

## Supporting Information

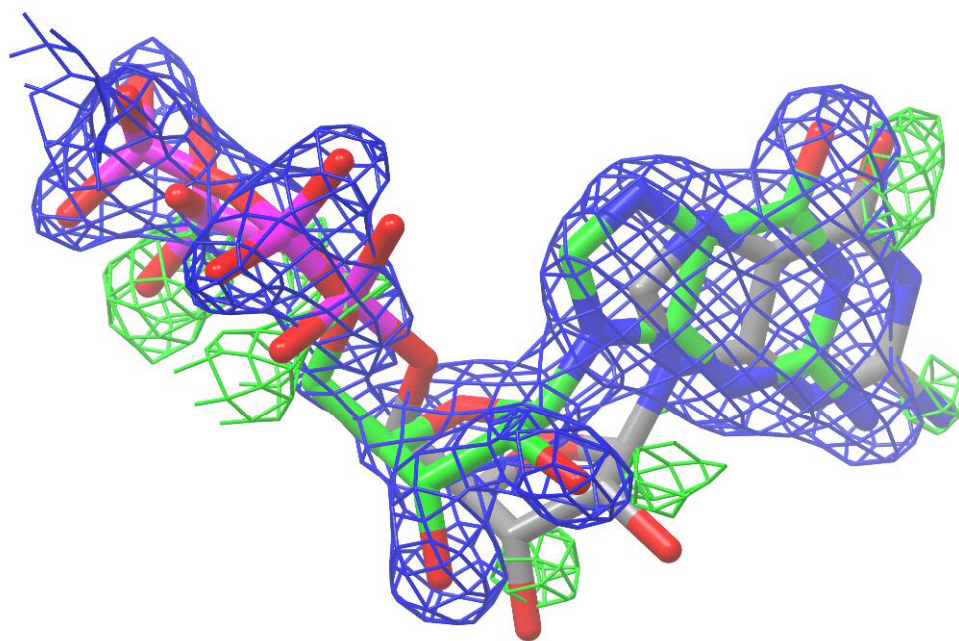


Figure 1: The two conformations of GDP present in molecule A of the PEPCK-Mn<sup>2+</sup>-OAA-Mn<sup>2+</sup>GDP crystallographic dimer. The major conformation of GDP is rendered as a stick model colored by atom type with carbon atoms in green. Shown in blue mesh is the 2F<sub>o</sub>-F<sub>c</sub> density rendered at 1.5 σ after inclusion of this conformation in the model. Shown in green mesh is the F<sub>o</sub>-F<sub>c</sub> density rendered at 2 σ present after refinement of the major

nucleotide conformation. Illustrated in the grey stick model is the nucleotide conformation present in molecule B that suggests the presence of this nucleotide conformation at a low occupancy.