Supplementary Data

Extending MeCP2 interactome: Canonical nucleosomal histones interact with MeCP2

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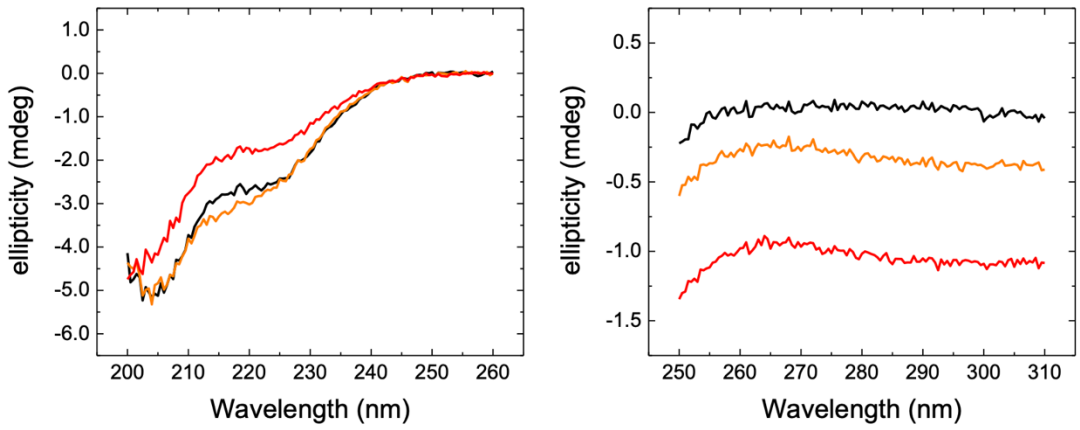

Figure S1. Trimethylation induces small structural effects on H3. Far-UV circular dichroism spectra for H3 (black), H3 K27C (orange), and H3 K27me3 (red). The substitution of K2 of a cysteine in K27 position required for the trimethylation procedure did not perturb much the structure of H3, whereas the trimethylation somewhat perturbed the structure of H3.

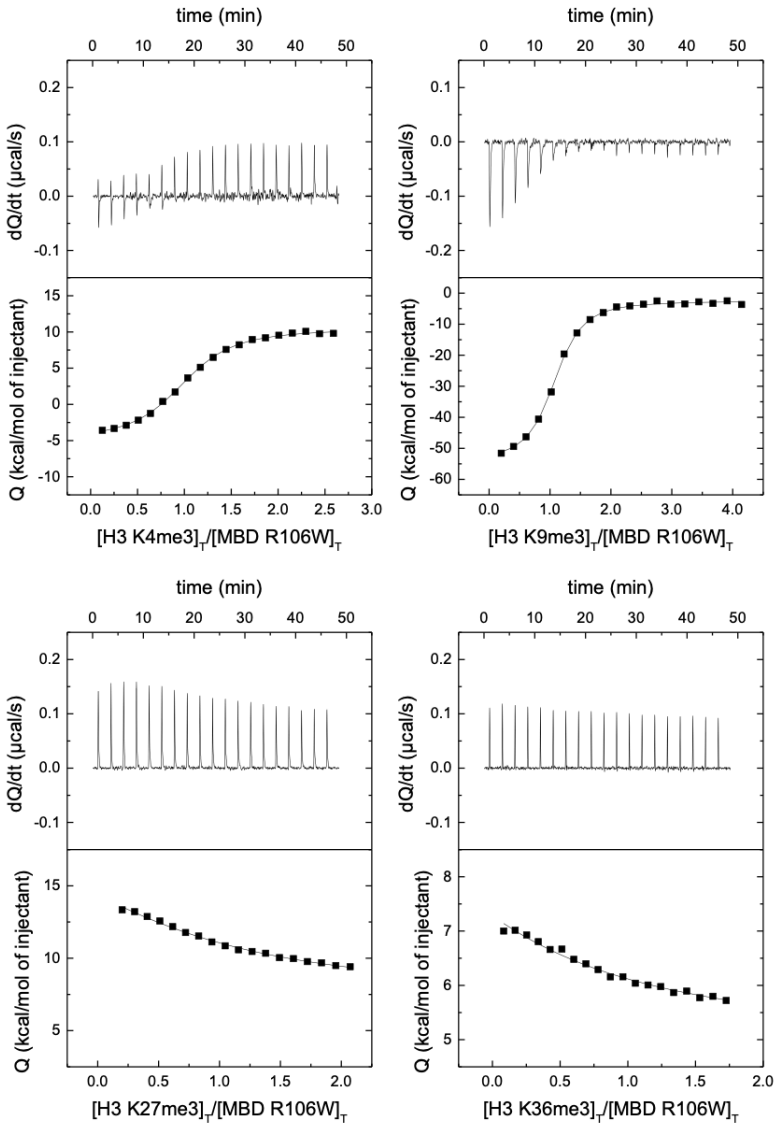

Figure S2. MeCP2 R106W interaction with trimethylated H3 by ITC. Calorimetric titrations of MBD R133C interacting with H3 trimethylated at K4, K9, K27, and K36. The upper panels show the thermograms (thermal power as a function of time to maintain the same temperature in the sample cell with respect to the reference cell), and the lower panels show the binding isotherms (ligand-normalized heat effect per injection as a function of the molar ratio in the sample cell). The continuous lines correspond to the non-linear least-squares fitting according to a single binding site model.

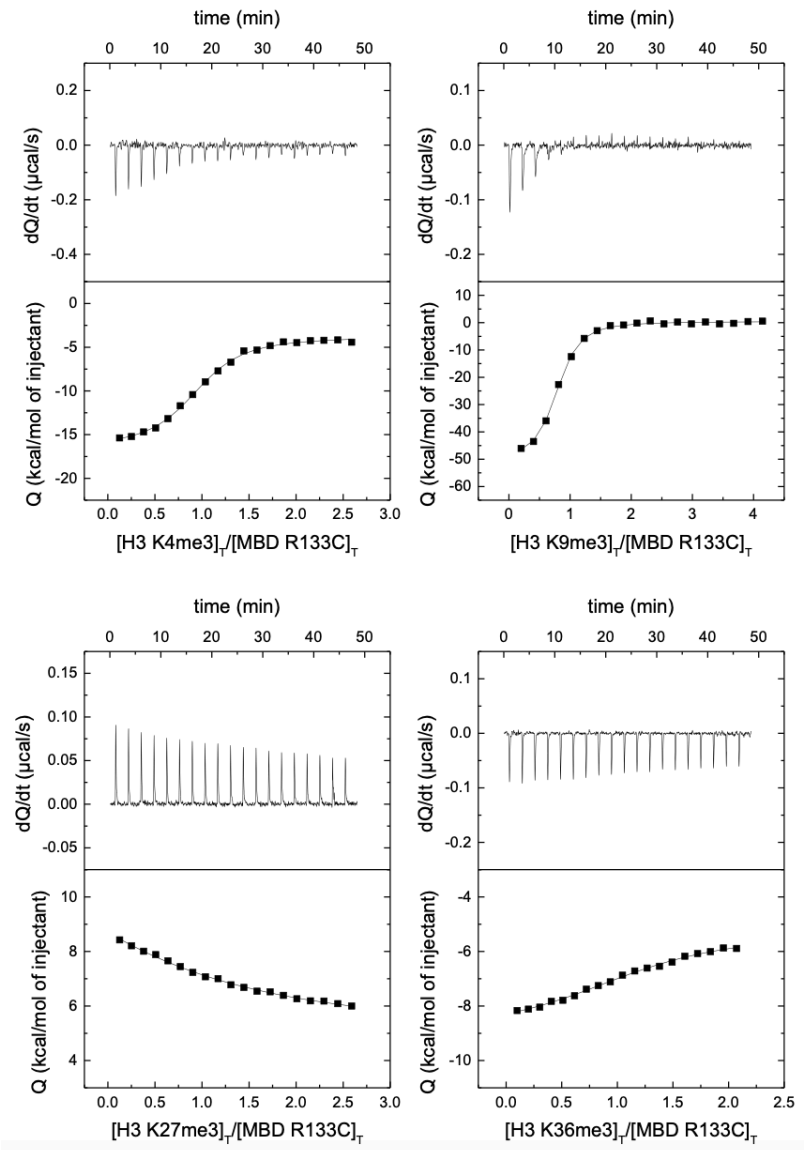

Figure S3. MeCP2 R133C interaction with trimethylated H3 by ITC. Calorimetric titrations of MBD R133C interacting with H3 trimethylated at K4, K9, K27, and K36. The upper panels show the thermograms (thermal power as a function of time to maintain the same temperature in the sample cell with respect to the reference cell), and the lower panels show the binding isotherms (ligand-normalized heat effect per injection as a function of the molar ratio in the sample cell). The continuous lines correspond to the non-linear least-squares fitting according to a single binding site model.