



**Figure S1.** Quantitative densitometry analysis of TTHB099 binding to its palindromic consensus sequence. Shown is an IR fluorescence image of IRD700-labeled ST2\_099 incubated with 0, 0, 0.66, 1.32, 2.64, 5.27, 10.5, 21.1, or 42.2 nM TTHB099 protein.  $K_D$  is determined as 1.9 nM using data at the binding midpoint (2.64 nM TTHB099). (S) Protein-DNA complex, and (T) uncomplexed DNA.