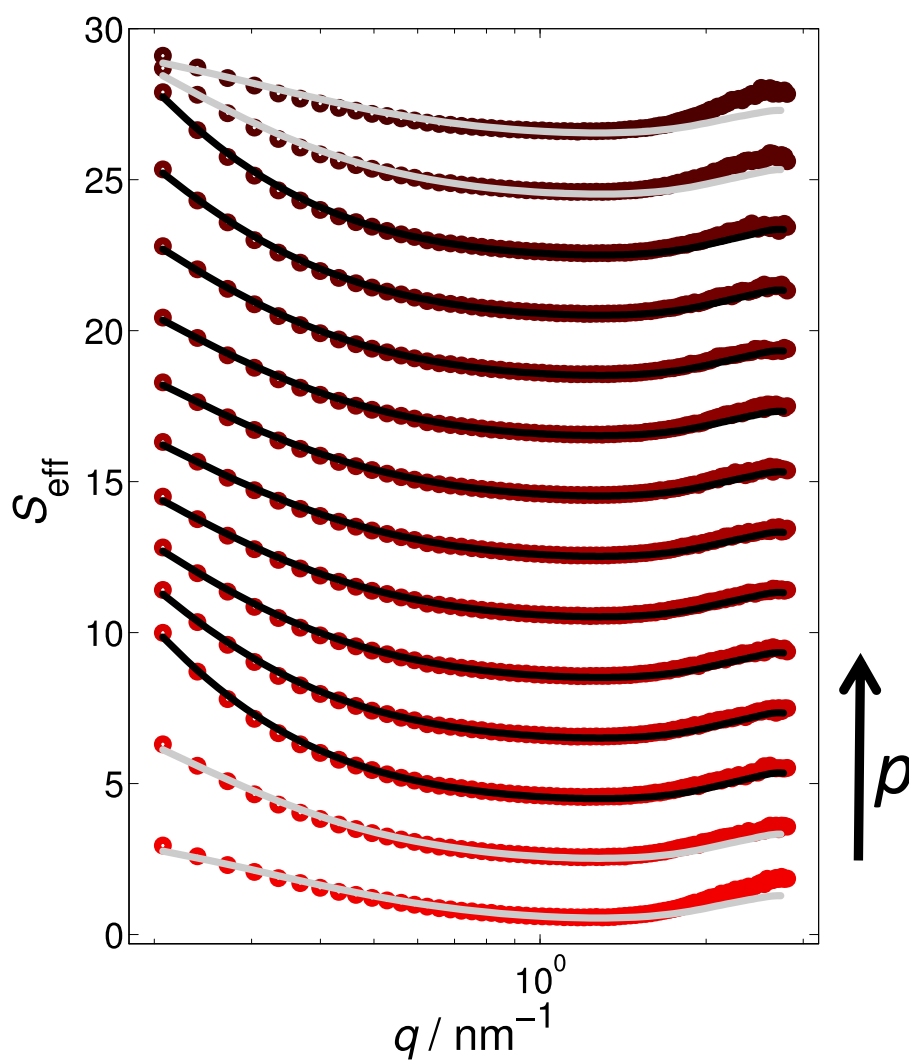


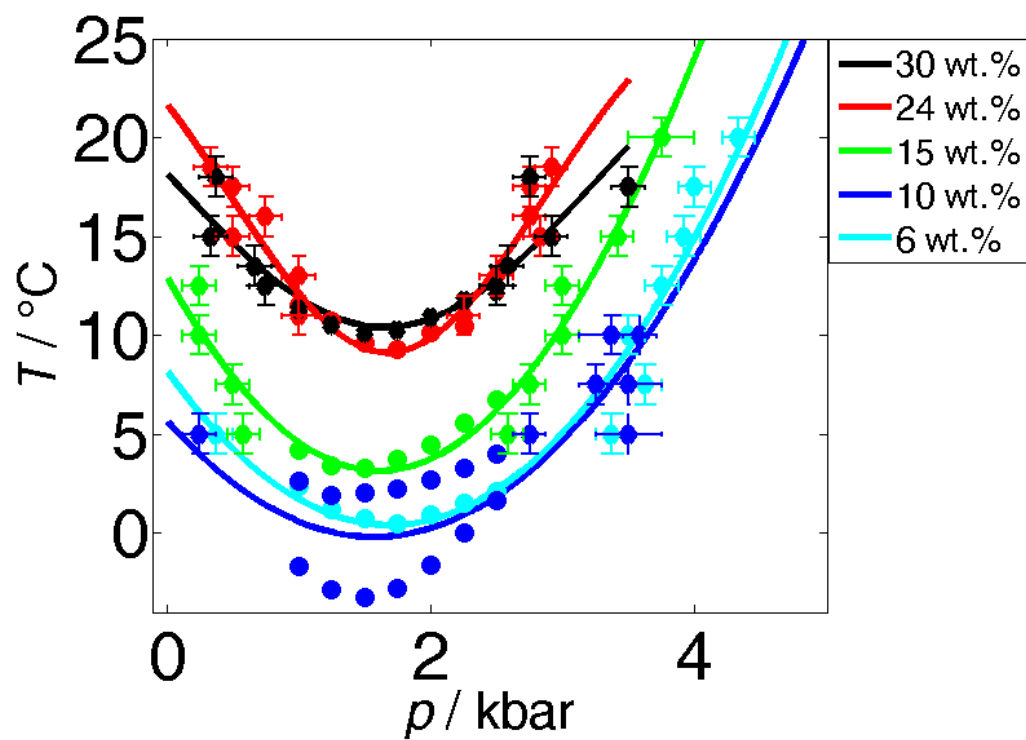
PCCP

Supporting Information

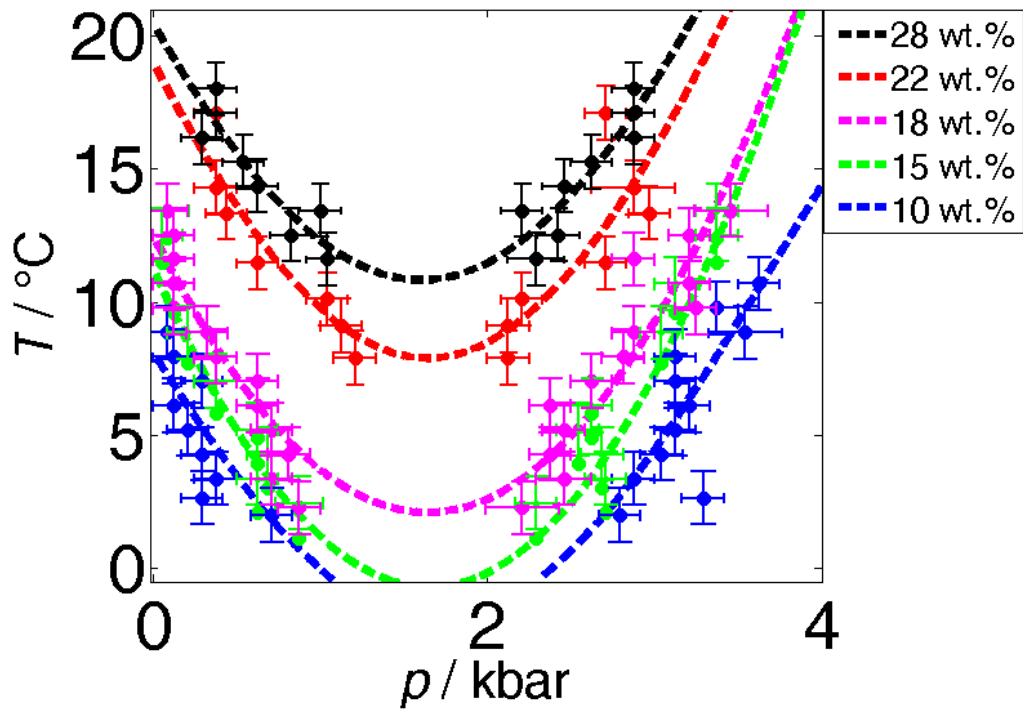
### Additional Figures



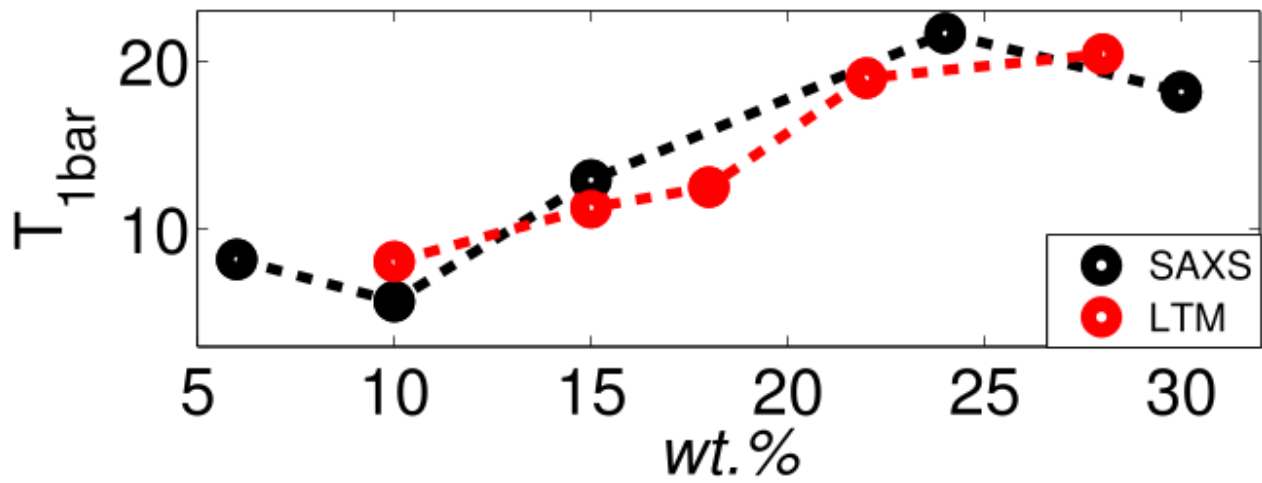
**SI Figure 1:** Measured effective structure factor  $S_{\text{eff}}(q)$  of a 24 wt.% lysozyme solution for selected pressures at  $T = 15\text{ °C}$  (dots). Black lines indicate the fits in the homogenous phase, grey lines indicate fits in the LLPS phase. Lines are shifted by 2 units towards higher pressures.



**SI Figure 2:** Overview of all LL-phase transitions as determined by the SAXS measurements for all concentrations as well as the corresponding Gaussian fits.



SI Figure 3: Overview of all LL-phase transitions as identified by the turbidity measurements as well as the Gaussian fits.



SI Figure 4. Overview of LL-phase transition temperatures at 1 bar obtained by SAXS and turbidity measurements.