



**S10 Fig.** Variants in and upstream of *whiB7* associated with ethionamide MIC. Manhattan plots showing the association results for *whiB7* for the **A** oligopeptides and **B** oligonucleotides, and alignment plots showing close ups of significant regions in *whiB7* for **C** oligopeptides in the C-terminal end of the coding region and **D** oligonucleotides in the upstream intergenic region. The black dashed lines indicate the Bonferroni-corrected significance thresholds. In the Manhattan plots, oligopeptides are coloured by the reading frame that they align to, black for the correct reading frame for *whiB7*. Oligo-peptides and nucleotides assigned to the region but did not align using BLAST are shown in grey on the right hand side of the plots. In the alignment plots, the H37Rv reference codons are shown at the bottom of the figure, grey for an invariant site, coloured at variant site positions. The oligo-peptides and nucleotides that aligned to the region are plotted from least significant at the bottom to most significant at the top. The background colour of the oligo-peptides and nucleotides represents the direction of the b estimate, light grey when  $b < 0$  (associated with lower MIC), dark grey when  $b > 0$  (associated with higher MIC). Oligo-peptides and nucleotides below the MAF threshold and not included in the analysis, but visualised here for signal interpretation, are marked by \*s.