Description of Additional Supplementary Files:

Supplementary Movie 1: Induction movement of MtrR. Morph video of induced MtrR bound to β -estradiol and MtrR bound to the mtrCDE operator site. Key conformational changes occur in the HTH domain, α 4, and the loop formed by residues 114-122, between helices α 6 and α 7, (opaque blue).