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Supporting information for article:

Nanocrystalline Protein Domains via Salting-Out

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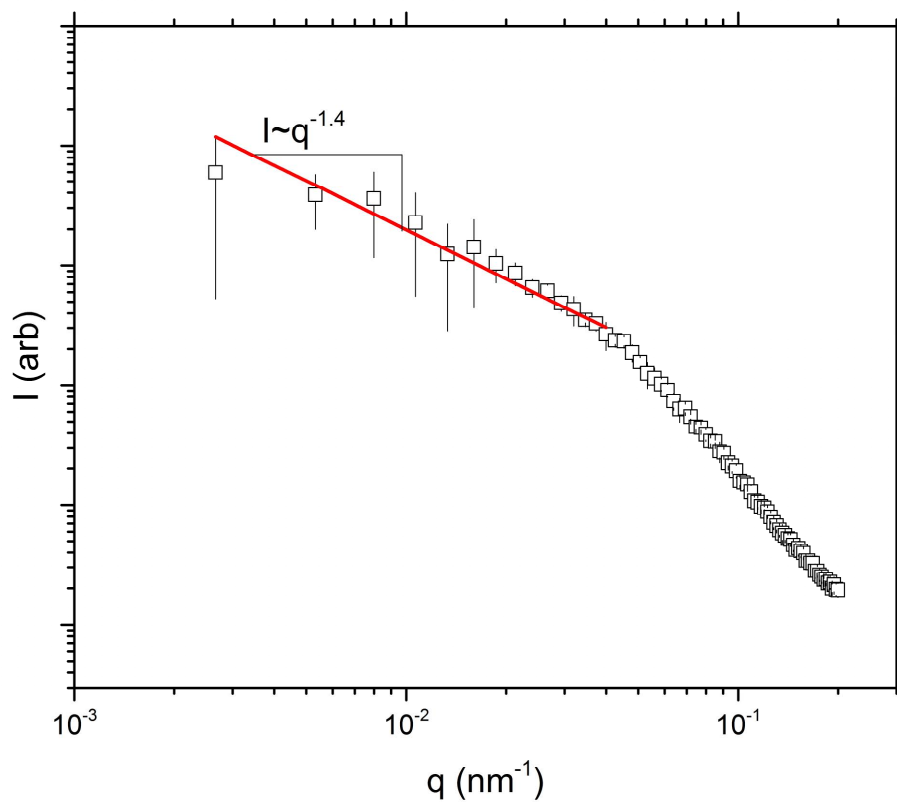


Figure S1 Power spectrum of the interior of an RNase A spherulite particle (Fig. 2 B). The best-fit power-law index to the low- q region is -1.4 ± 0.1 , which corresponds to a fractal dimension of 2.4 ± 0.1 .

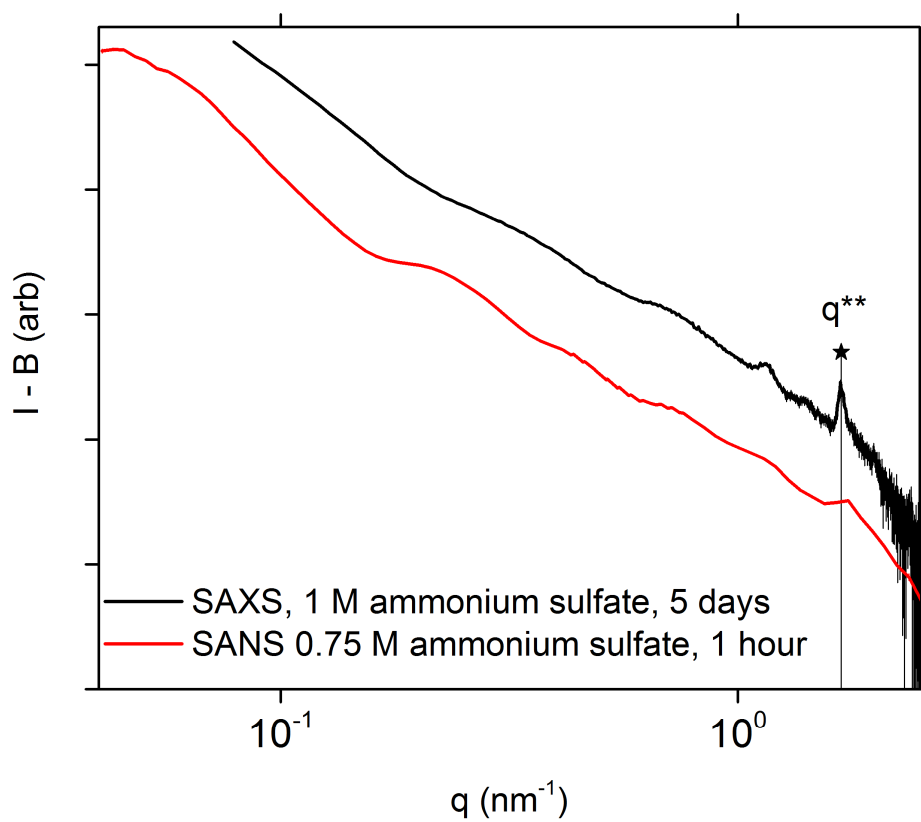


Figure S2 Comparison of SAXS and SANS data from IgG1. SANS data are identical to those in Fig. 3 D. SAXS data were taken 5 days after sample preparation and illustrate that the peak at q^{**} sharpens over time.

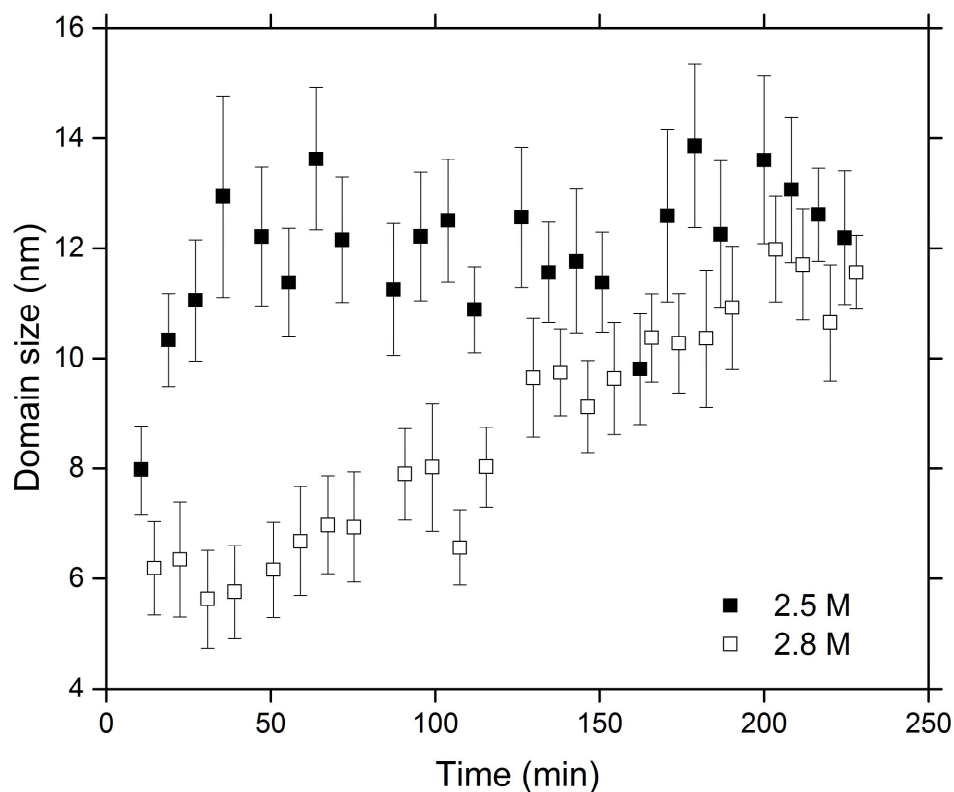


Figure S3 Growth of ovalbumin nanocrystals at 5 mg/mL over time as a function of ammonium sulfate concentration (closed symbols: 2.5 M, open symbols: 2.8 M). The domain size is obtained from the high- q peak width via Scherrer's equation. Increases in salt concentration significantly slow nanocrystalline growth.

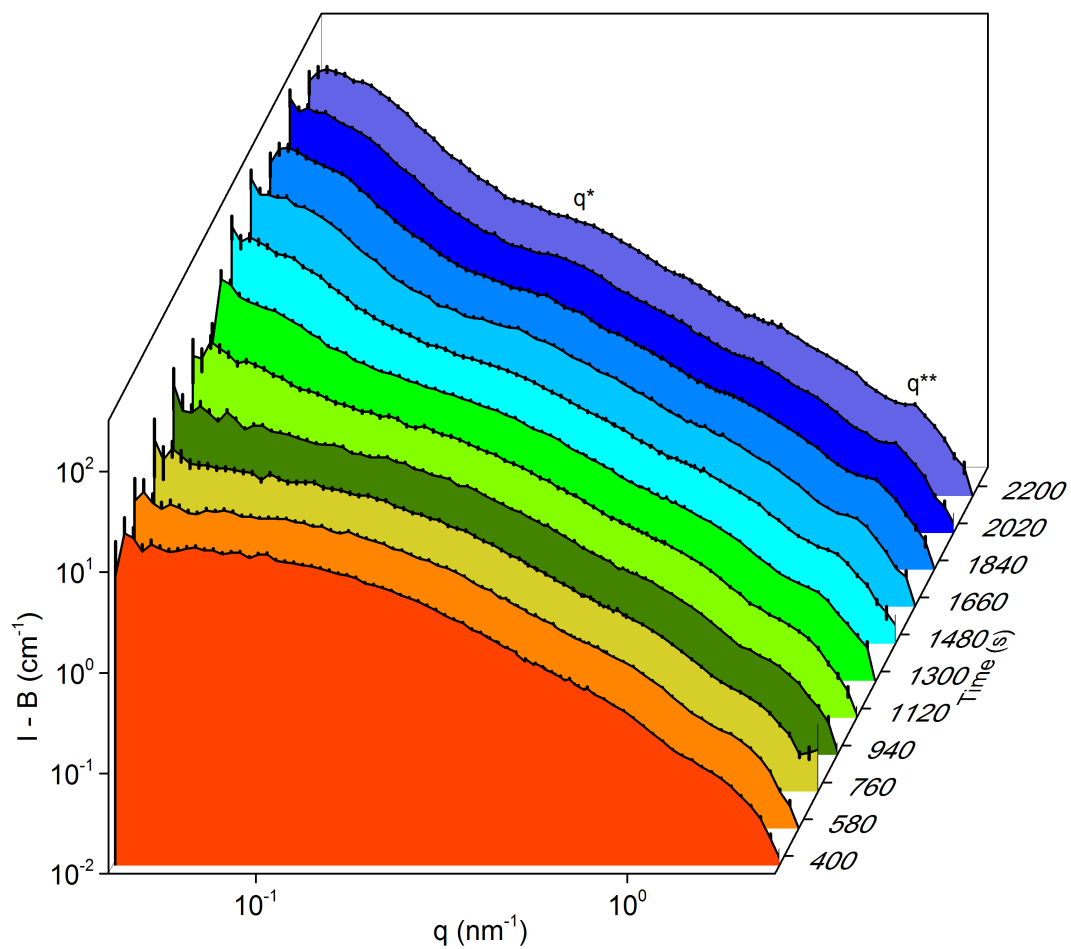


Figure S4 Time-resolved SANS data taken from IgG1 dense phase salted out at 0.75 M ammonium sulfate. The nanocrystals grow over the course of about 40 minutes. The last profile (light purple) is identical to the profile shown in Fig. 3 D.

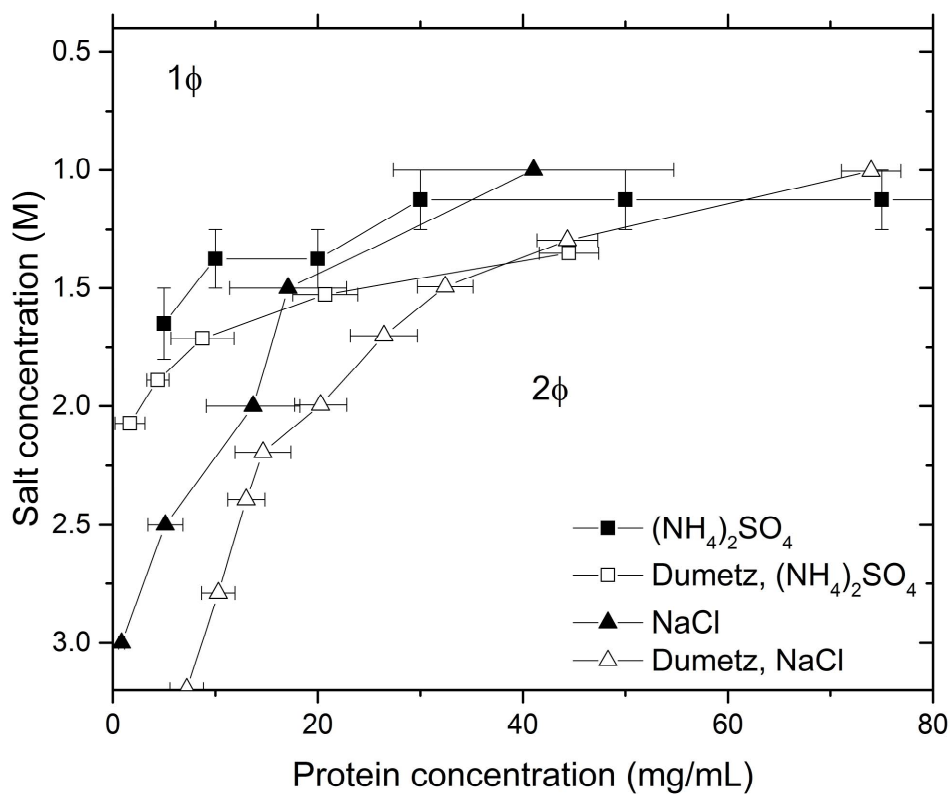


Figure S5 Instantaneous phase boundaries for lysozyme salted out with ammonium sulfate and sodium chloride as compared to values reported in Dumetz *et al.* (2008).

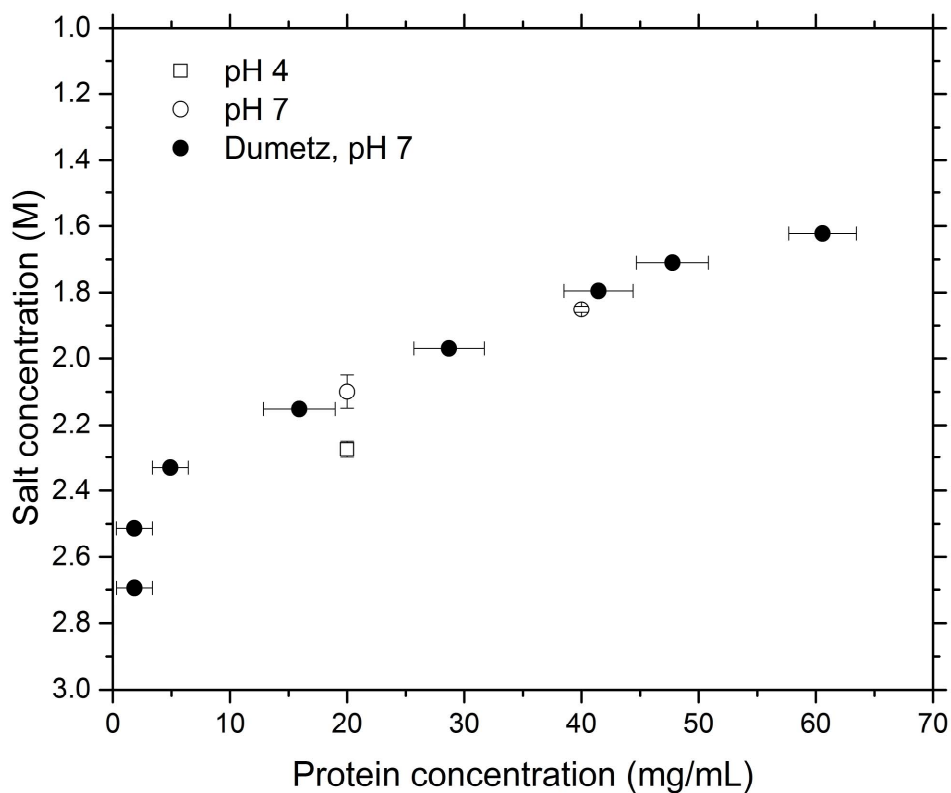


Figure S6 Instantaneous phase boundaries for ribonuclease A salted out with ammonium sulfate as compared to values reported in Dumetz *et al.* (2008).

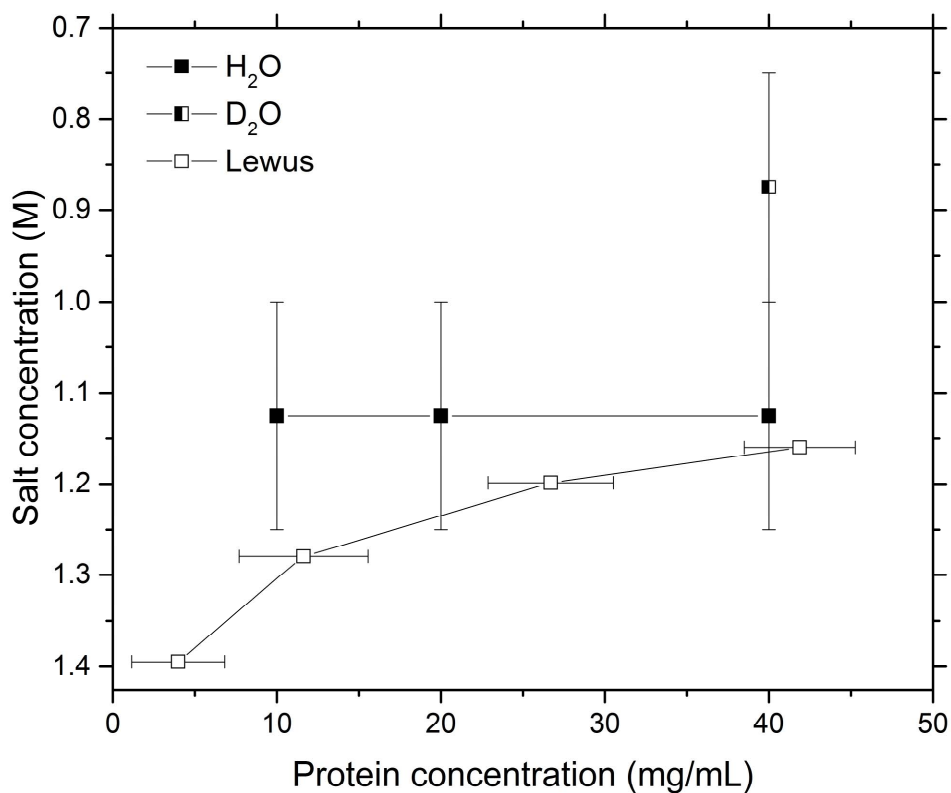


Figure S7 Instantaneous phase boundaries for IgG1 salted out with ammonium sulfate in H₂O and D₂O as compared to results of Lewus *et al.* (2015). There is a slight decrease in salt concentration when moving to a deuterated system.

Movie Captions

Movie M1

Time-resolved SANS of ovalbumin nanocrystal growth. Conditions: ovalbumin concentration, 40 mg/mL; ammonium sulfate concentration, 2.1 M; pD, 7.0. Elapsed time, in seconds, is shown at upper right. Select time points from these data are plotted in Fig. 4.

Movie M2

Time-resolved SANS of mAb nanocrystal growth. Conditions: mAb concentration, 40 mg/mL; ammonium sulfate concentration, 0.75 M; pD, 5.0. Elapsed time, in seconds, is shown at upper right. Select time points from these data are plotted in Fig. S4.