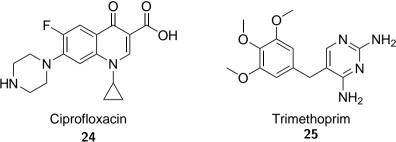
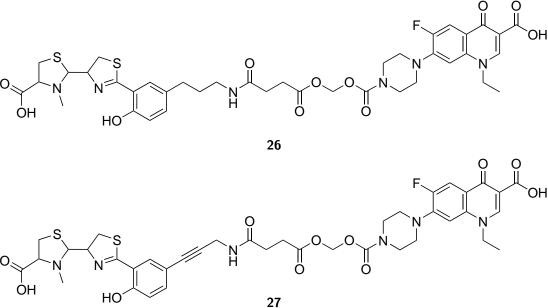


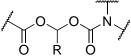


$$C_4$$
-HSL 3 -oxo- C_{12} -HSL 20

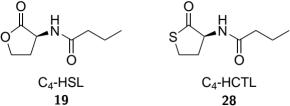
HHQ PQS 21
 A -OH A -C2 A -C3 A -OH A -C3 A -C4-HSL A -C4-HSL

















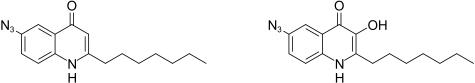


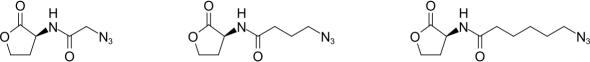


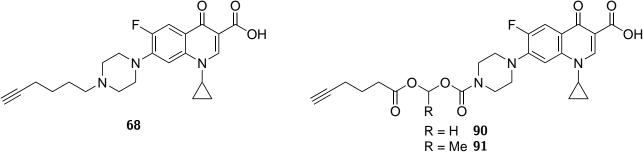






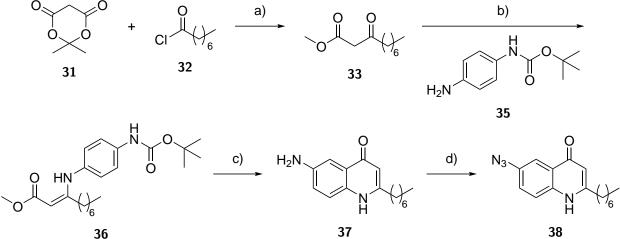


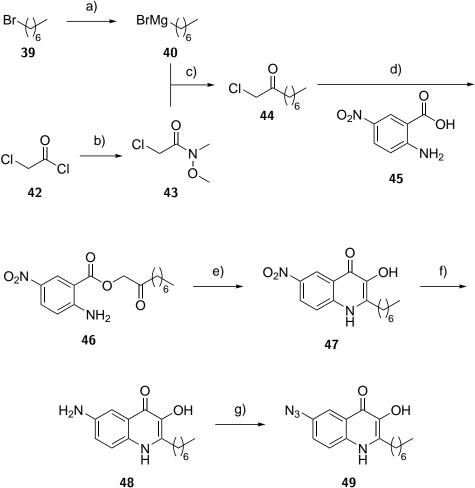


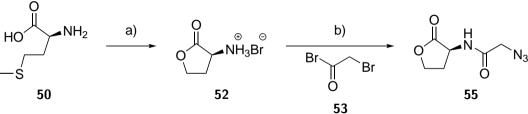


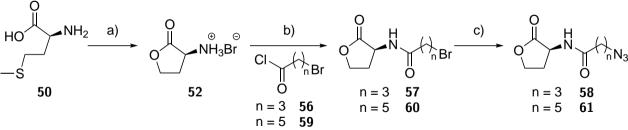


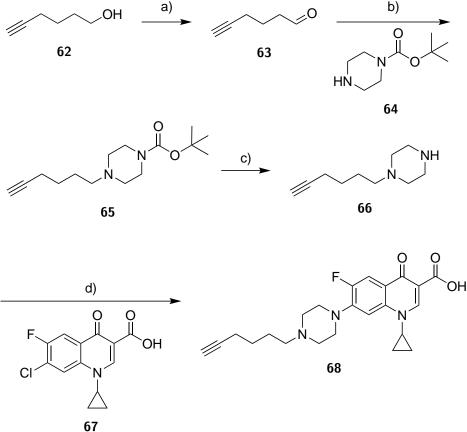
Autoinducer Antibiotic Autoinducer < , . Antibiotic

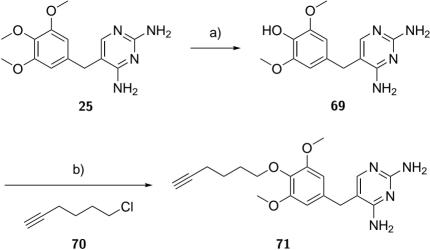


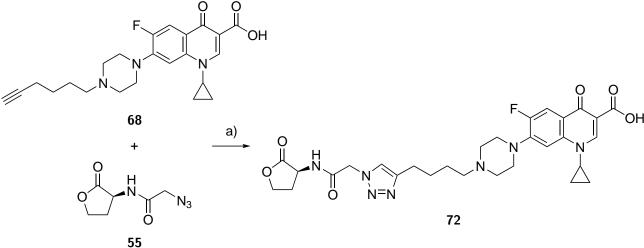


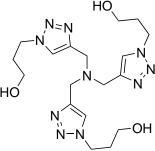


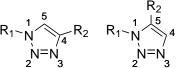


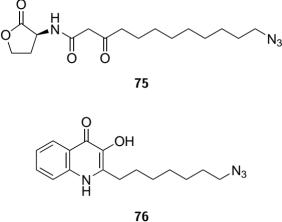












$$R_1 \sim N_3$$
 + $R_2 \xrightarrow{a)} R_1 \sim N_1 \sim N_2$

