

SUPPLEMENTARY DATA

Thermoresponsive nanogels for prolonged duration local anesthesia

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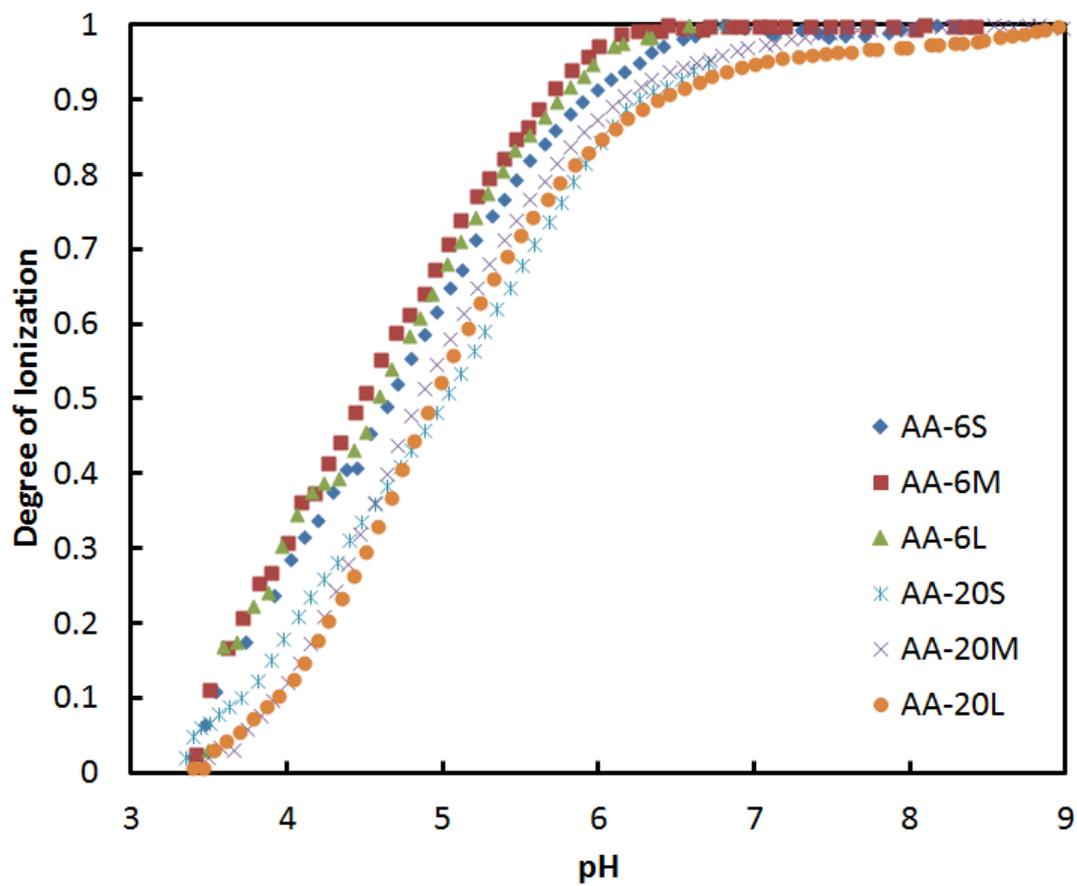


Figure S1. Degree of ionization as a function of pH for core acrylic acid-functionalized nanogels tested

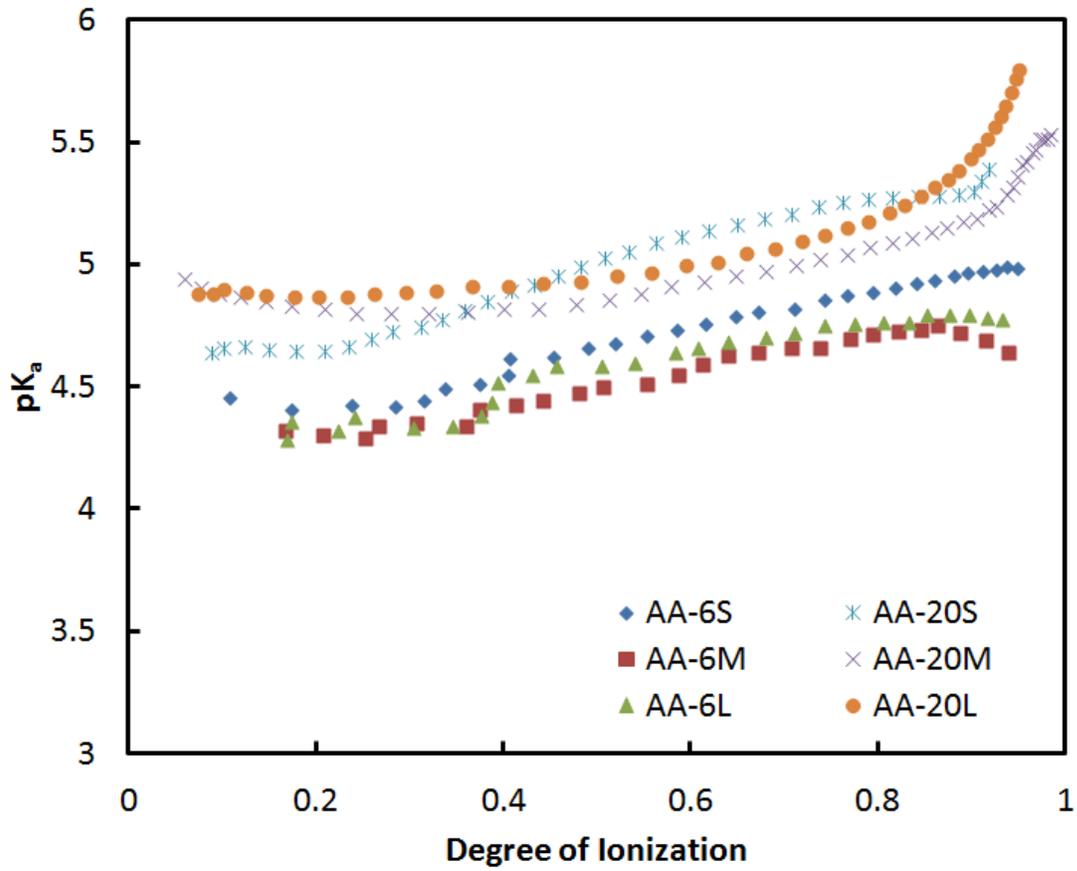


Figure S2. pK_a of core acrylic acid-functionalized nanogels tested as a function of degree of ionization

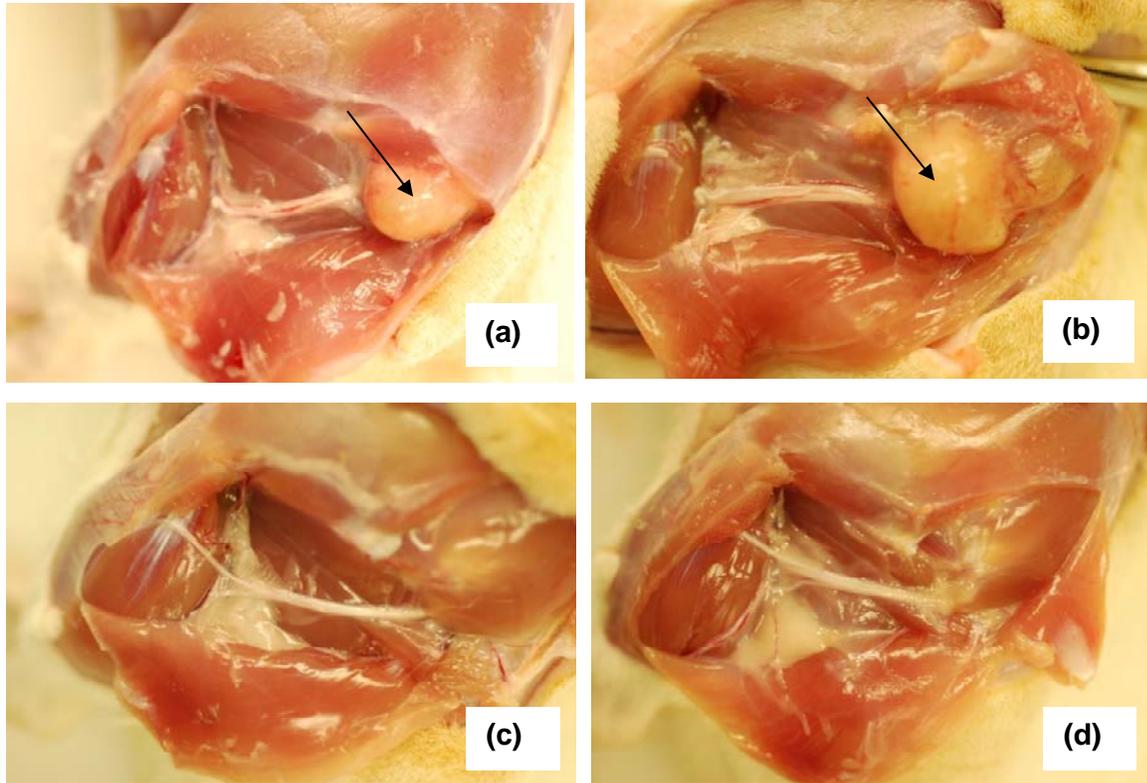


Figure S3. Tissue response to sciatic nerve injection of AA-33 nanogels of different sizes (a) AA-33L, 4 days after injection; (b) AA-33L, 2 weeks after injection; (c) AA-33S, 4 days after injection; (d) AA-33S, 2 weeks after injection. Arrows point to the residual nanogel deposit/inflammatory complex.

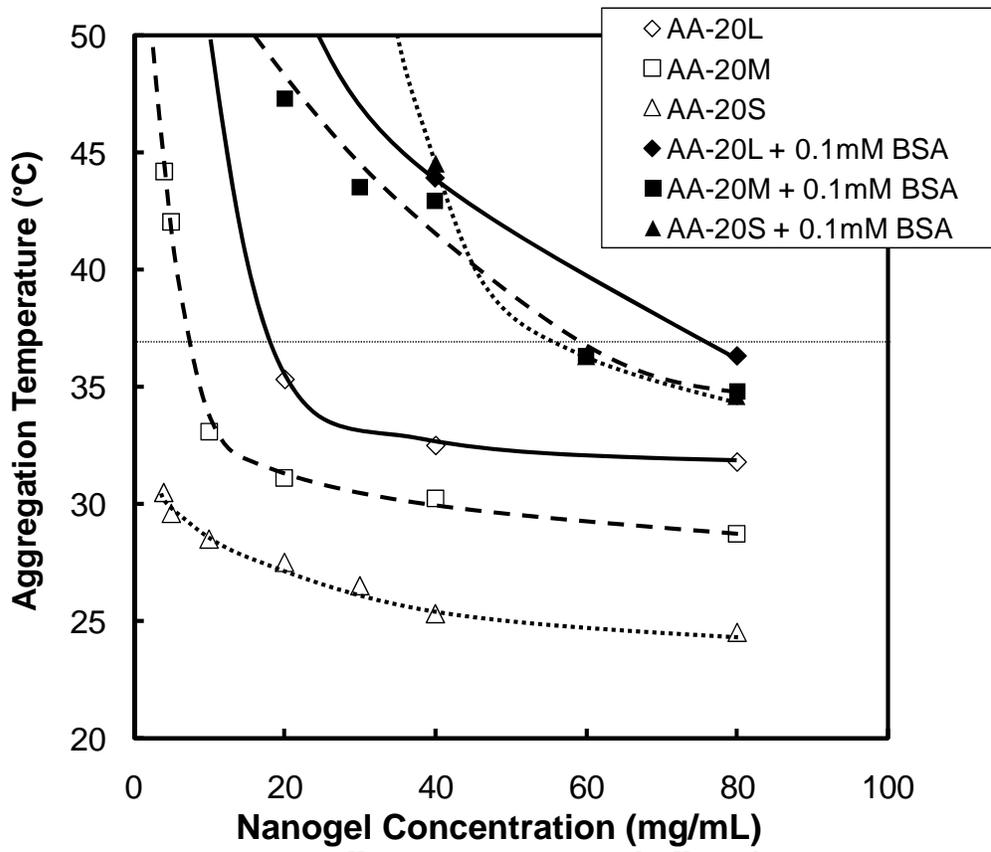


Figure S4. Critical aggregation temperature of AA-20 nanogels with varying sizes as measured in saline (0.15M NaCl) in the absence and presence of 0.1mM bovine serum albumin (BSA), representative of the total protein concentration in interstitial fluid ($n = 4$)

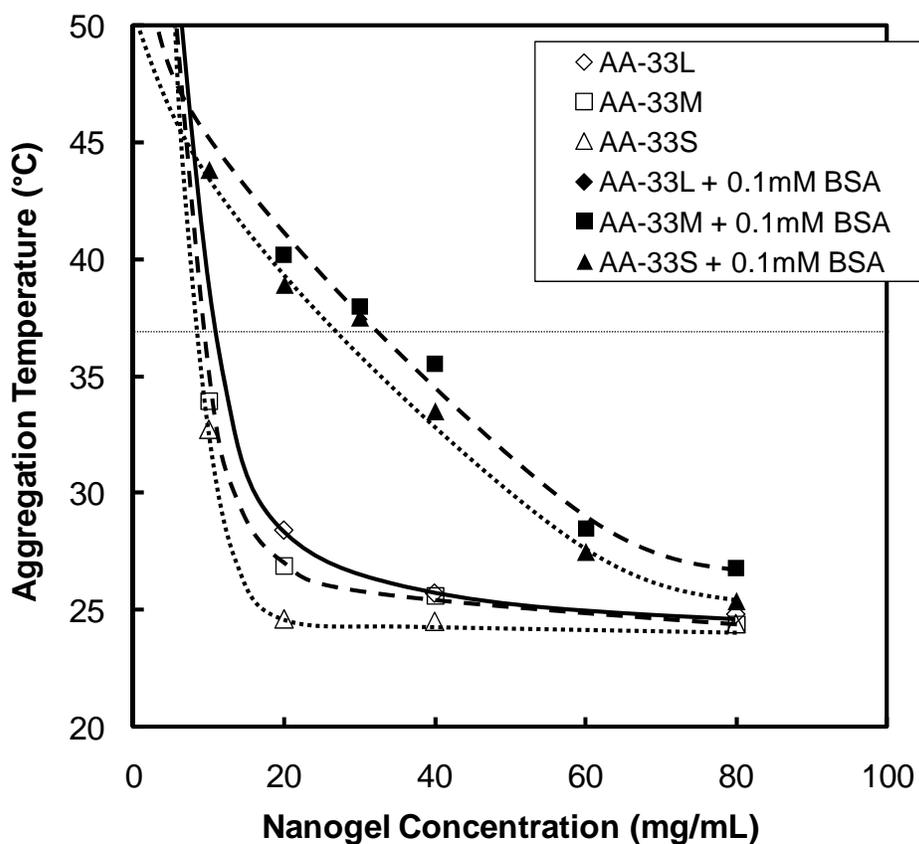


Figure S5. Critical aggregation temperature of AA-33 nanogels with varying sizes as measured in saline (0.15M NaCl) in the absence and presence of 0.1mM bovine serum albumin (BSA), representative of the total protein concentration in interstitial fluid ($n = 4$)