



S9 Fig. EMSAs of PgMntR variants binding to P1 DNA in the presence or absence of Mn²⁺ or Fe²⁺. (A) Reactions of 800 nM proteins with the biotinylated P1 DNA (1 nM) were performed in the presence or absence of 100 μM Mn²⁺ in 10 mM Tris·Cl buffer (pH 7.5); (B) Reactions of 700 nM proteins with the biotinylated P1 DNA (1 nM) were performed in the presence or absence of 20 μM Fe²⁺ in 10 mM HEPES plus 2 mM TCEP (pH 6.8). Other reagents in the reactions included 50 mM KCl, 2.5% glycerol, 0.05% NP-40 and 50 ng/μL non-specific DNA competitor poly (dI–dC). Reaction volume: 20 μL. Protein-DNA complexes were resolved on a 4% non-denaturing polyacrylamide gel in 0.5 x TBE (A) or TA buffer plus 2 mM TCEP (B) and visualized using the LightShift ® Chemiluminescent EMSA kit.