



Supplementary Figure 3: MigC inhibits MurD activity under a variety of

conditions. (A) A 1-by-1 interaction domain mapping yeast two-hybrid performed between full-length MigC and a truncated form of MurD, AA55-354, by Hybrigenics. Growth on agar with histidine supplemented indicates interactions between MigC and MurD. **(B)** Inhibition curves of MurD activity with varied apo-MigC with (red) and without GTP (grey), Zn loaded MigC with GTP (blue), Zn loaded E99A MigC with GTP. A global curve fitting was performed to determine maximum inhibition of MurD at saturating MigC to be 75%. Curve fittings determined K_i for apo-MigC without GTP to be $20 \pm 3 \mu\text{M}$, K_i for apo-MigC with GTP to be $43 \pm 7 \mu\text{M}$, K_i for Zn-MigC with GTP to be $32 \pm 6 \mu\text{M}$, and K_i for Zn-E99A MigC with GTP to be $21 \pm 6 \mu\text{M}$.