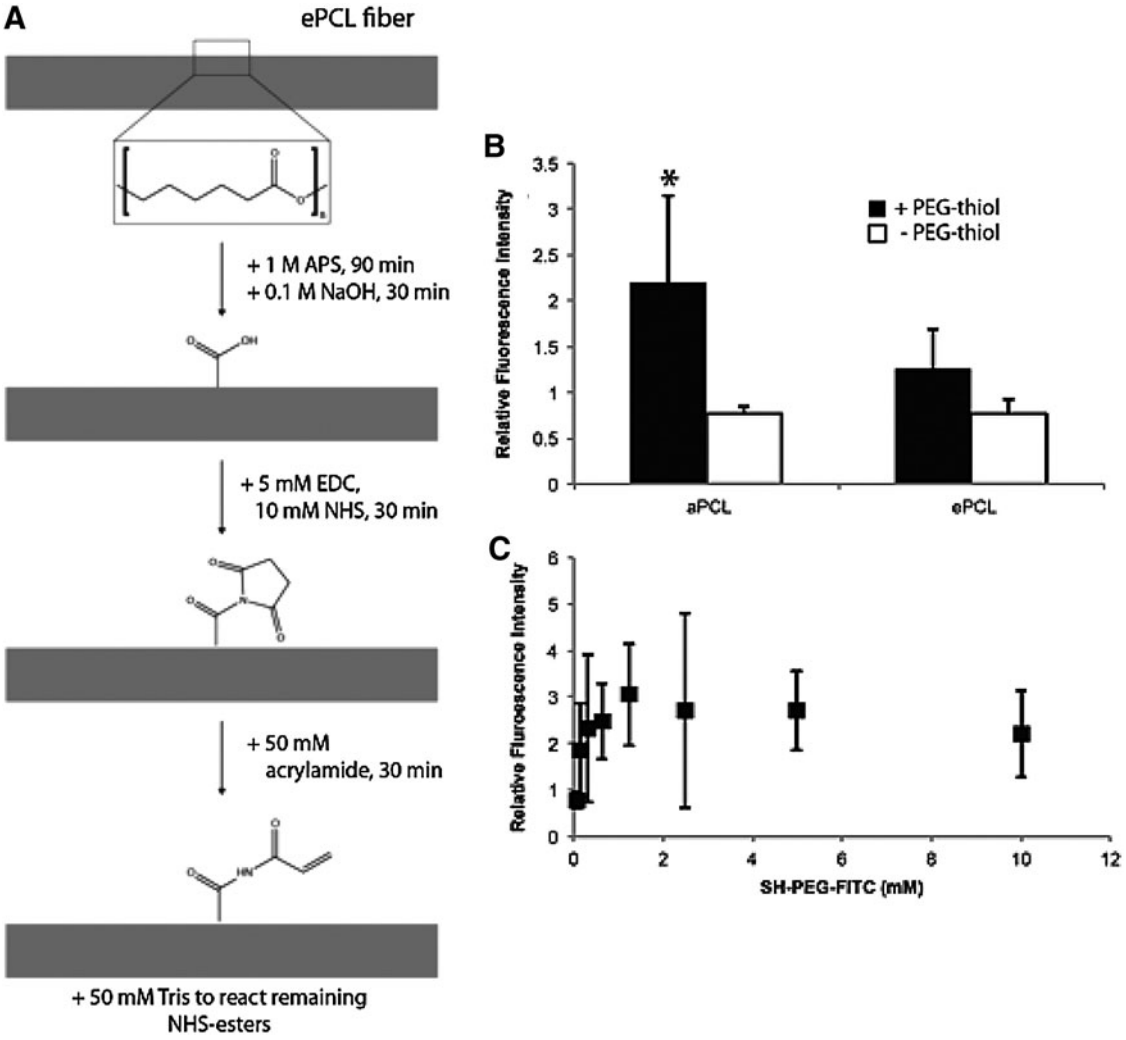

SUPPLEMENTARY FIG. S1. **(A)** The fabrication process of aPCL. ePCL was first rendered hydrophilic and alkali digested to expose carboxyl groups. 1-Ethyl-3-[3-dimethylaminopropyl]carbodiimide hydrochloride (EDC) and N-hydroxysuccinimide (NHS) were used to crosslink amine-reactive NHS-esters to the carboxyl group. The scaffold was then mixed with acrylamide to fully convert carboxyl groups to acrylate groups, with Tris used to react any remaining NHS-esters. **(B)** The fluorescence intensity of aPCL and unmodified ePCL with and without 10 mM fluorescently tagged PEG-thiol. There is a significant difference in intensity between aPCL with PEG-thiol and the other groups, demonstrating that aPCL was successfully acrylated. $*p < 0.05$ versus the other groups. **(C)** Fluorescent intensity as a function of PEG-thiol concentration, which demonstrated a logarithmic trend ($r^2 = 0.463$, $p = 0.008$) and seemed to saturate at 1.25 mM. Error bars represent standard deviation.