



Supplementary information, Fig. S5. Defective in vitro phase separation of Rett syndrome-related MeCP2 nonsense mutants with 4x601 NA is rescued by WT MeCP2.

a Weak phase separation of the Rett syndrome-related MeCP2 nonsense mutant proteins with 4x601 NA is enhanced by adding WT MeCP2 protein. Top, phase diagrams of the Rett syndrome-related MeCP2 nonsense mutants with 4x601 NA.

Bottom, phase diagrams of the samples after adding extra WT MeCP2. Scale bars, 5 μm . **b** Immunofluorescence of MeCP2 in hippocampal neurons from adult mice. Scale bar, 10 μm . **c** Statistical analysis of MeCP2 on the heterochromatin in 3T3 cells and in mouse hippocampal neurons in Fig. 3f and Supplementary information, Fig. S5b. **d** Top, localization of overexpressed mCherry-MeCP2-R270X to heterochromatic chromocenters marked by DAPI in NIH 3T3 cells. Bottom, colocalization of EGFP-MeCP2 with mCherry-MeCP2-R270X in NIH 3T3 cells. Scale bars, 5 μm .