



**S6 Fig. Remaining DBD flexibility among GntR/HutC transcription factors with  $\beta$ -strand  $\beta^*$  formed in the linker segment.** (a) and (b) Superposition of the crystal structures of ligand-free SauR from *S. avermitilis* (grey, PDB-ID 3EET), ligand-free DasR from *S. coelicolor* (blue, PDB-ID 4ZS8), GlcNAc-6-P-bound NagR from *B. subtilis* (green, PDB-ID 4U0W) and ligand-free PhnF from *M. smegmatis* (light yellow, PDB-ID 3F8M) displayed as a cartoon representation in a side view (a) and a top view (b). The ligand GlcNAc-6-P bound to NagR is shown as a stick model. The EBDs of all four dimeric structures were rendered transparent for clarity.