

Multiresponsive Hybrid Microparticles for Stimuli-Responsive Delivery of Bioactive Compounds

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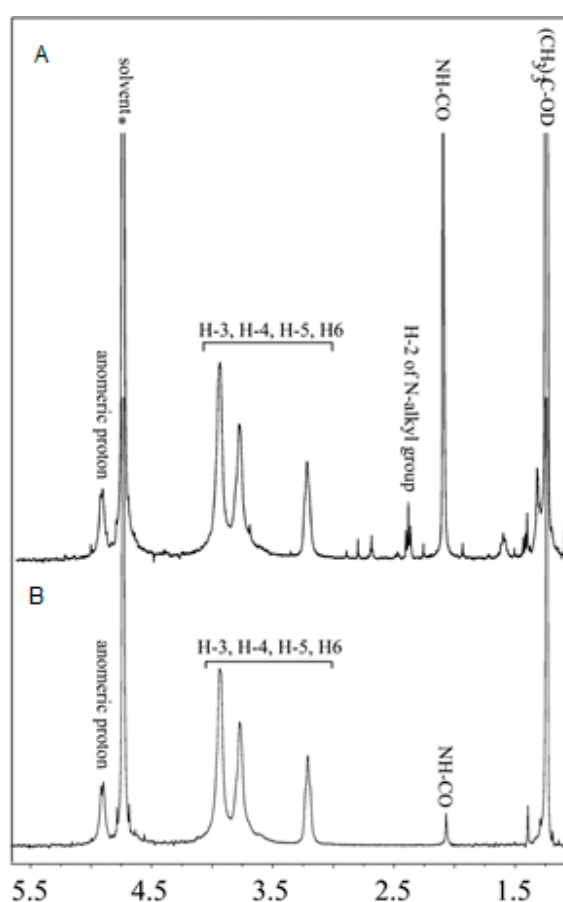


Figure S1. ¹H-NMR spectra of (A) PLACA-g-CS and (B) CS.

These ¹H-NMR spectral results are in accordance with data reported in previous works (Di Martino et al., 2015). The chemical shifts for CS appear at 3.55–3.72 ppm (H-3, H-4, H-5 and H-6), 2.98 ppm (H-2)

and 1.85 ppm (NH-CO). The chemical shifts for CS-g-PLA are at 4.81–4.83 ppm (–CH of the lactyl unit), 4.62 ppm (–CH of the hydroxylated lactyl unit), 3.60–3.85 ppm (H-3, H-4, H-5 and H-6), 3.15 ppm (H-2), 2.01 ppm (NH-CO), 1.51 ppm (–CH₃ of the lactyl units) and 3.12 ppm; the H-2 proton signal for N-alkylation of CS confirms that bonding exists between the CS and lactic acid.

References

Di Martino, A., Kucharczyk, P., Zednik, J., Sedlarik, V. Chitosan grafted low molecular weight polylactic acid for protein encapsulation and burst effect reduction. *Int.J.Pharm.* **2015**, (2), 496, 912–921.