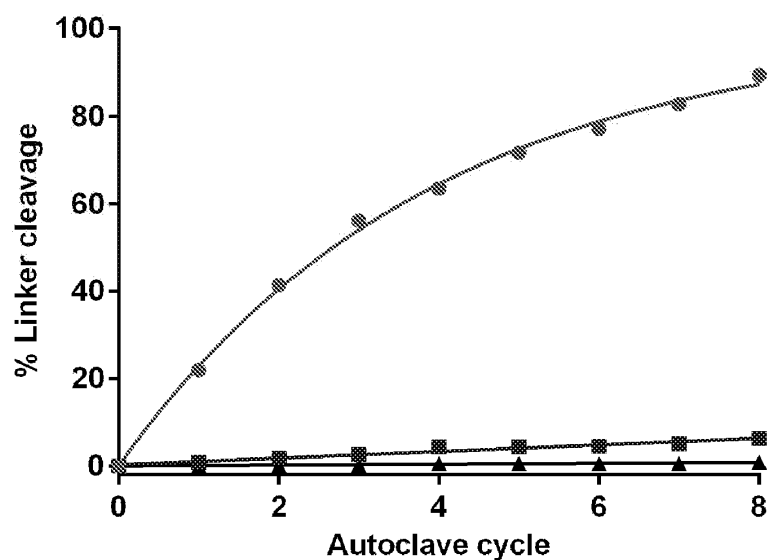
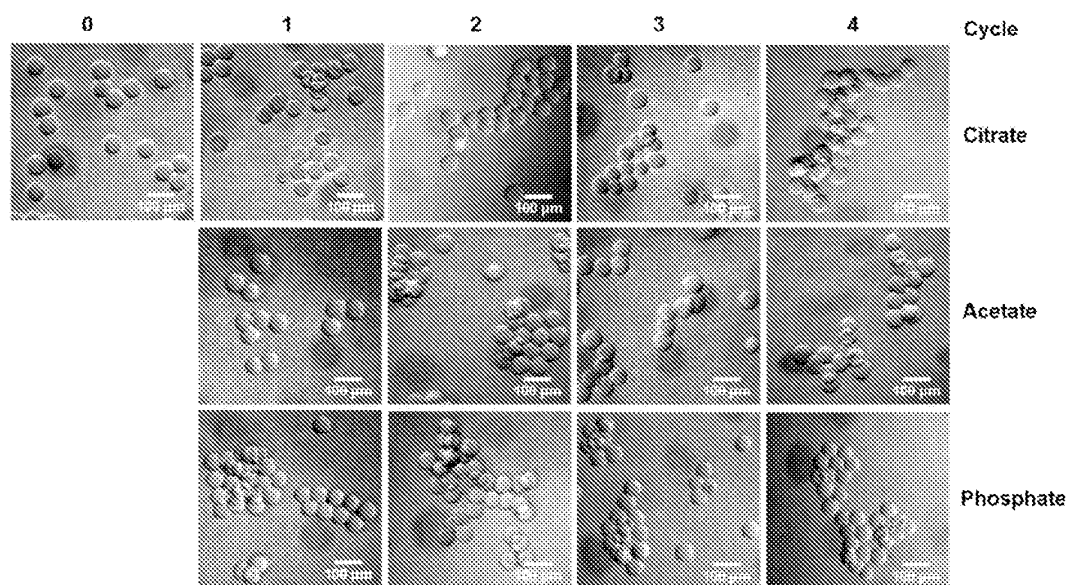


Figure 1

Cleavage of a β -eliminative linker with a $(\text{CH}_3)_2\text{SO}_2\text{-N-}$ modulator at pH 4.0, 5.0, or 7.4 at 25 °C or pH 6.2 (●), 5.0 (■) and 4.0 (▲) at 121 °C for eight consecutive autoclave cycles. The buffers, pH at 25 °C and $\Delta\text{pH}/\Delta\text{T}$ values used for estimating pH at 121 °C used were: HEPES, pH 7.4, -0.014; acetate, pH 5, -0.0002, and citrate, -0.0024.

Figure 2

Optical microscopy of amino-hydrogel microspheres after 0, 1, 2, 3, or 4 autoclave cycles.

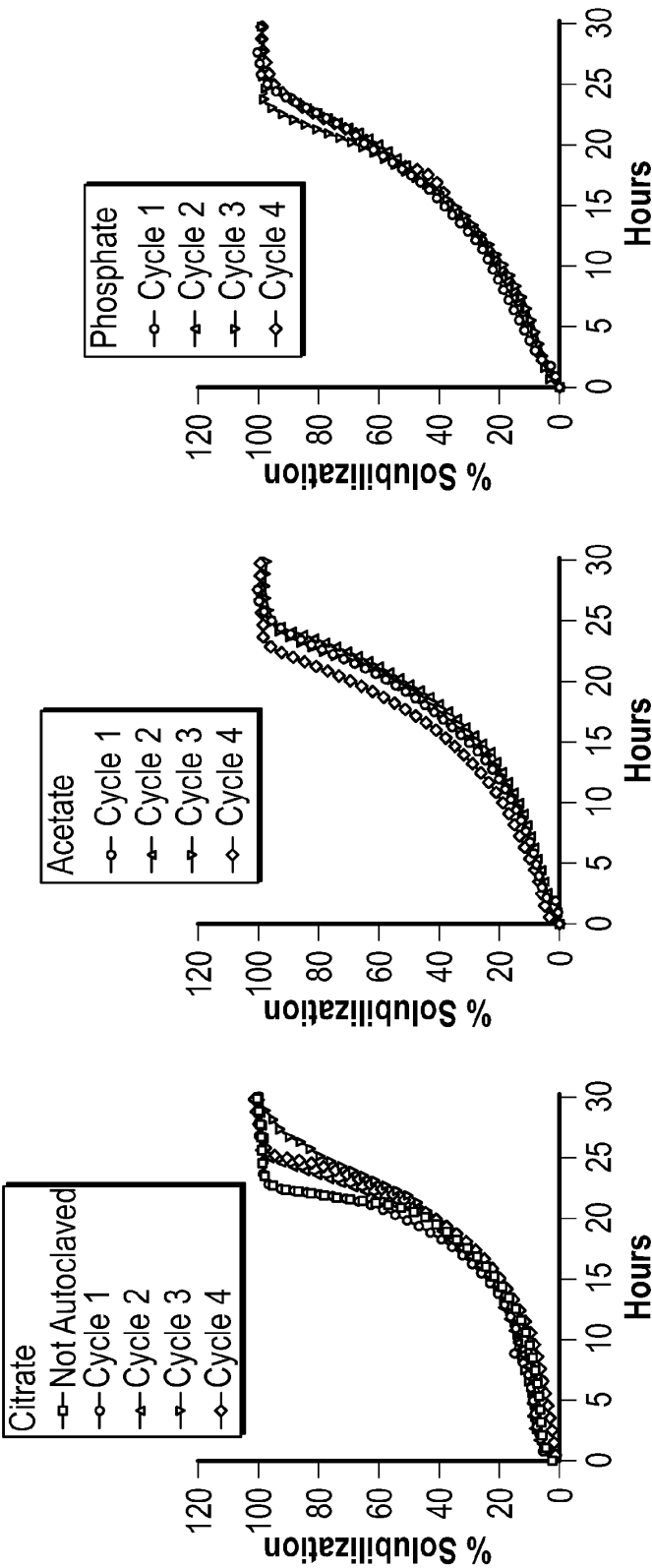


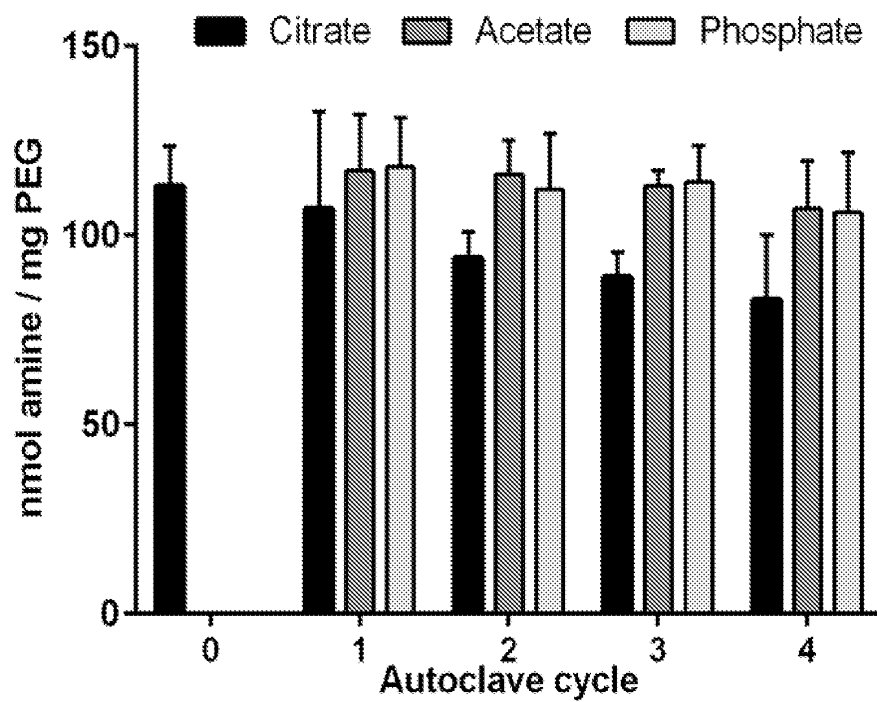
Figure 3C

Figure 3B

Figure 3A

Dissolution curves for autoclaves amine-MSs with a β -eliminative linker. tRG values are reported in **Table 2**. Amino-hydrogel microspheres autoclaved in A) pH 4.0 citrate B) pH 4.0 acetate, and C) pH 4.0 phosphate compared to non-autoclaved particles.

Figure 4



Ratio of free amine groups to PEG for amino-hydrogel microspheres (R¹ = (N,N-dimethylamino)sulfonyl) at pH 9.4, after 0-4 autoclave cycles in different buffers

Figure 5

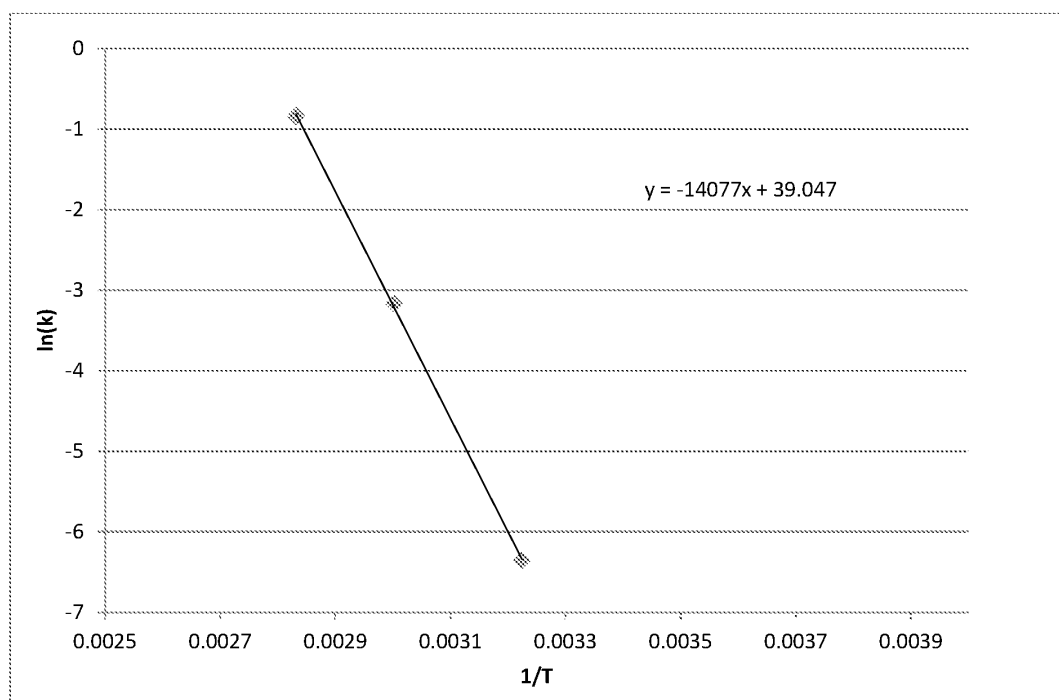


Figure 6

