



Fig. S3. Binding Assays. (A-E) Antibiotic bioassay results showing mean antibiotic disc contents \pm SEM following mixing with BcnA and passing through centrifugal filter units of MWCO 10 KDa compared to control antibiotic solutions. * $p<0.05$,

and ** $p < 0.01$ from paired student's t-tests compared to the respective control conditions. $n=3$ from 3 independent experiments. At this sample size, the actual power of the assay to detect statistically significant effects at significance level (alpha) of 0.05, two-tailed is $>99\%$. (F-G) Binding displacement assays of Nile Red from $1.5 \mu\text{M}$ BcnA- $1.5 \mu\text{M}$ Nile Red complex by antibiotics and other chemicals. 3 independent experiments, $n=5$. (H-M) Binding displacement isotherms showing the displacement of Nile Red by different antibiotics from its complex with BcnA. Mean of $n=3$ from a representative of 3 independent experiments. (N) The affinity of $1.5 \mu\text{M}$ BcnA compared to that of $1.5 \mu\text{M}$ BcnB to bind $1.5 \mu\text{M}$ Nile Red, $n=5$ from 3 independent experiments. *** $p < 0.001$ from unpaired two-sided Student's t-test. (O) *In vitro* binding assay of $1.5 \mu\text{M}$ BcnA to Nile Red in PBS, 3 independent experiments, $n=5$. (P and Q) Binding isotherms from the fluorometric assays showing the interaction between BcnA (P) or BcnB (Q) and Nile Red. Mean of $n=3$ from a representative of 3 independent experiments. (R-T) Nile red binding affinity of BcnA to BODIPY phosphocholine (R and S) and BODIPY phosphoethanolamine (T), $n=4$ from 2 independent experiments. (U) Binding displacement assays of Nile Red from $1.5 \mu\text{M}$ BcnA- $1.5 \mu\text{M}$ Nile Red complex by vitamins. $n=5$ from 3 independent experiments