







**Fig. S1.** Mass spectra of c-di-GMP synthesized by SesA. (A-C) MS, MS/MS, and MS/MS/MS of authentic c-di-GMP. (D-F) c-di-GMP produced by the Pg form of SesA (fraction at 39 min in the upper HPLC chromatogram shown in Fig. 2). (G-I) c-di-GMP produced by the Pb form of SesA (fraction at 39 min in the lower HPLC chromatogram shown in Fig. 2). (A, D, G) Mass spectra. (B, E, H) Tandem mass spectra of the peak at  $m/z = 689$  in panels A, D, and G. (C, F, I) MS/MS/MS spectra of the product at  $m/z = 343$  in panels B, E, and H. Insets show the structures associated with the peaks.