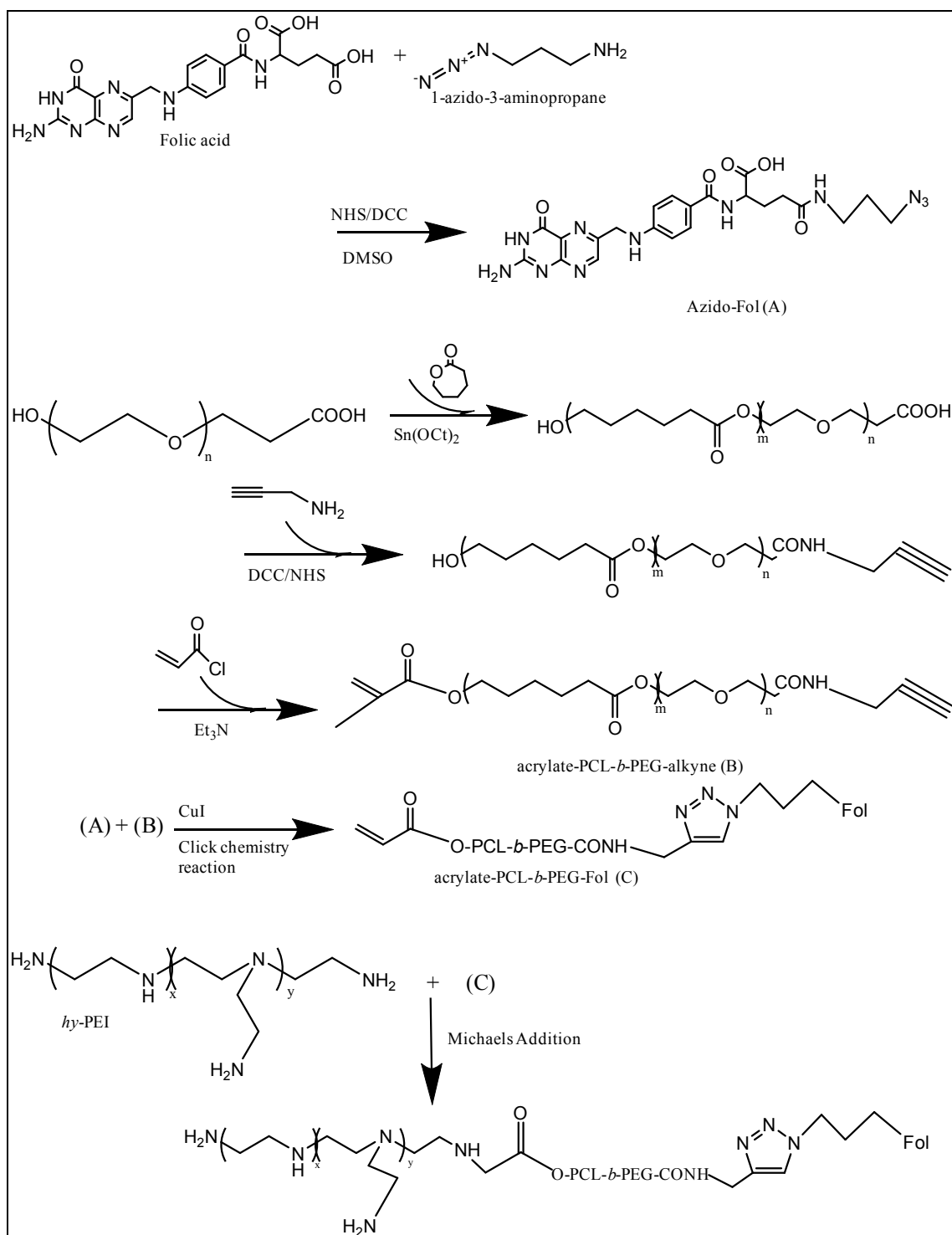


Supporting Information

Folate Receptor Targeted Delivery of siRNA and Paclitaxel to Ovarian Cancer Cells via Folate Conjugated Triblock Co-polymer to Overcome TLR4 Driven Chemotherapy Resistance

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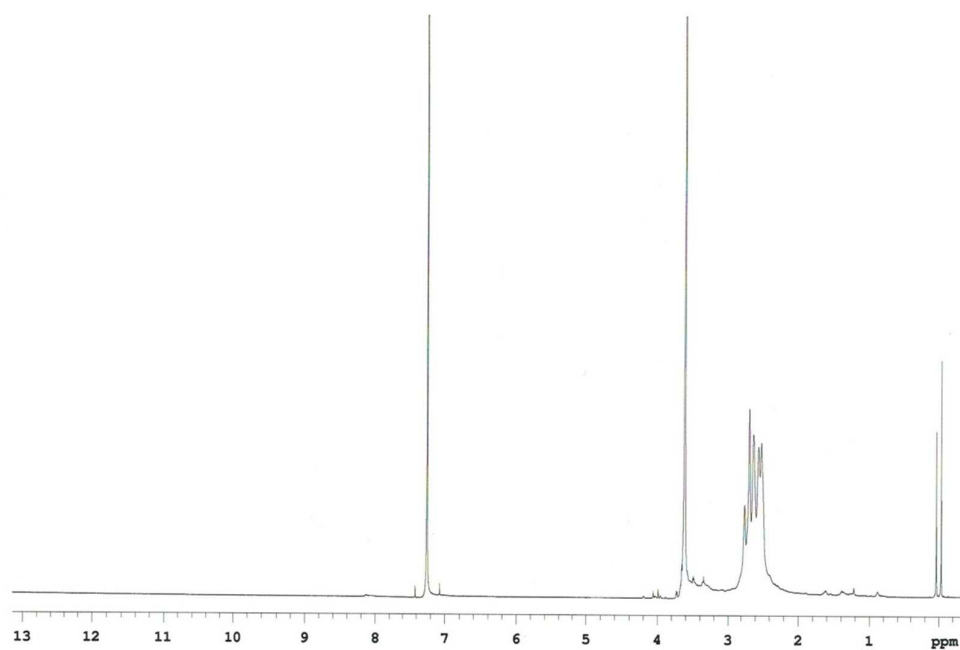
The synthetic reaction scheme for this project is seen below. It is a multi-step reaction that yields a tri-block copolymer consists of polyethyleneimine-graft-polycaprolactone-block-poly(ethylene glycol) (PEI-g-PCL-*b*-PEG-Fol). In the reaction scheme, m and n refer to different PCL and PEG lengths, respectively.



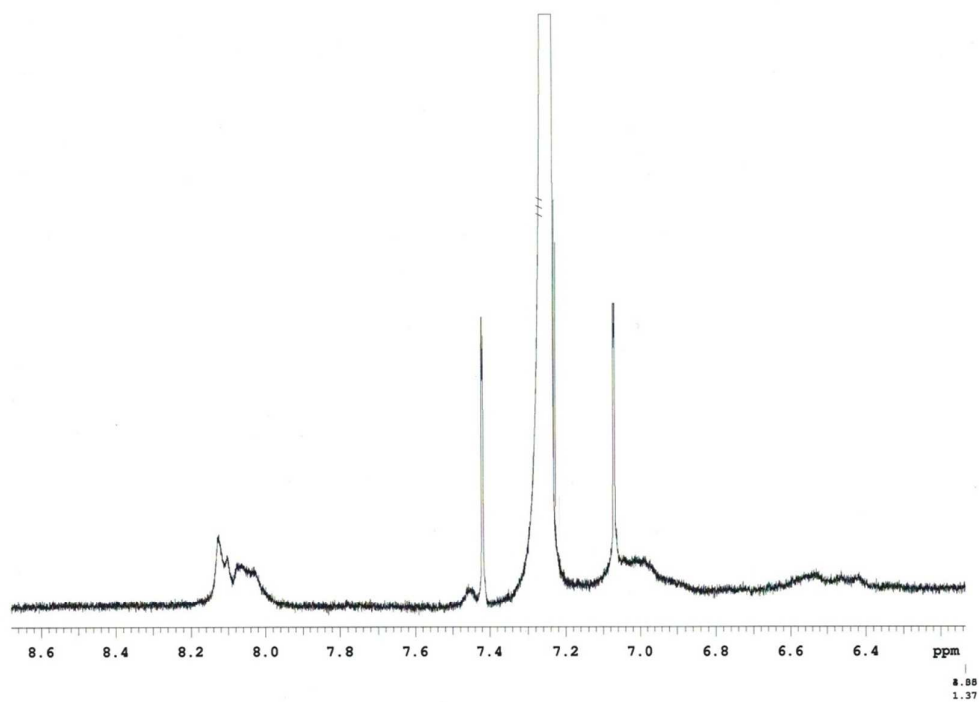
Supplementary Scheme 1: Synthetic strategy for PEI-*g*-PCL-*b*-PEG-Fol copolymers.

¹H NMR for PEI-*g*-PCL-*b*-PEG-Fol copolymers. Samples were run in CDCl₃.

A

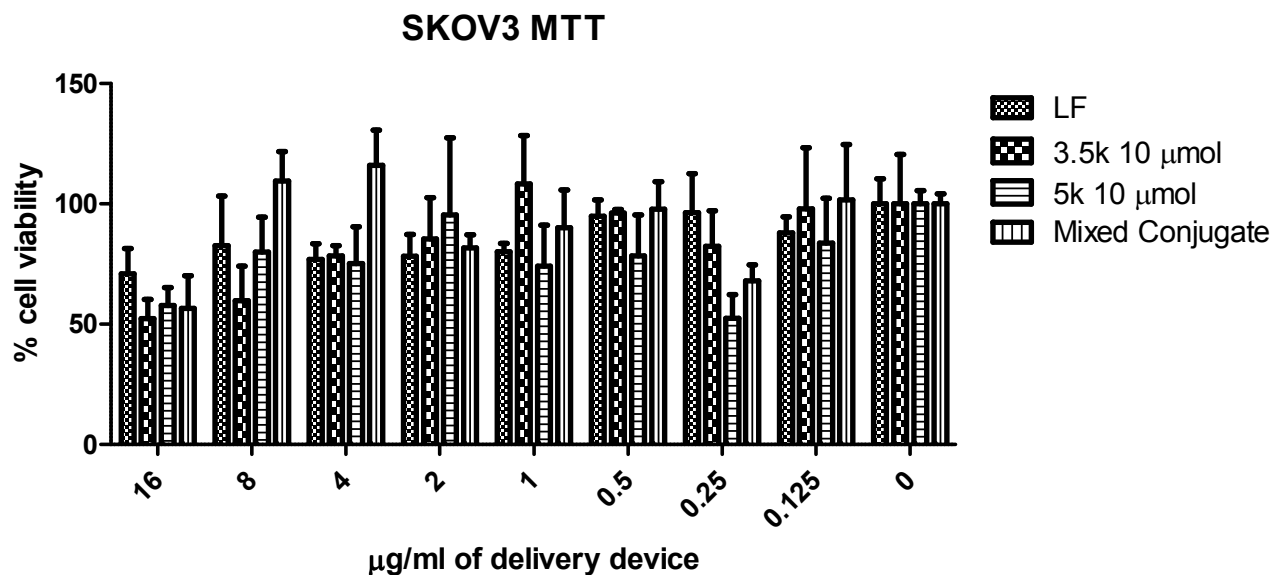


B



Supplementary Spectra 1: ^1H NMR for A) PEI-*g*-PCL-*b*-PEG-Fol copolymers in CDCl_3 and B) ^1H NMR for PEI-*g*-PCL-*b*-PEG-Fol copolymers zoomed in on Folic acid spectra in CDCl_3 .

An MTT assay was performed to assess the cellular viability of lipofectamine and our folate decorated micelleplexes on SKOV-3 cells. Concentration ranges were from 0-16 $\mu\text{g/mL}$ for all reagents were used, which is a significantly higher concentration than our standard transfection concentrations. Each formulation was transfected for 24 hours.



Supplementary figure 1: MTT assay of lipofectamine against folate decorated micelleplexes. Concentration ranges were from 0-16 $\mu\text{g/mL}$ and transfected for 24 hours.