

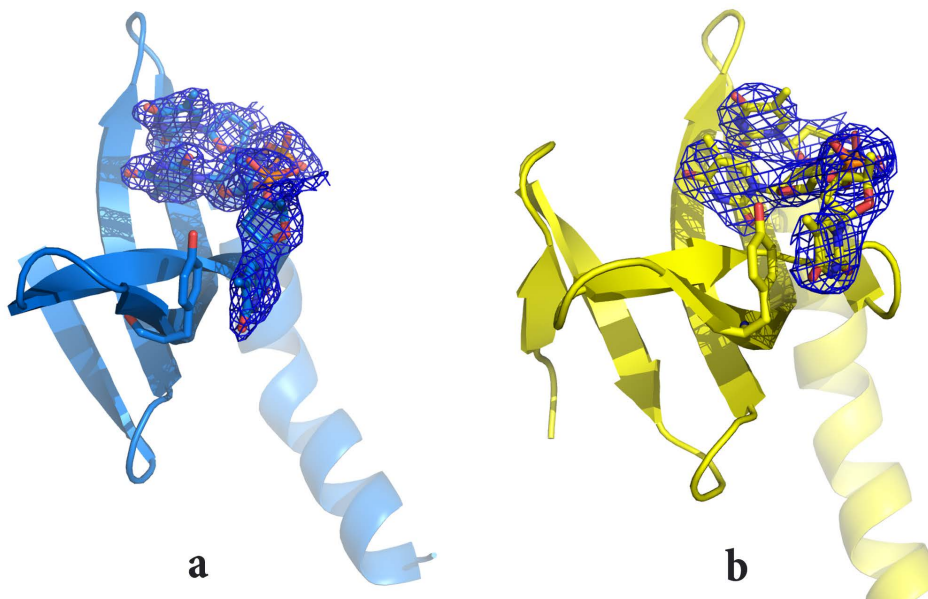
Substitution of tryptophan 89 with tyrosine switches the DNA binding mode of PC4

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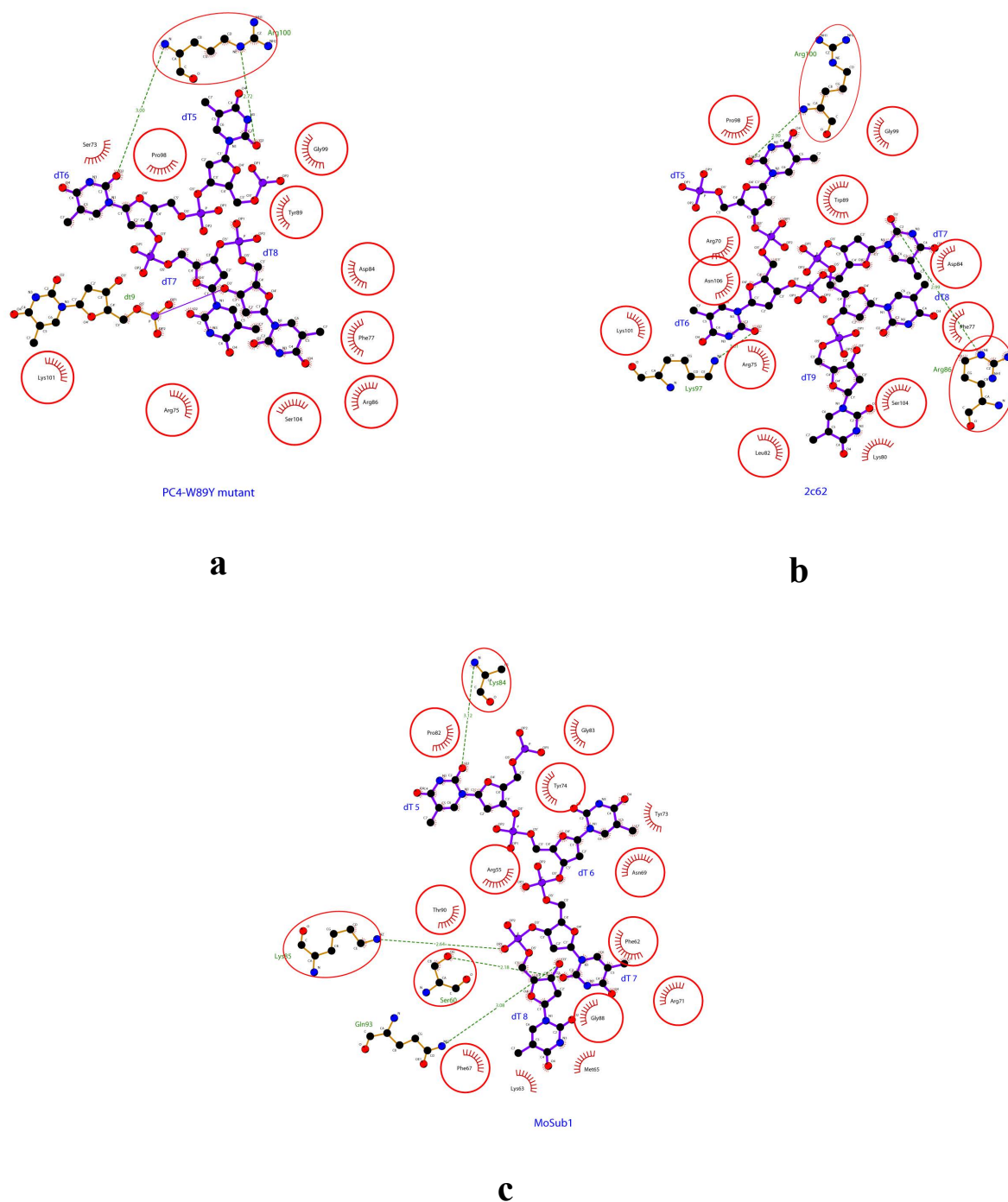
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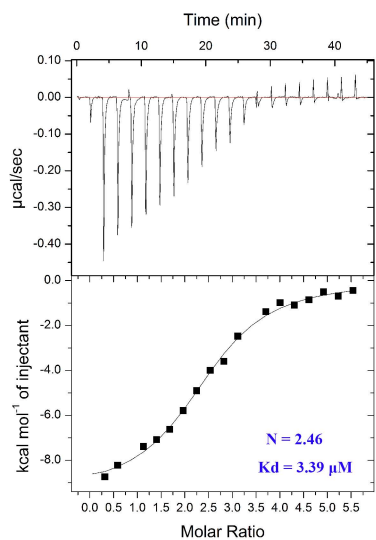
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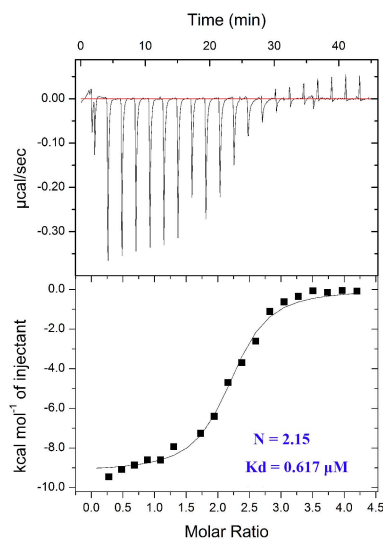
Supplementary Figure 1. 2Fo-Fc electron density maps (blue mesh) contoured at 1.5σ of the DNA around Tyr89 within PC4 W89-DNA complex (a) and Tyr74 in the MoSub1-DNA complex (b).



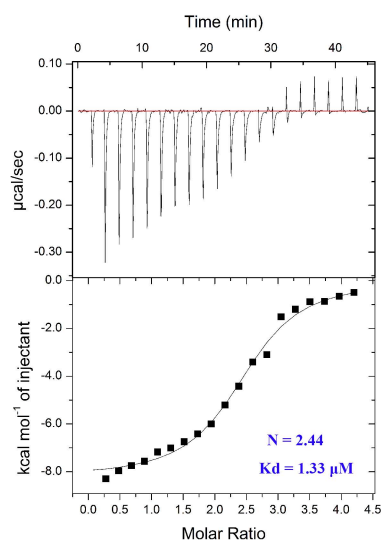
Supplementary Figure 2. The schematic illustrations (Ligplot+) of the protein-DNA contacts in the PC4 W89Y mutant-DNA complex (a), PC4-DNA complex(PDB 2C62) (b), and the MoSub1-DNA complex (c).



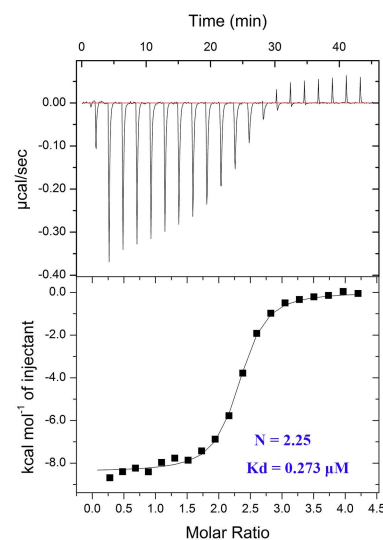
a



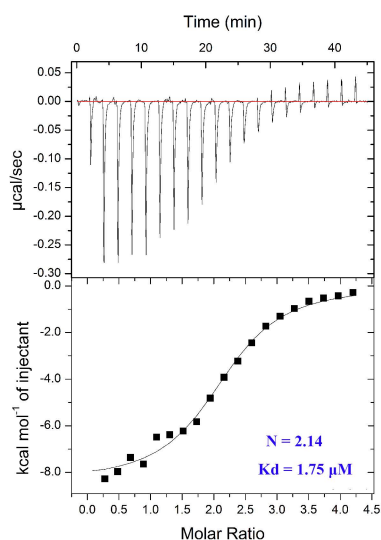
b



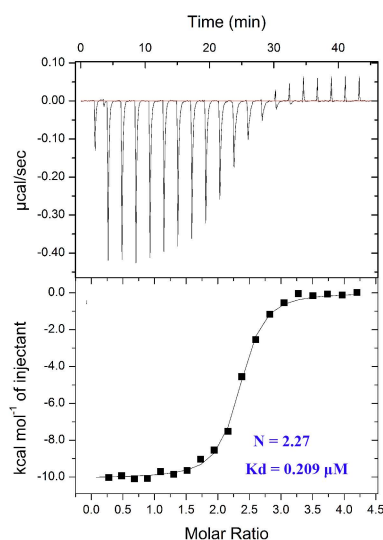
c



d



e



f

Supplementary Figure 3. Representative Isothermal Titration calorimetry (ITC) curves of wild type (a, b) or W89Y mutant (c, d) of PC4, and MoSub1 (e, f), binding with d(T4GGAGGT4) or d(T5GGAGGT5). Upper panels show the raw data, bottom panels show the integrated data. Experimental data were fitted using the 'identical and independent sites' binding models in the Origin Software (Origin Lab).