Supporting Information

‘Graft-*to*’ Protein:Polymer Conjugates Using Polynorbornene Block Copolymers

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Figure S1. ^{1}H NMR spectra of PEG norbornene monomer and purified PNB samples showing Grubbs' catalyst alkylidene region (18 – 20 ppm).

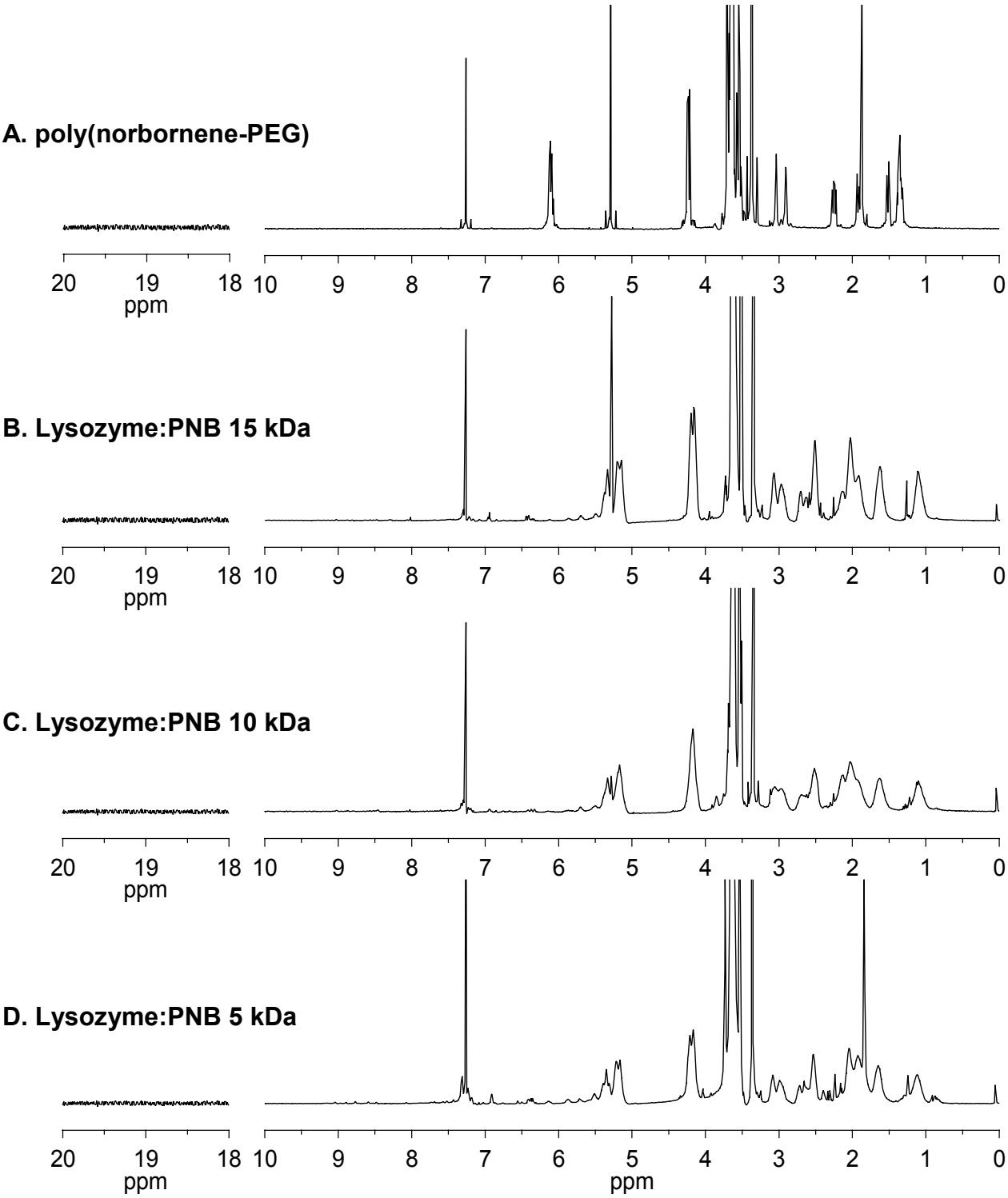


Figure S2. (A) PAGE gel of crude Lysozyme:PNB conjugates, stained with coomassie, showing distinct light blue staining of PNB impurity. (B) PAGE gel of crude Lysozyme:PNB conjugates after 6 hours of de-staining in deionized water. Lane 1 = wild type lysozyme, lanes 2 – 4 represent Lysozyme:PNB conjugates with 5, 10, and 15 kDa PNB, respectively.

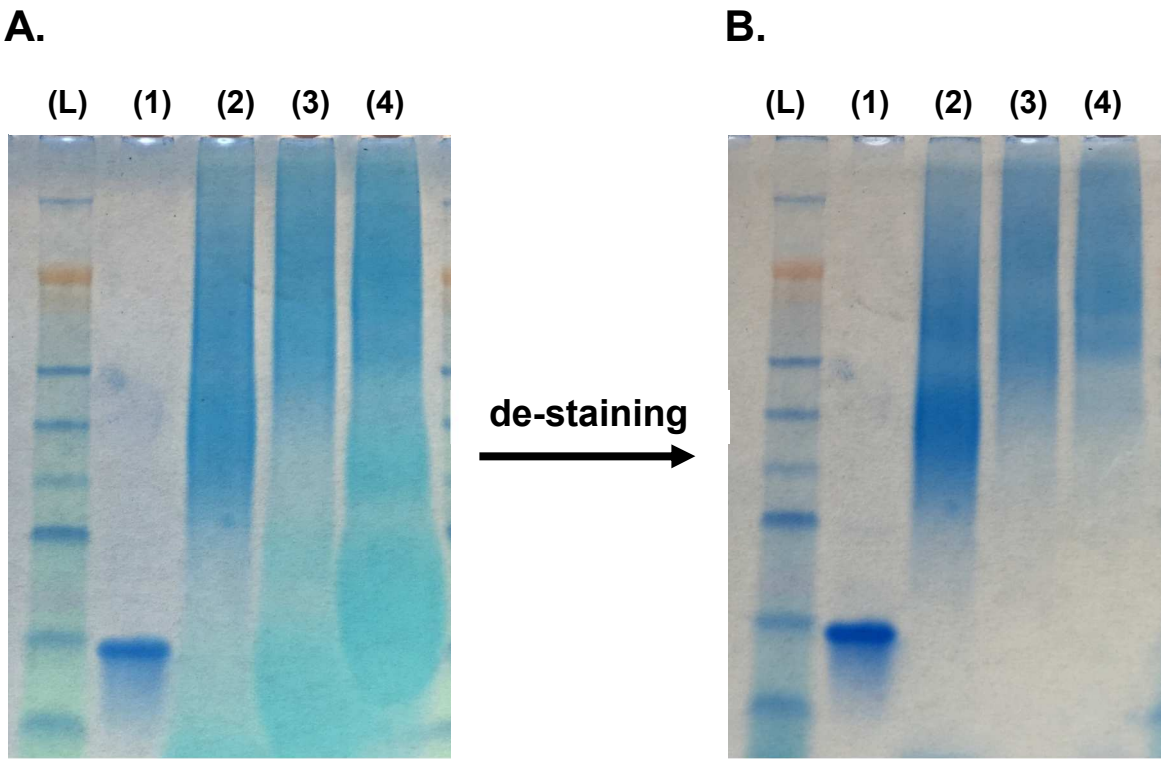


Figure S3. FPLC chromatograms of PNB and crude lysozyme:PNB conjugates. Black curve = 280 nm, gray curve = 254 nm.

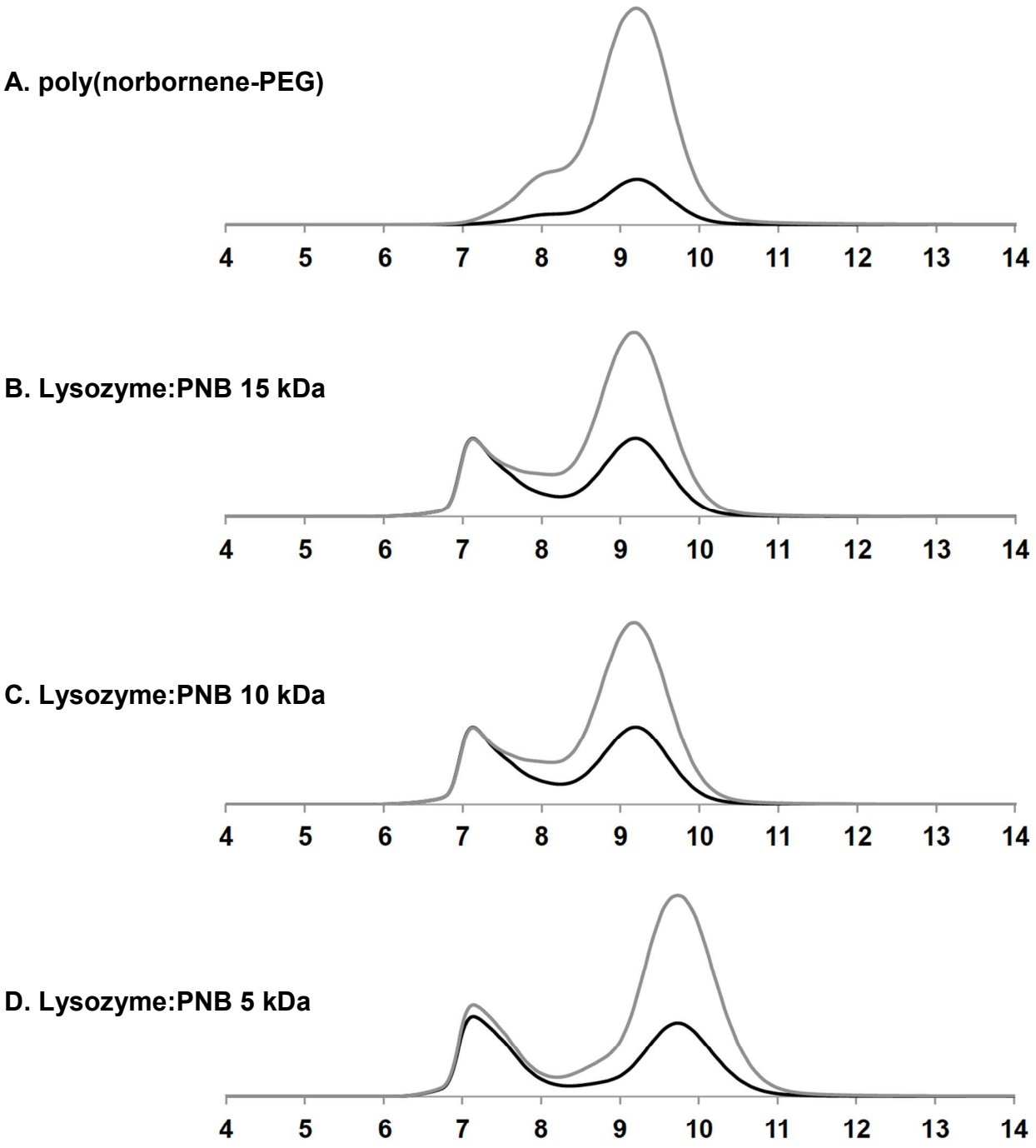


Figure S4. UV absorbance spectra of purified PEGylated PNB (15 kDa, black line), and purified lysozyme:PNB conjugate (15 kDa, red line).

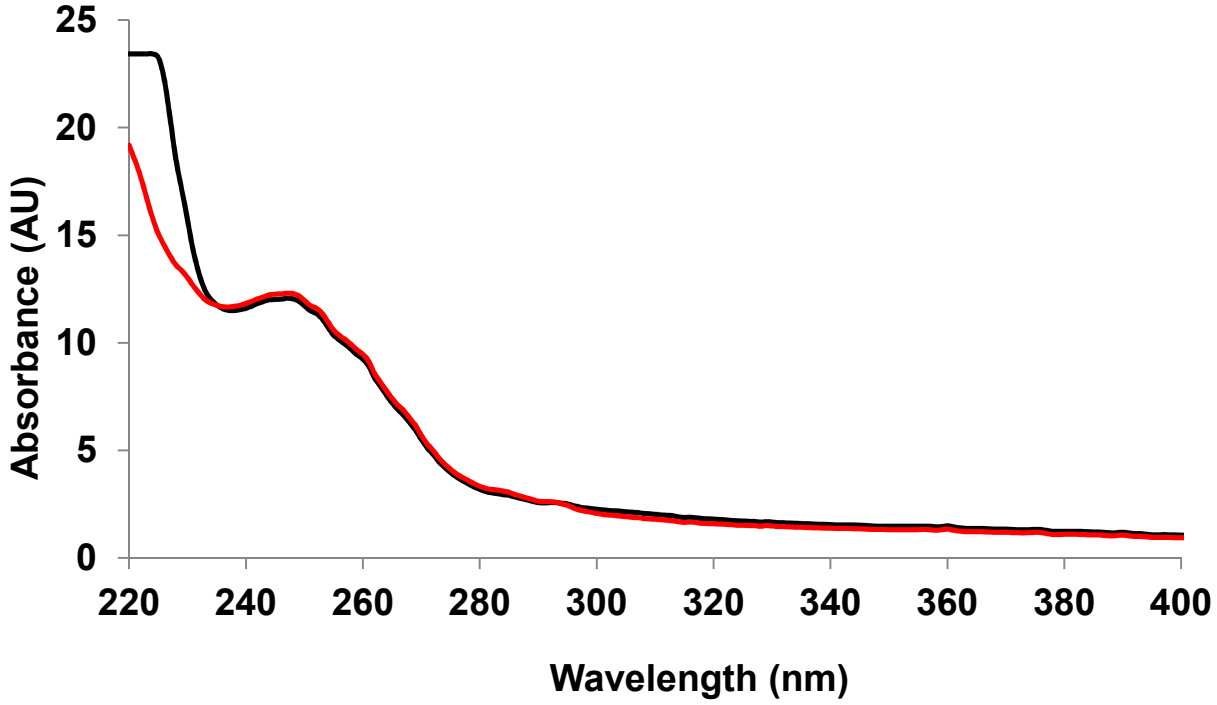


Figure S5. Circular dichroism spectrum of free, purified 10 kDa PNB (1 mg/mL).

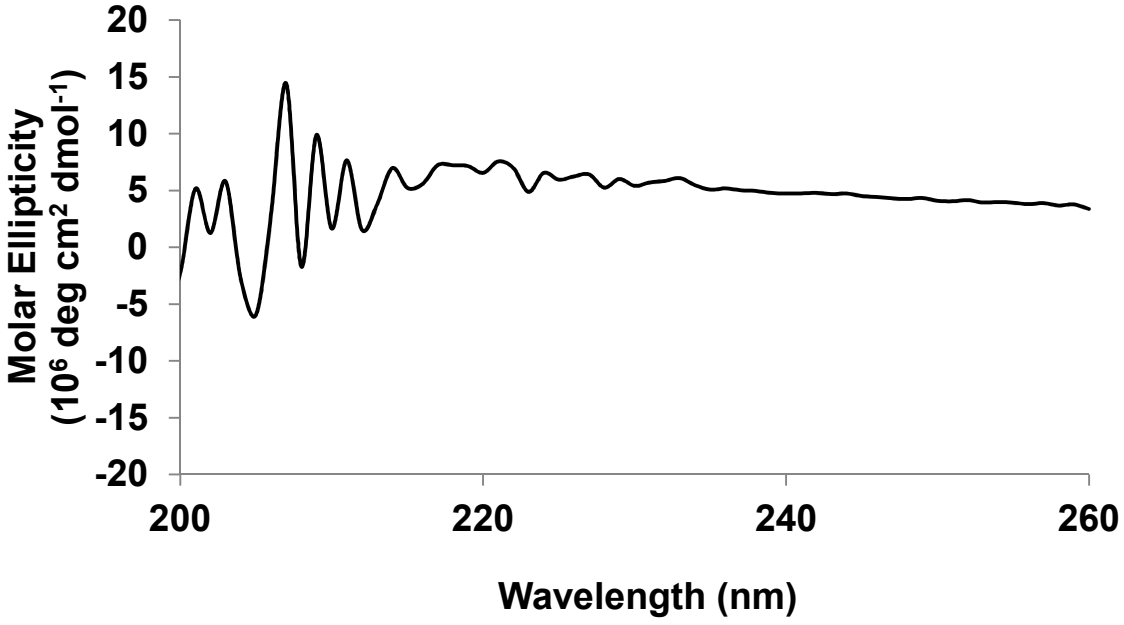


Figure S6. PAGE gel showing filtrate and supernatant following Qβ:PNB conjugate purification using 100 kDa MWCO centrifugal spin filtration. Lane 1 = concentrated filtrate after 6 rounds of filtration, Lane 2 = supernatant.

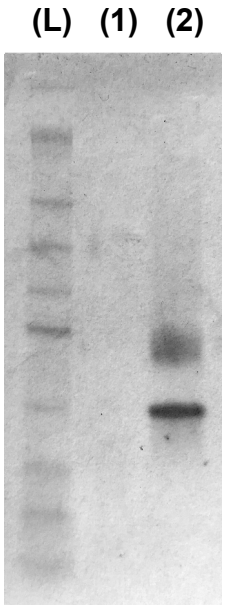
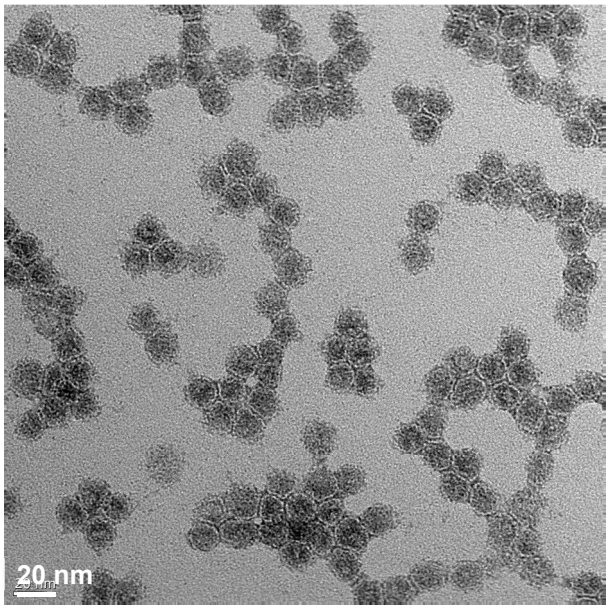
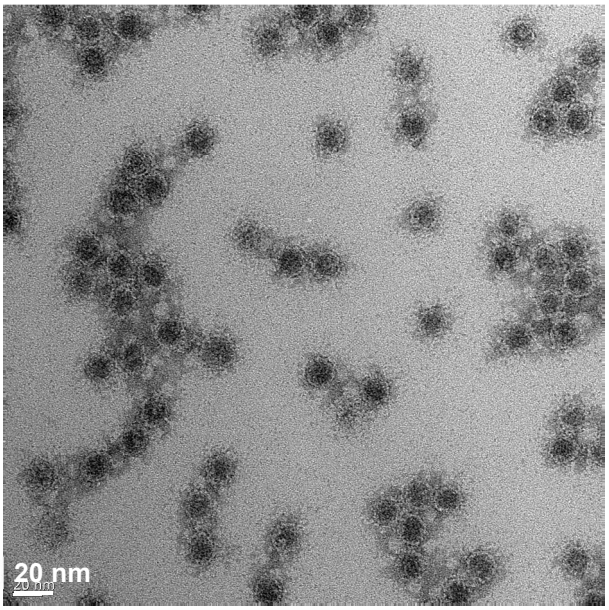


Figure S7. TEM micrographs of (A) wild type Qβ and (B) Qβ:PNB nanoparticle conjugates at 20 nm scale.

A.



B.