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Silica Capsules Enclosing P123 Triblock Copolymer Micelles for Flurbiprofen Storage and Release

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Supplementary Information

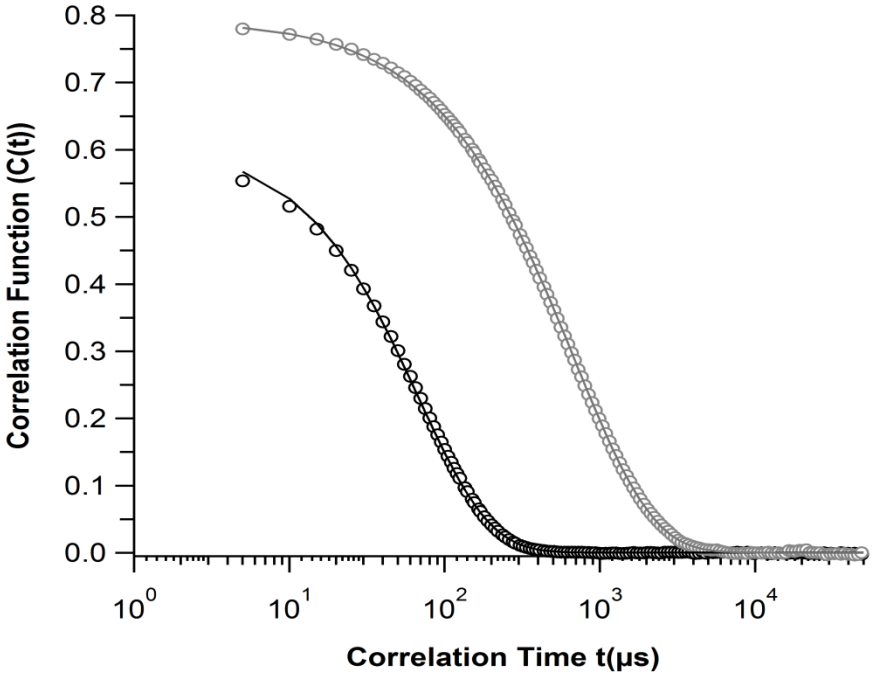

Figure S1. Autocorrelation data from DLS measurement of 3.7 wt% P123 solution in citrate buffered solution. Before flurbiprofen addition (black), and after 0.6 wt% flurbiprofen addition (grey). Experimental data (○) is modeled using the Maximum Entropy Method (solid line). Decay times were converted with the Stokes-Einstein law to hydrodynamic radii, yielding intensity weighted size distributions.

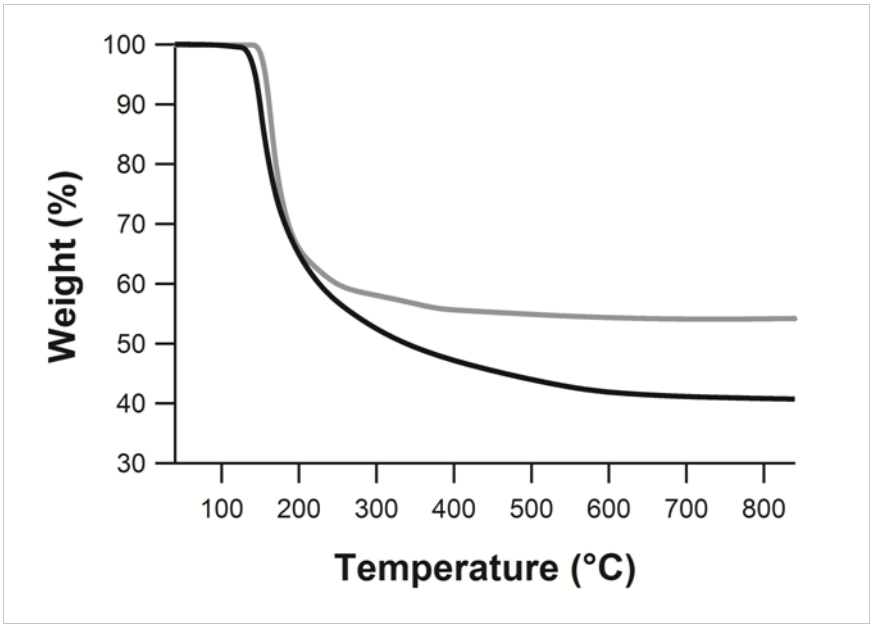

Fig. S2. Thermal gravimetrical analysis of flurbiprofen-P123-silica (FPS) capsule (black) and not loaded COK-12 (grey).

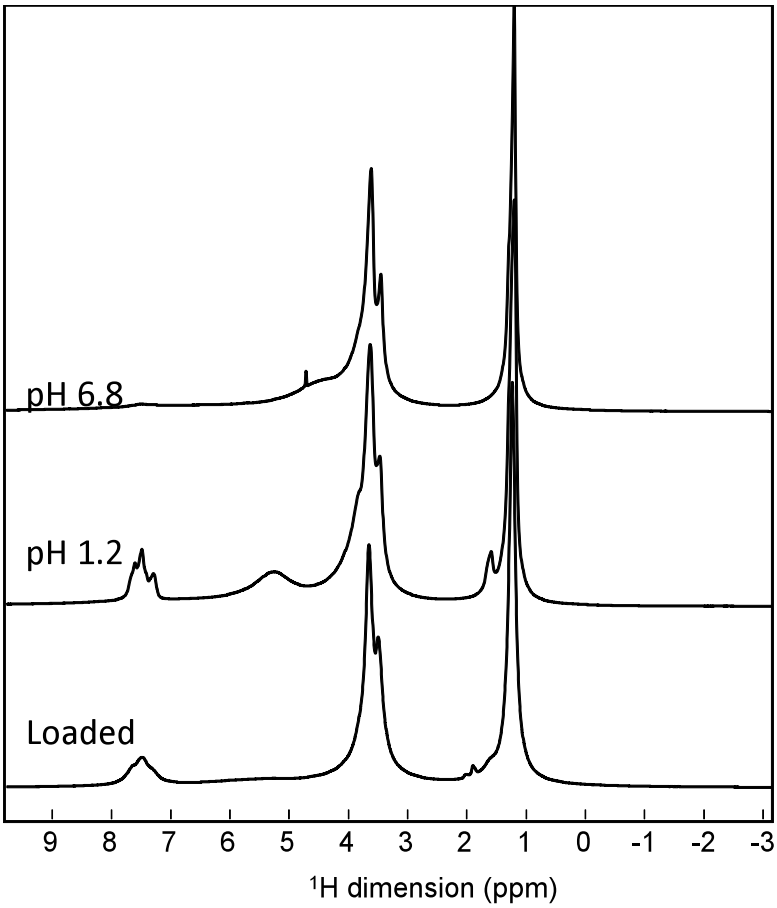

Figure S3. ^{13}C single-pulse MAS NMR spectra of FPS initial sample (loaded), and of the sample after release experiments in solutions of pH 1.2 and 6.8.

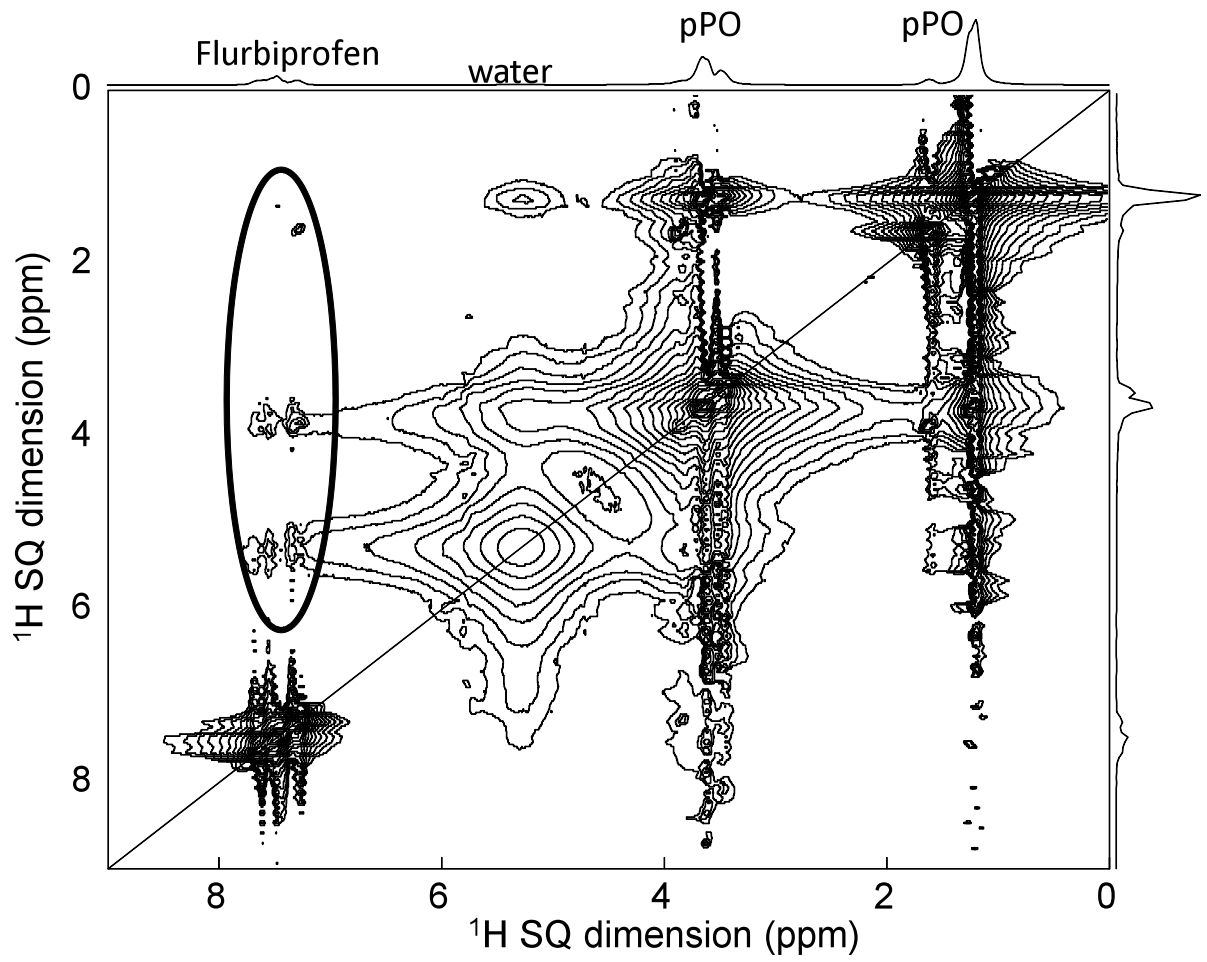

Fig. S4. ^{1}H-^{1}H 2D MAS NMR spectrum of FPS sample after release experiment in pH 1.2.

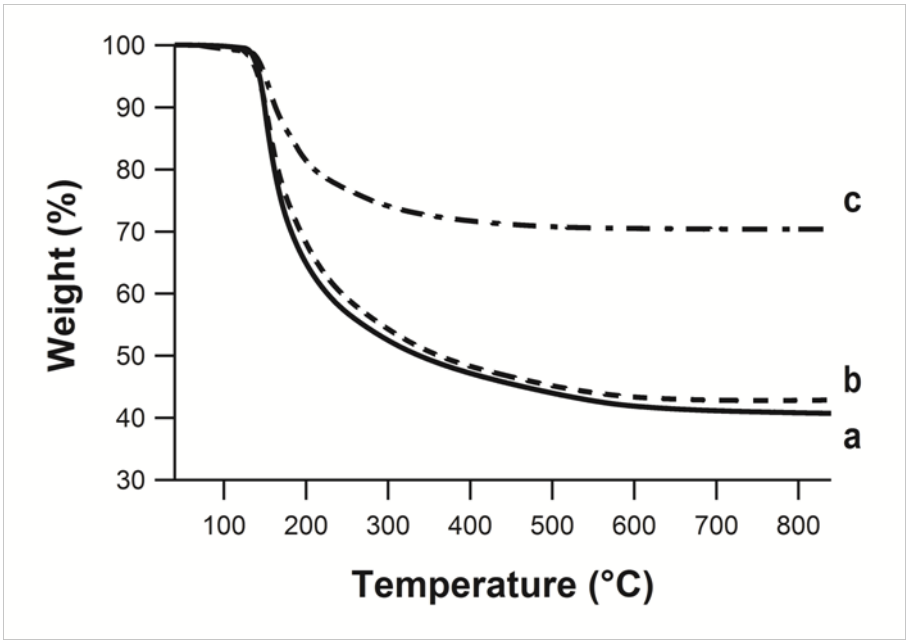

Fig. S5. thermal gravimetrical analysis of (a) parent FPS material and after 4 h release in (b) simulated gastric fluid (0.1 M, pH 1.2) or (c) phosphate buffer (0.1 M, pH 6.8) at 120mg flurbiprofen l^{-1} dosage.