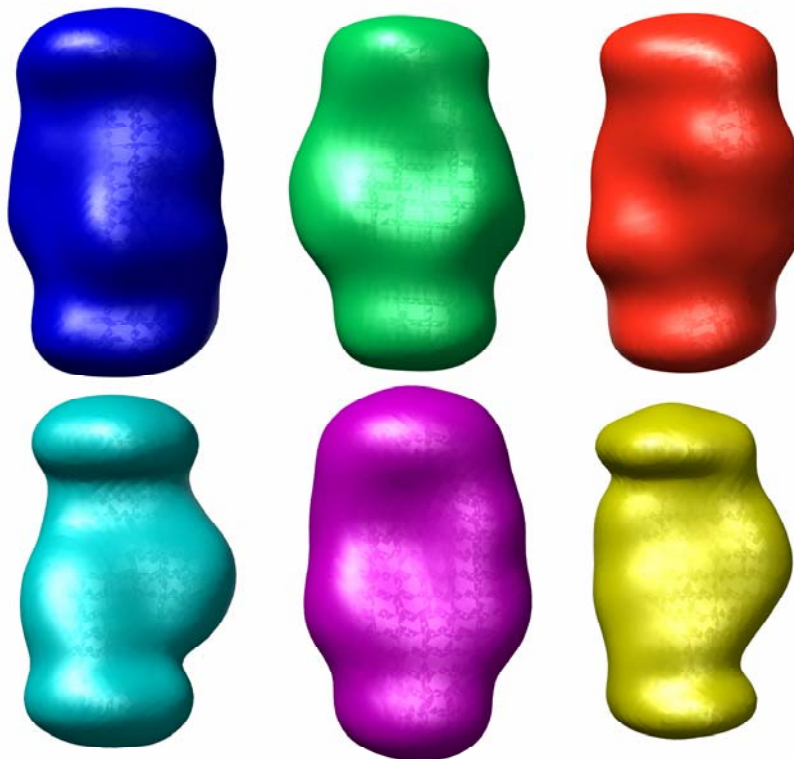


## Supplementary Data:



Caption: Additional reconstructions of P4-P6 test the effect of truncating the  $q$  range of the scattering profile.

This figure shows reconstructions of scattering profiles acquired 92, 125, and 168 ms (left to right) after the initiation of P4-P6 folding by the addition of  $\text{Mg}^{2+}$ . The three structures in the top row exclude low signal to noise data ( $q > 0.18 \text{ \AA}^{-1}$ ). The MNSD for these averages are 0.589, 0.547 and 0.599 respectively. The structures pictured in the bottom row employ all of the scattering data, and are identical to those shown in the paper.