

Figure S1. PBP-associated changes (\pm 95% confidence intervals) in penta- and tetrapeptidecontaining muropeptides in all *E. coli* strains tested (n = 28), including those with and without PBP5. Bacteria were grown in media buffered to pH 7.5 (A and B) or pH 5.0 (C and D), and muropeptide compositions were determined by HPLC. The plotted values are the changes in muropeptide levels associated with the presence of each PBP compared to absence of that PBP, and were computed using multivariable linear regression as described in Materials and Methods. DD-CPase activity decreases pentapeptides and increases tetrapeptides.