Supporting Information

Stable High-Concentration Monoclonal Antibody Formulations Enabled by an Amphiphilic Copolymer Excipient

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Supplemental Methods

Diffusion Ordered Spectroscopy (DOSY)

A 0.2 mg/ml PGT121 sample in D₂O was prepared by diluting the stock material (55.5 mg/ml PGT121 in 20 mM acetate buffer with 9% (w/v) sucrose, 0.01% PS 80, pH 5.0) in D₂O (Acros Organics) and dialyzing against D₂O in 2000 Da MWCO Slide-A-Lyzer dialysis cassettes (Thermo Scientific) for 24 hours prior to use. MoNi was prepared directly in D₂O at 0.1 mg/mL. ¹H two-dimensional DOSY spectra were recorded using a Varian Inova 600 MHz NMR instrument. Magnetic field strengths ranged from 2 to 57 G cm⁻¹. The DOSY time and gradient pulse were set at 66.5 ms (Δ) and 2 ms (δ), respectively. All NMR data were processed using MestReNova 11.0.4 software.



Figure S1: Diffusion ordered spectroscopy (DOSY) of (a) MoNi alone (0.1 mg/mL) (b) PGT121 alone (0.2 mg/mL) (c) co-formulation of PGT121 and MoNi at 0.2 mg/mL and 0.1 mg/mL, respectively.



Figure S2: Mouse weight over time post treatment