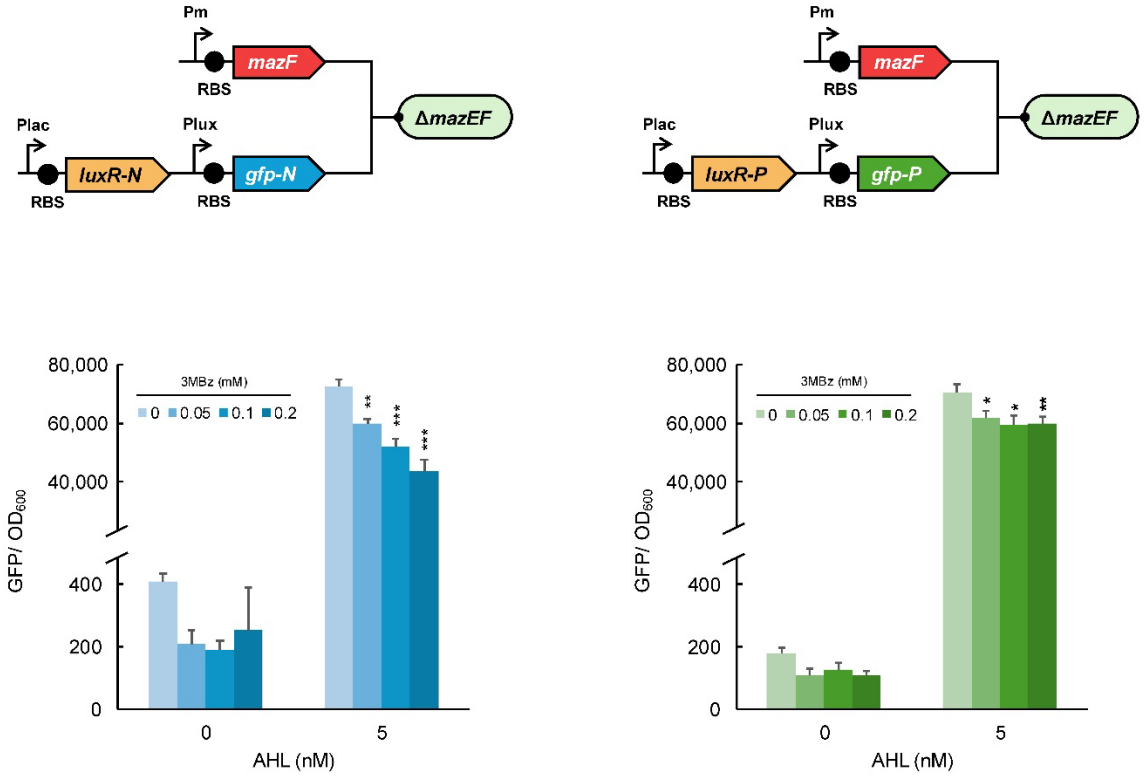


Fig. S2. Protection of a LuxR-regulated GFP circuit from MazF-mediated cleavage. In the presence of the MazF expression system, AHL-activated GFP expression circuit was introduced into the *P. putida* Δ*mazEF* host. The native circuit contained MazF-sensitive LuxR and GFP sequences [LuxR-N/GFP-N], whereas the protected circuit contained synonymously recoded LuxR and GFP sequences lacking MazF recognition sites [LuxR-P/GFP-P]. (A) GFP fluorescence normalized to cell density (GFP/OD_{600}) in *P. putida* Δ*mazEF* harboring pSEVA658-*mazF* and pSEVA231-Plux-GFP-N, cultured in LB medium with the indicated concentrations of AHL (0 or 5 nM) and 3MBz (0, 0.05, 0.1, or 0.2 mM). (B) GFP/OD_{600} measured under the same conditions as in (A), using pSEVA231-Plux-GFP-P. Data represent the Mean ± standard deviation of three independent biological replicates (n = 3). At each AHL concentration, statistical significance was determined by comparing each 3MBz-treated condition with the corresponding condition without 3MBz using a two-tailed Welch's t-test (*$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$).