



Supplementary Figure 1

Supplementary Figure 1. Example of excess electron density not explained by *E. coli* model.

GAPDS (red) and *E. coli* GAPDH (green) are represented with i) $2|F_{obs}| - |F_{calc}|$ electron density and ii) $|F_{obs}| - |F_{calc}|$ electron density (+ve in blue mesh, -ve in red mesh) obtained by molecular replacement, and iii) final weighted electron density after refinement with a) an example of excess electron density not explained by *E. coli* model at residues Tyr 316 and His 320 (GAPDS) and b) an example of negative difference electron density where Thr 254 and Ala 255 in GAPDS replace a glutamate and a glutamine (*E. coli*) respectively.