

Article

Supplementary Materials: Vitamin E-loaded PLA- and PLGA-Based Core-Shell Nanoparticles: Synthesis, Structure Optimization and Controlled Drug Release

Norbert Varga¹, Árpád Turcsányi¹, Viktória Hornok^{1,2} and Edit Csapó^{1,3*}

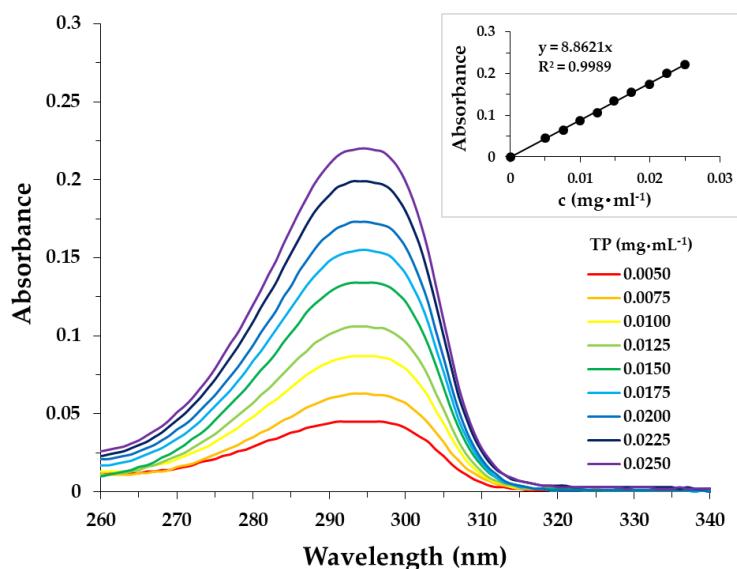


Figure S1. UV spectra of TP in 1,4-dioxane at different concentrations.

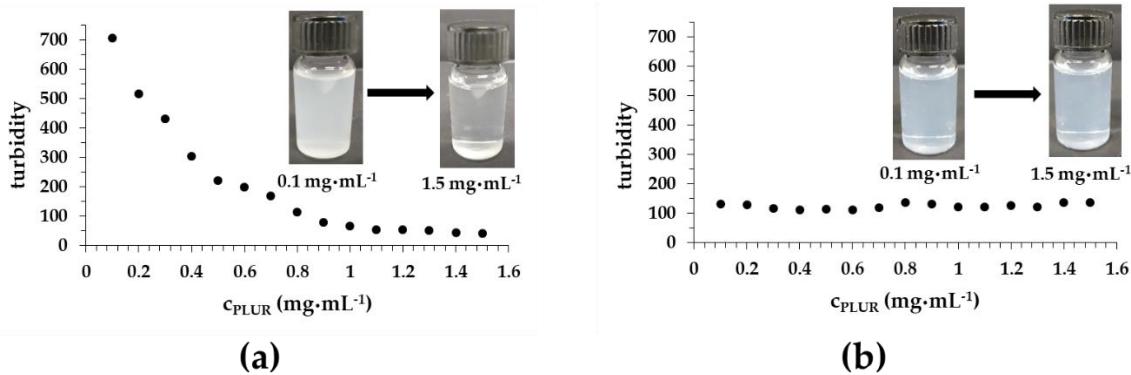


Figure S2. The turbidity of TP (a) and PLA (b) in PLUR solution at 25 °C in aqueous medium ($c_{TP} = 0.25 \text{ mg} \cdot \text{mL}^{-1}$, $c_{PLA} = 0.25 \text{ mg} \cdot \text{mL}^{-1}$).

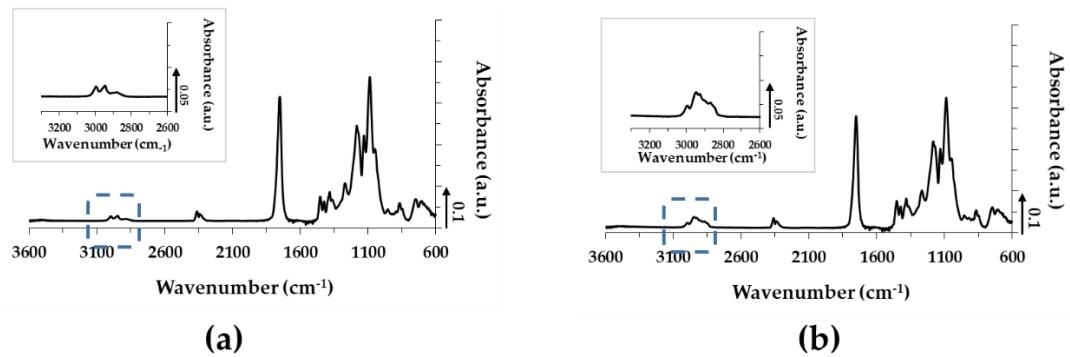


Figure S3. IR spectra of the TP-free (a) and TP-loaded (b) PLGA75 NPs ($c_{TP} = 2.5 \text{ mg} \cdot \text{mL}^{-1}$, $c_{PLA} = 10 \text{ mg} \cdot \text{mL}^{-1}$, $c_{PLUR} = 0.1 \text{ mg} \cdot \text{mL}^{-1}$).

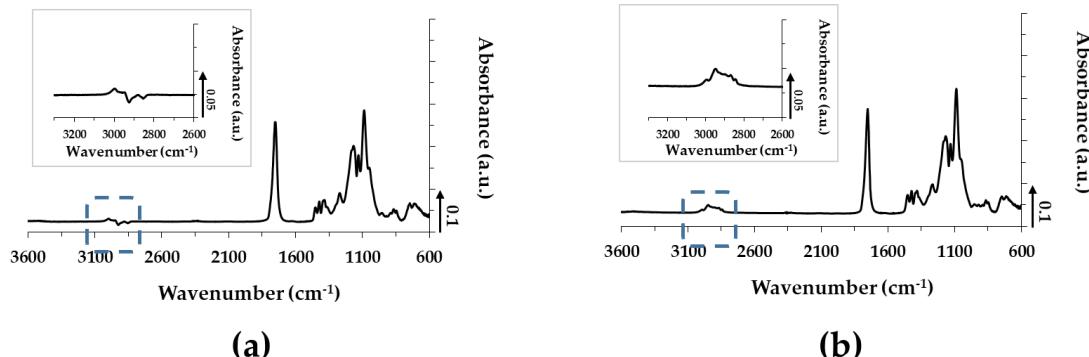


Figure S4. IR spectra of the TP-free (a) and TP-loaded (b) PLGA65 NPs ($c_{TP} = 2.5 \text{ mg} \cdot \text{mL}^{-1}$, $c_{PLA} = 10 \text{ mg} \cdot \text{mL}^{-1}$, $c_{PLUR} = 0.1 \text{ mg} \cdot \text{mL}^{-1}$).

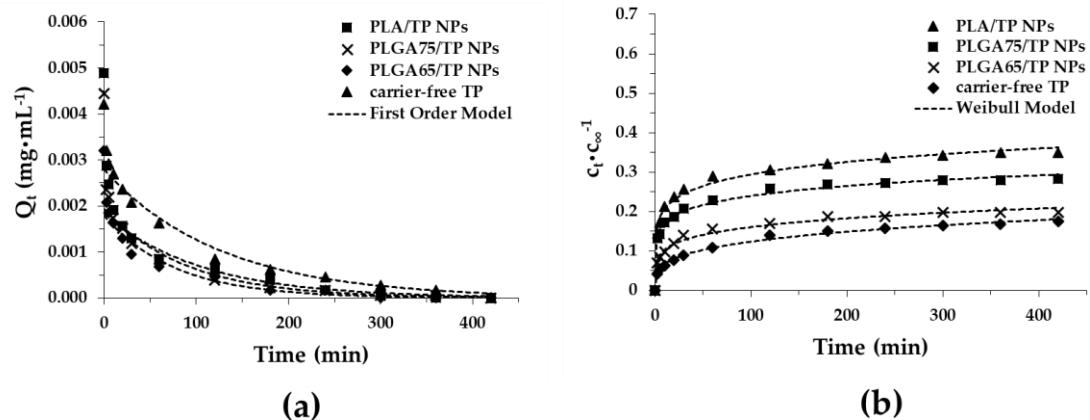


Figure S5. Release profiles and different kinetic models-predicted (First Order model (a), Weibull model (b)) release curves of TP from PLA and PLGA NPs in PBS solution ($\text{pH} = 7.4$, 0.9 w/w% NaCl).