



Supplementary information, Fig. S2. Phase diagrams of MeCP2 domain truncations with 4x601 NA and 4x601 DNA.

a EM images (left panels) and sedimentation coefficient distribution plots (right panel)

of chromatin fibers compacted by the indicated MeCP2 domain truncations. Scale bar, 50 nm. **b** Histogram of statistics the ability of chromatin compaction is indicated by the sedimentation coefficient of AUC when the boundary fraction is 50% in Supplementary information, Fig. S2a. **c** Phase diagrams of the indicated MeCP2 domain truncations with 4x601 NA. Scale bars, 20 μ m. **d** Phase diagrams of FL MeCP2 and domain truncations with 4x601 DNA. Scale bars, 20 μ m. **e-f** Stacked histogram of the ability or strength of phase separation is indicated by the percentage of 4*4 phase diagrams when MeCP2 proteins mixed with 4x601 NA or DNA in Fig. 1g-h and Supplementary information, Fig. S1c-d.