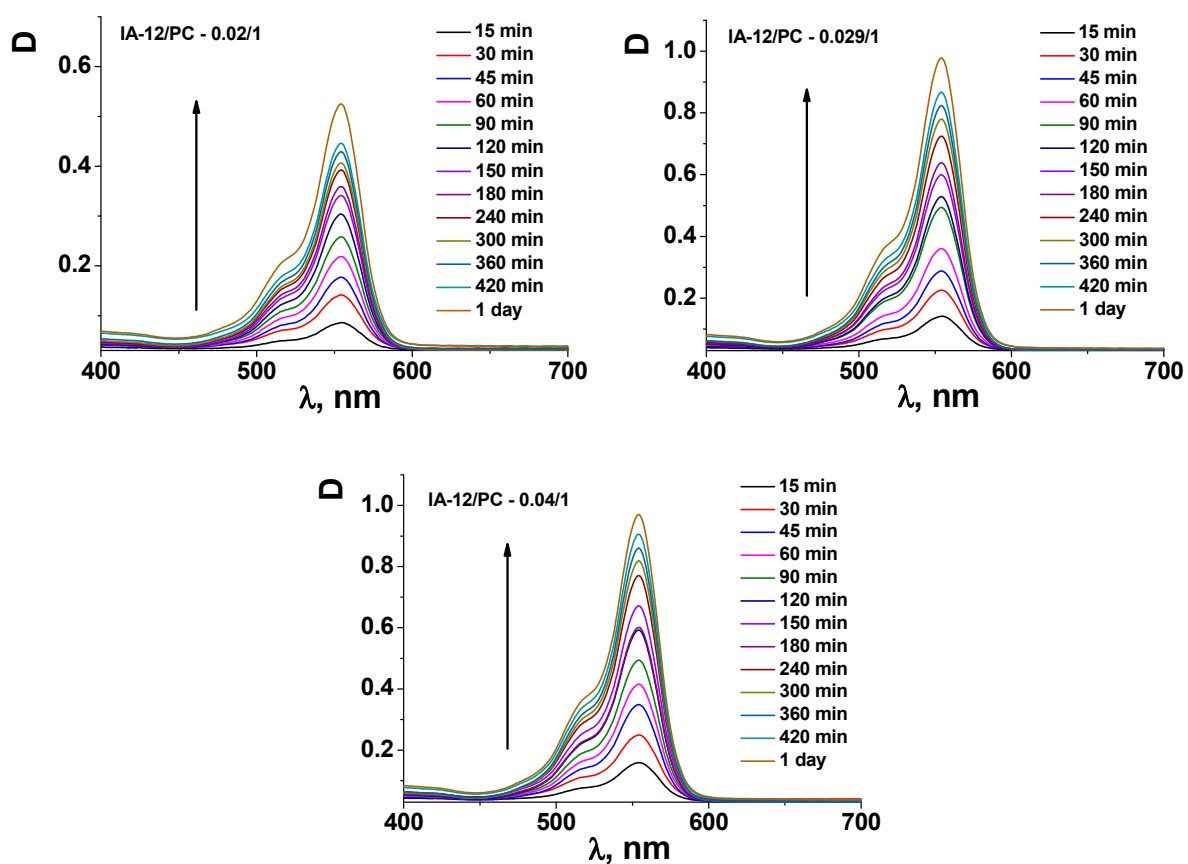
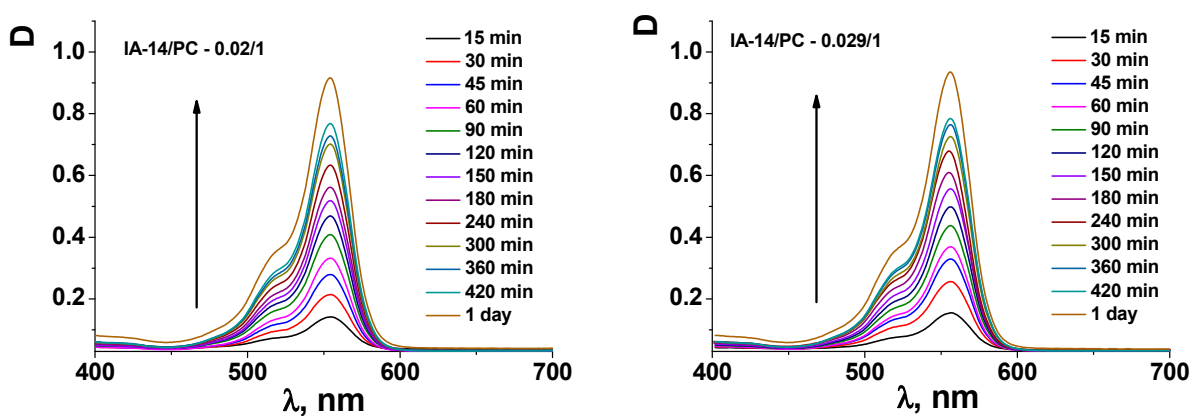
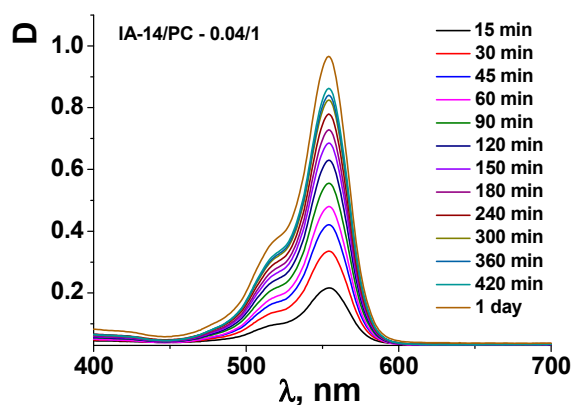


Figure S2. The absorption spectra of Rhodamine B at different release time intervals for modified IA-10/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.

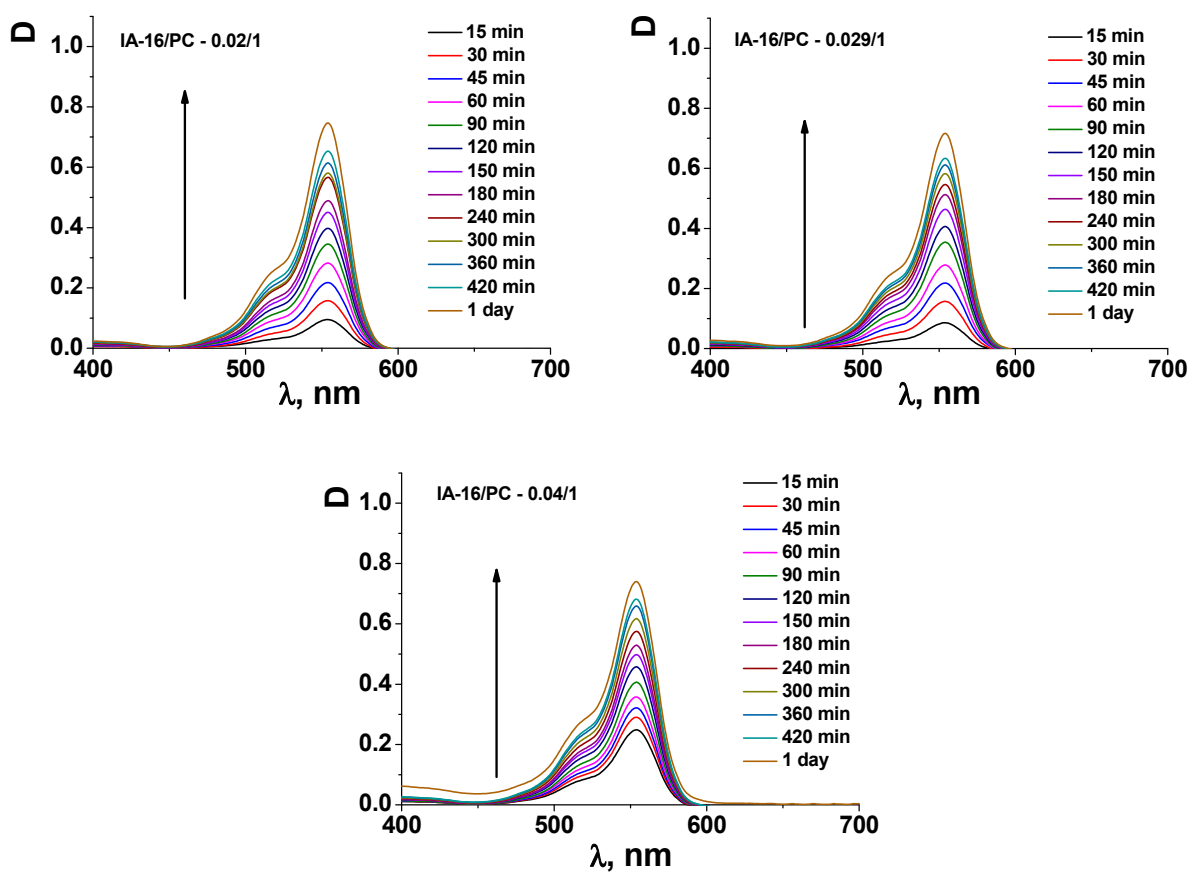


**Figure S3.** The absorption spectra of Rhodamine B at different release time intervals for modified IA-12/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.

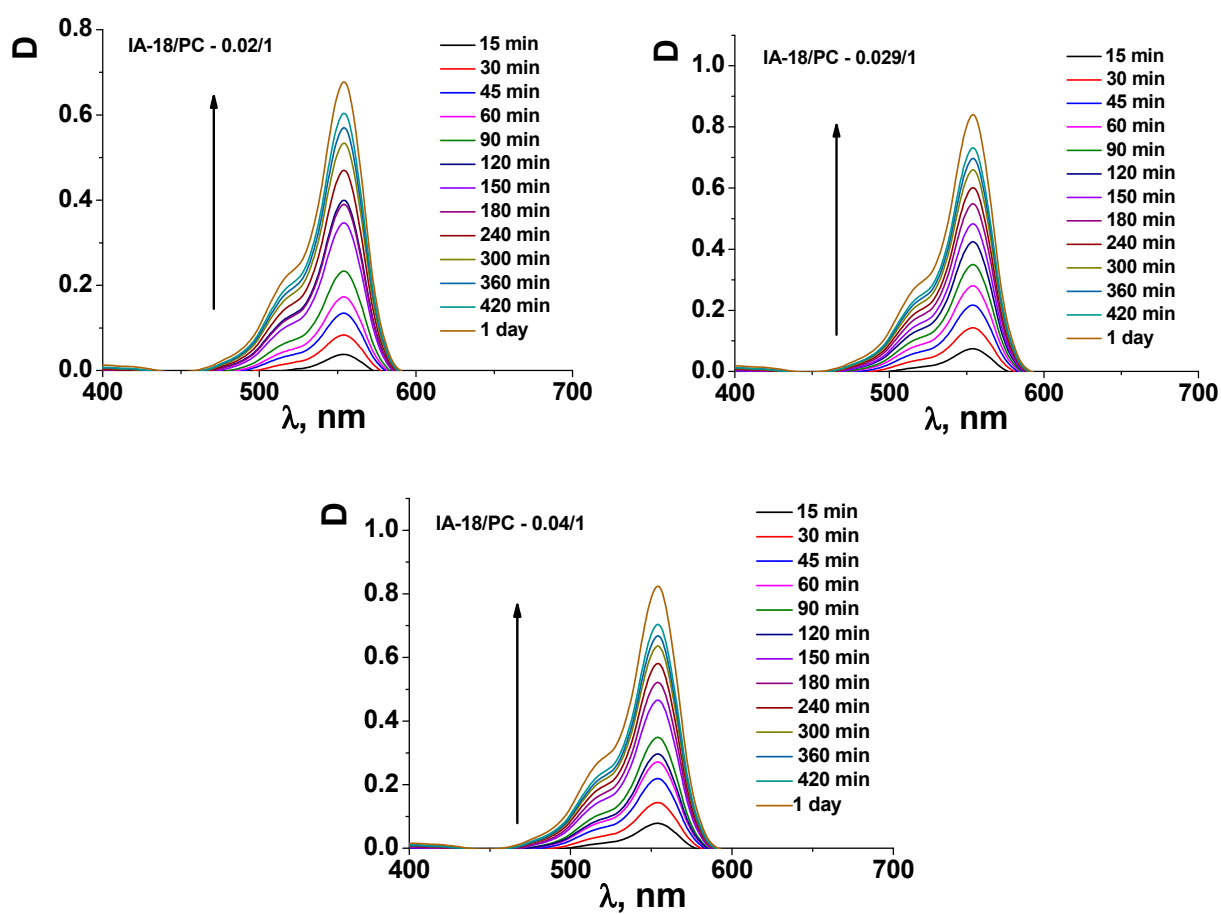




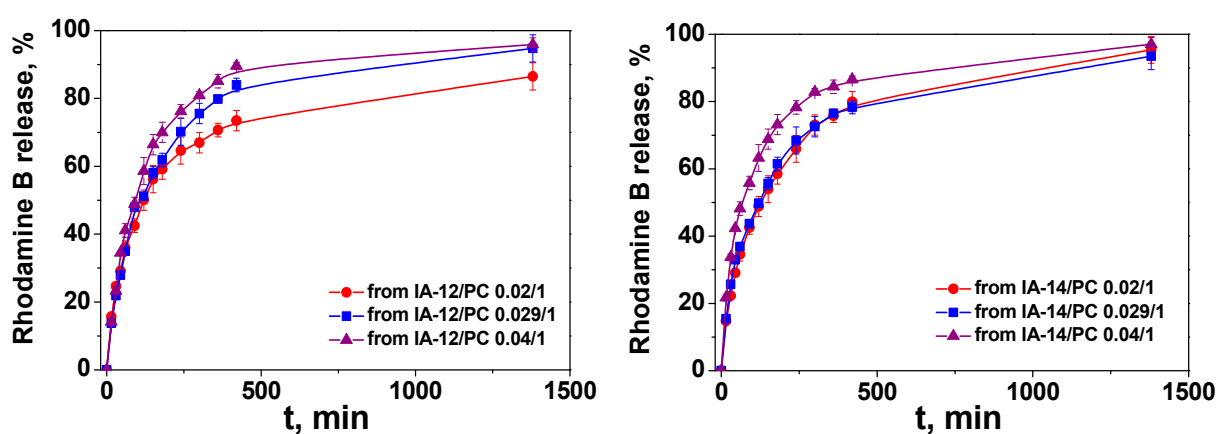
**Figure S4.** The absorption spectra of Rhodamine B at different release time intervals for modified IA-14/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.

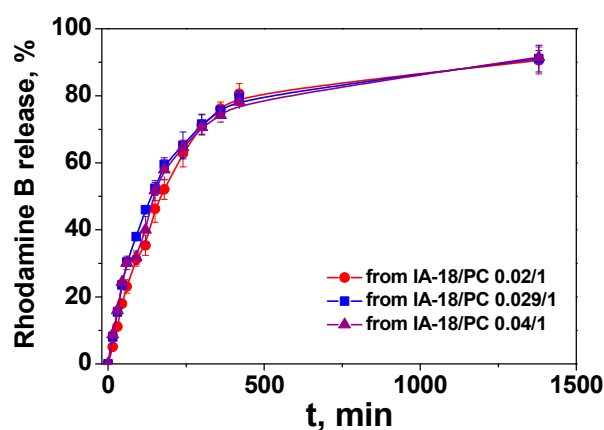


**Figure S5.** The absorption spectra of Rhodamine B at different release time intervals for modified IA-16/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.

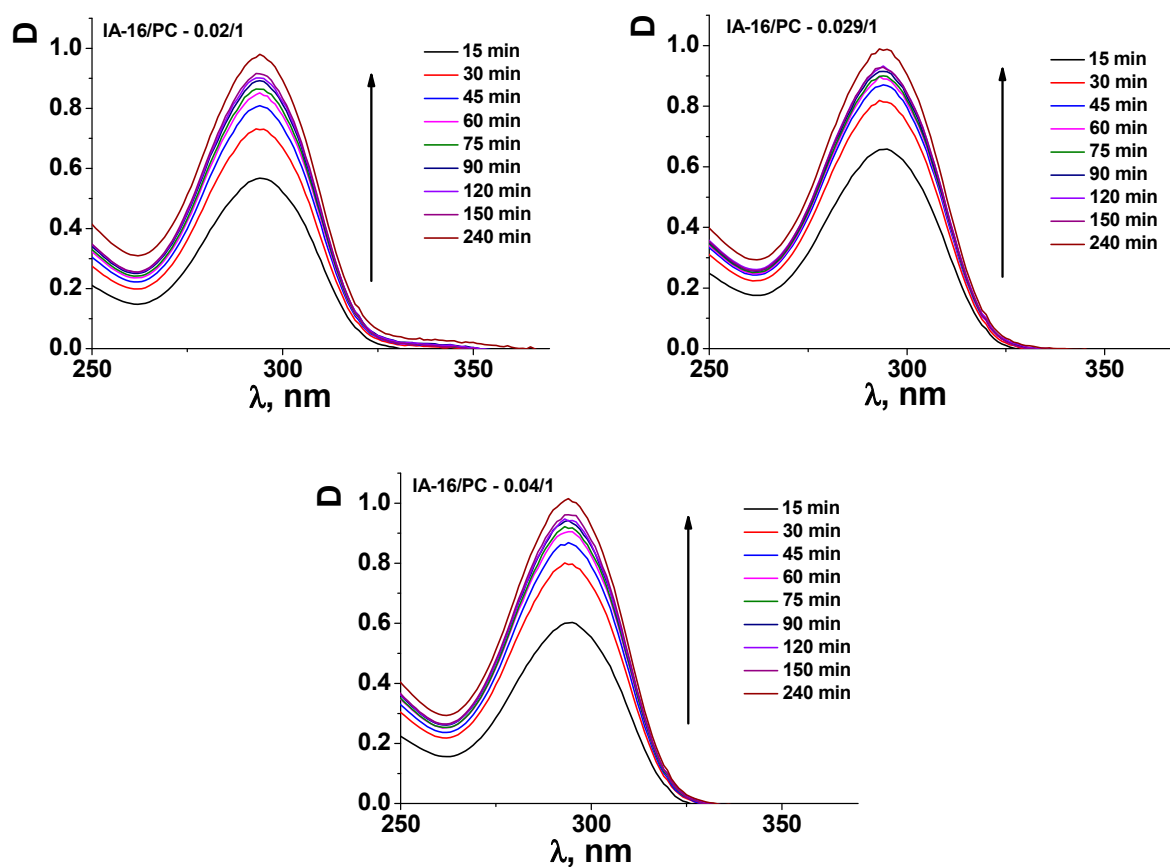


**Figure S6.** The absorption spectra of Rhodamine B at different release time intervals for modified IA-18/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.

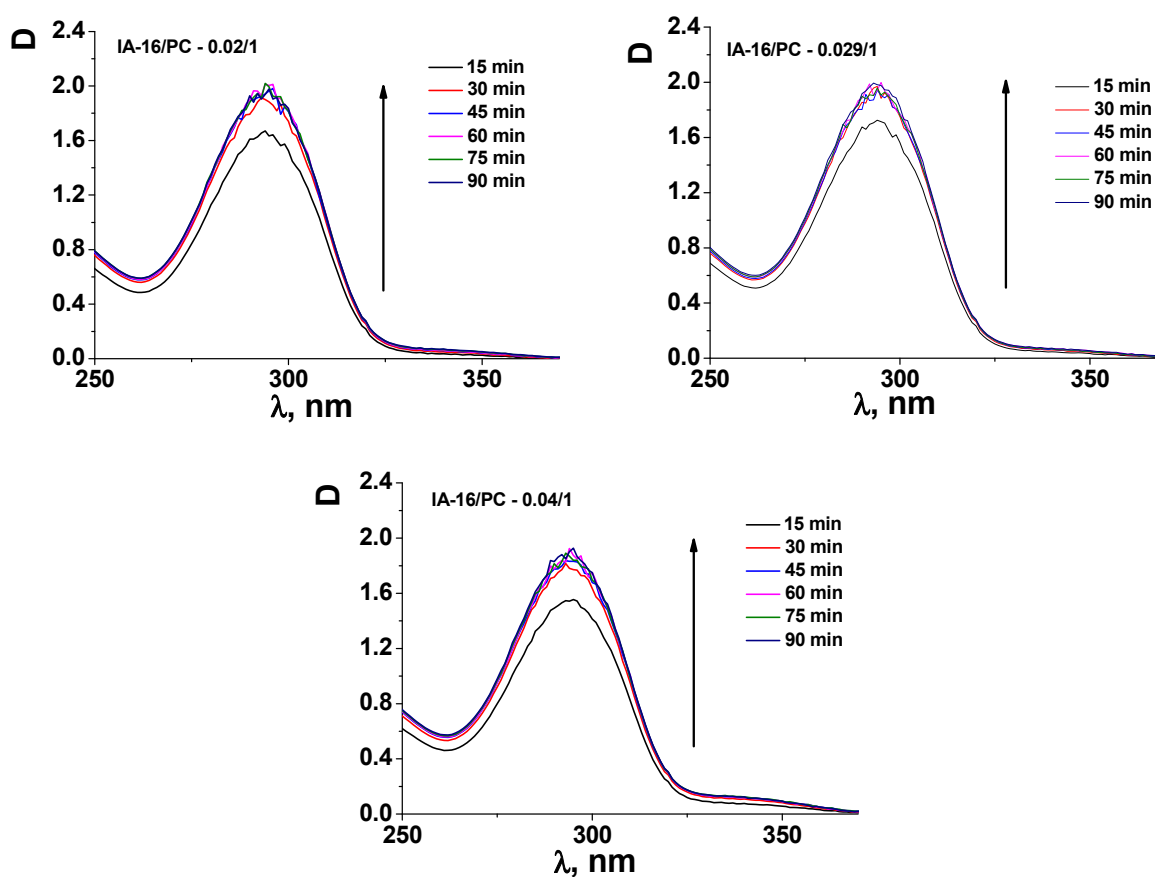




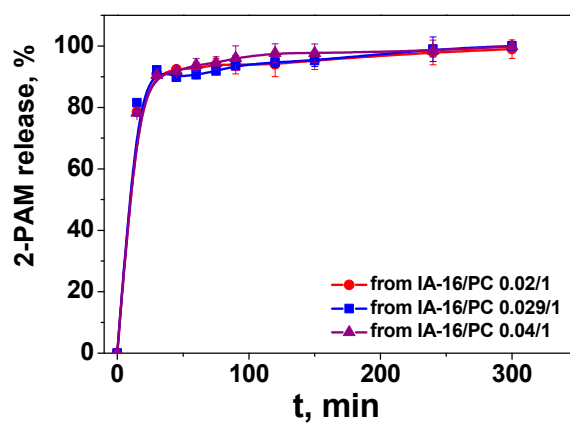
**Figure S7.** *In vitro* Rhodamine B release from mixed liposomes at various surfactant/lipid molar ratio: IA-12/PC; IA-14/PC; IA-18/PC; phosphate buffer (0.025 M), pH 7.4, 37°C.



**Figure S8.** The absorption spectra of 2-PAM at different release time intervals for modified IA-16/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, C (2-PAM) = 10 mg/mL; phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.



**Figure S9.** The absorption spectra of 2-PAM at different release time intervals for modified IA-16/PC liposomes, molar ratio of components: 0.02/1; 0.029/1; 0.04/1; 37°C, C (2-PAM) = 20 mg/mL; phosphate buffer (0.025 M), pH = 7.4; the arrow indicates the direction of dialysis duration increasing.



**Figure S10.** *In vitro* 2-PAM release from IA-16/PC modified liposomes using the dialysis bag method (n = 3); C (2-PAM) = 20 mg/mL, phosphate buffer (0.025 M), pH 7.4, 37°C.