Supporting Information for:

Biocompatible and biodegradable poly(trimethylene carbonate)-*b*-poly(L-glutamic acid) polymersomes : size control and stability

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Calcein entrapment into vesicles formed by direct dissolution.

Bulk $PTMC_{24}$-*b*-PGA_{12} block copolymer (0.1 wt %) is added to a calcein solution (5 mM) stabilized at pH 7.4 with Tris buffer (50 mM). Complete dissolution is achieved within one hour by heating at 50 °C under magnetic stirring. Vesicular dispersion is then passed down a sephadex G-50 column (20*1.5 cm) equilibrated with Tris buffer (Tris 50 mM, pH 7.4) in order to remove the free calcein. The first fractions, showing turbidity due to the presence of vesicles and fluorescence, were sampled. Only the largest vesicles were easily observable under optical microscopy and they appeared as dark circles with luminous inside under the optical microscope and as luminous spheres in fluorescent mode. These observations are attesting the hollow structure of the self-assemblies (polymersomes).

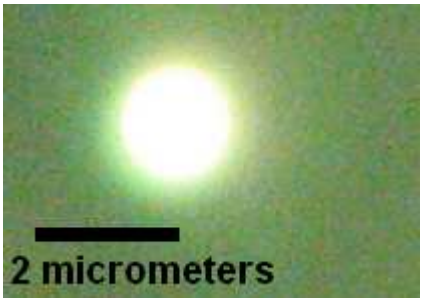

Figure S1. Calcein, an hydrophilic florescent probe, was loaded into $PTMC_{24}$-*b*-PGA_{12} vesicles using direct dissolution of the bulk copolymer.