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## Supplement of

## Protein aggregates nucleate ice: the example of apoferritin

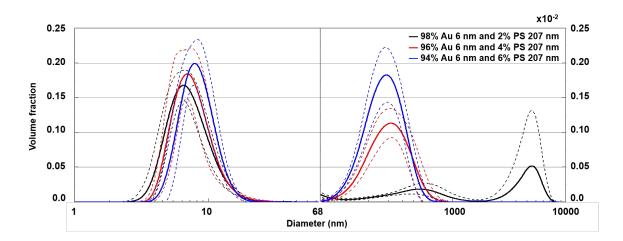
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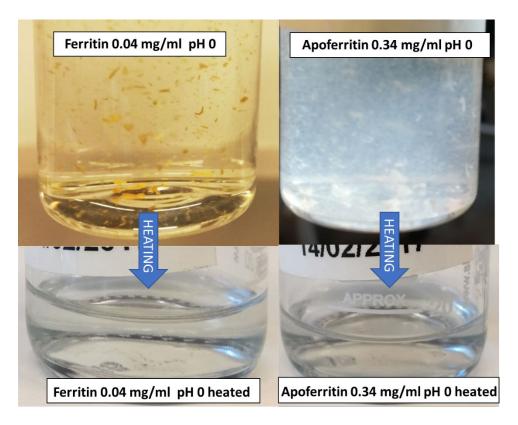
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Figure S1. Color of ferritin (right vial) compared with colorless apoferritin (left vial).



**Figure S2.** Volume-weighted distribution of polystyrene latex and gold nanoparticles mixtures measured by dynamic light scattering. (a) Main peak corresponds to the 6 nm gold signal. (b) Secondary peak corresponds to the polystyrene signal (207 nm). Mixing ratios gold/polystyrene: 98/2 (black), 96/4 (green), 94/6 (pink). Solid lines are averages of multiple measurements; dashed lines indicate one standard deviation.



**Figure S3.** Effect of pH 0 and pH 0 combined with heating to 110°C on the appearance of ferritin and apoferritin solutions.

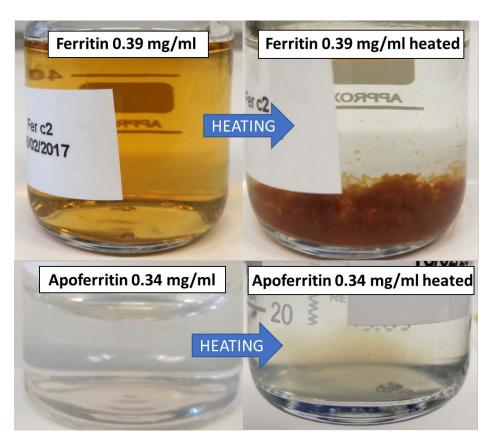
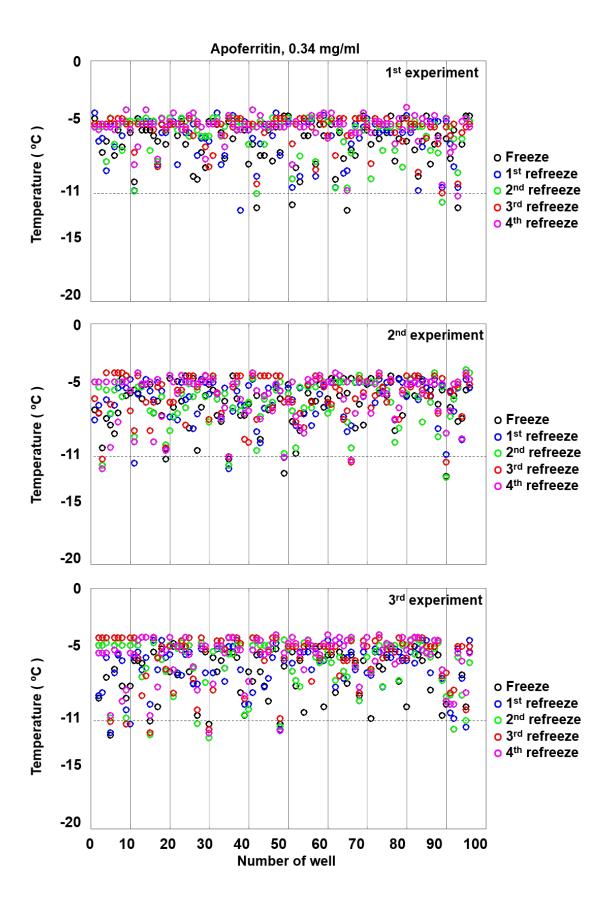
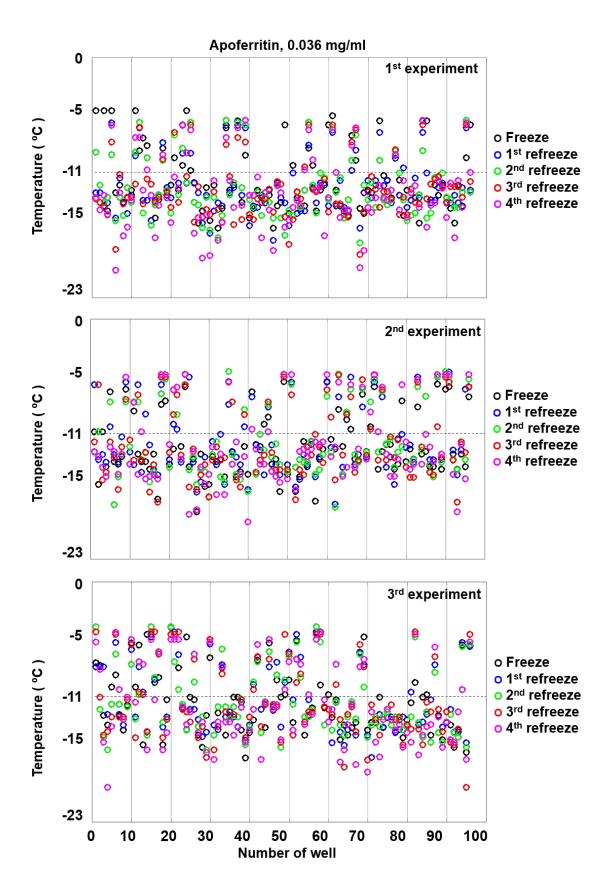
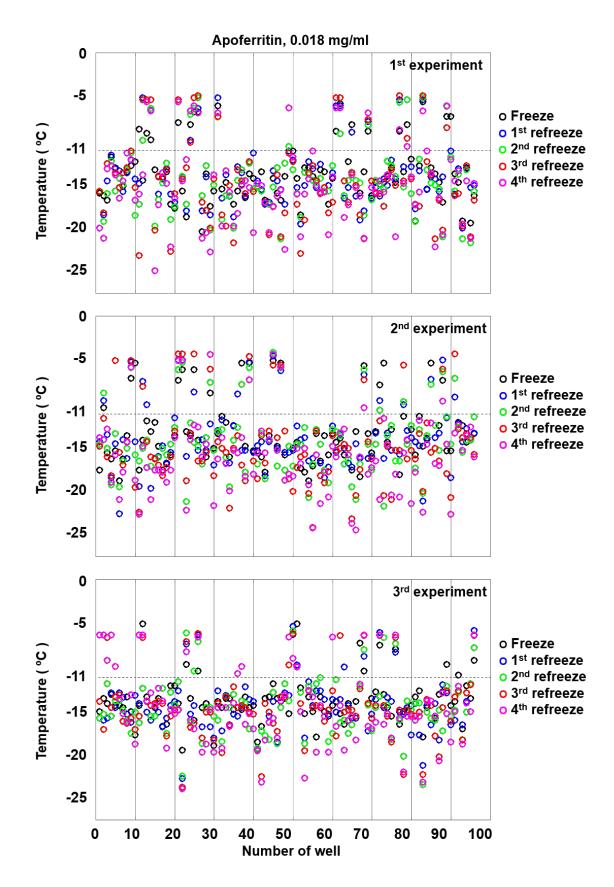


Figure S4. Effect of heating to 110°C on the appearance of ferritin and apoferritin solutions.







**Figure S5**. Well per well results of refreeze experiments performed with apoferritin (batch 2) with concentrations of 0.34 mg/ml, 0.036 mg/ml and 0.018 mg/ml.