SUPPORTING INFORMATION

Antimicrobial Activity, AME Resistance and A-site Binding Studies of Anthraquinone-Neomycin Conjugates

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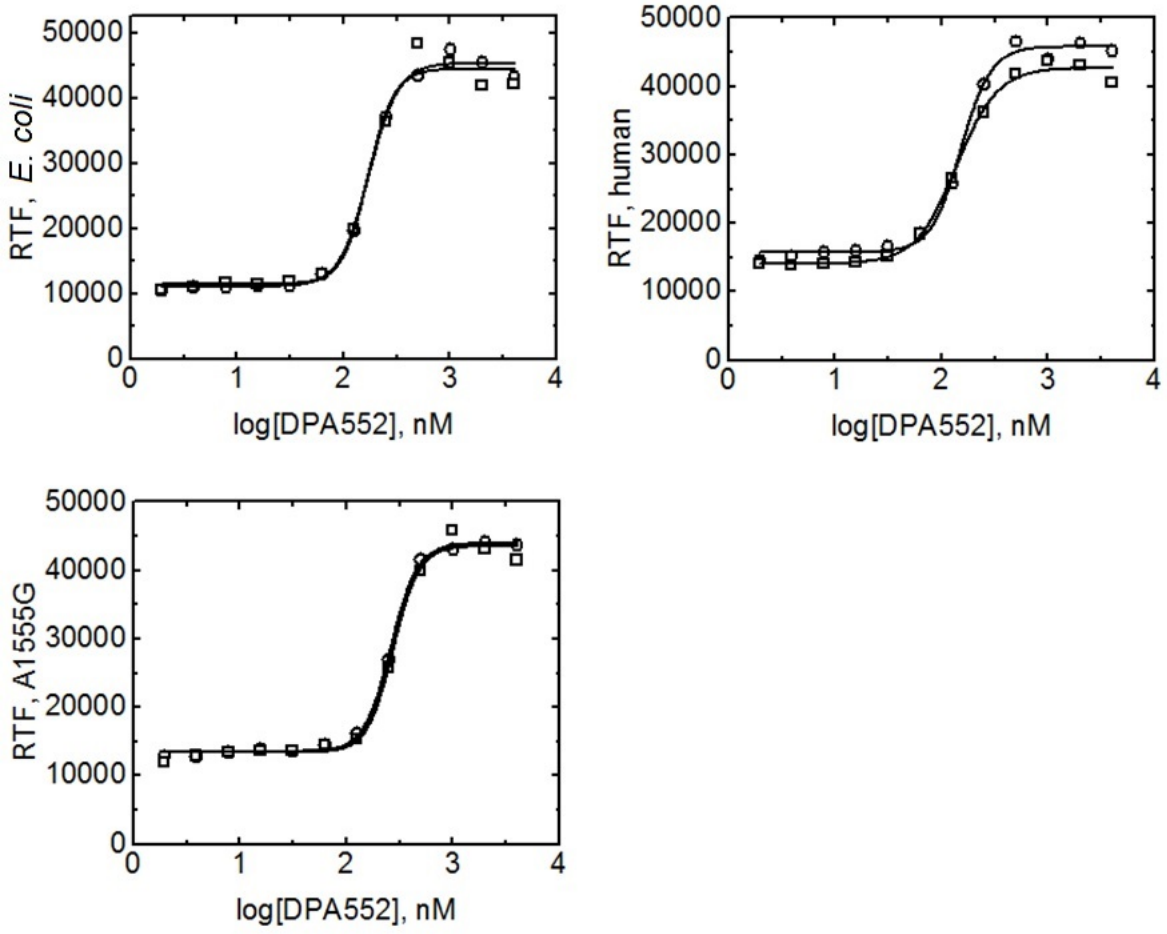


Figure S1. Titration plots of 100 nM A-site:F-NEO complex with compound **2**. IC_{50} values for *E. coli*, human cytosolic, and A1555G A-sites were 173 ± 1 nM, 146 ± 10 nM, and 270 ± 10 nM, respectively.

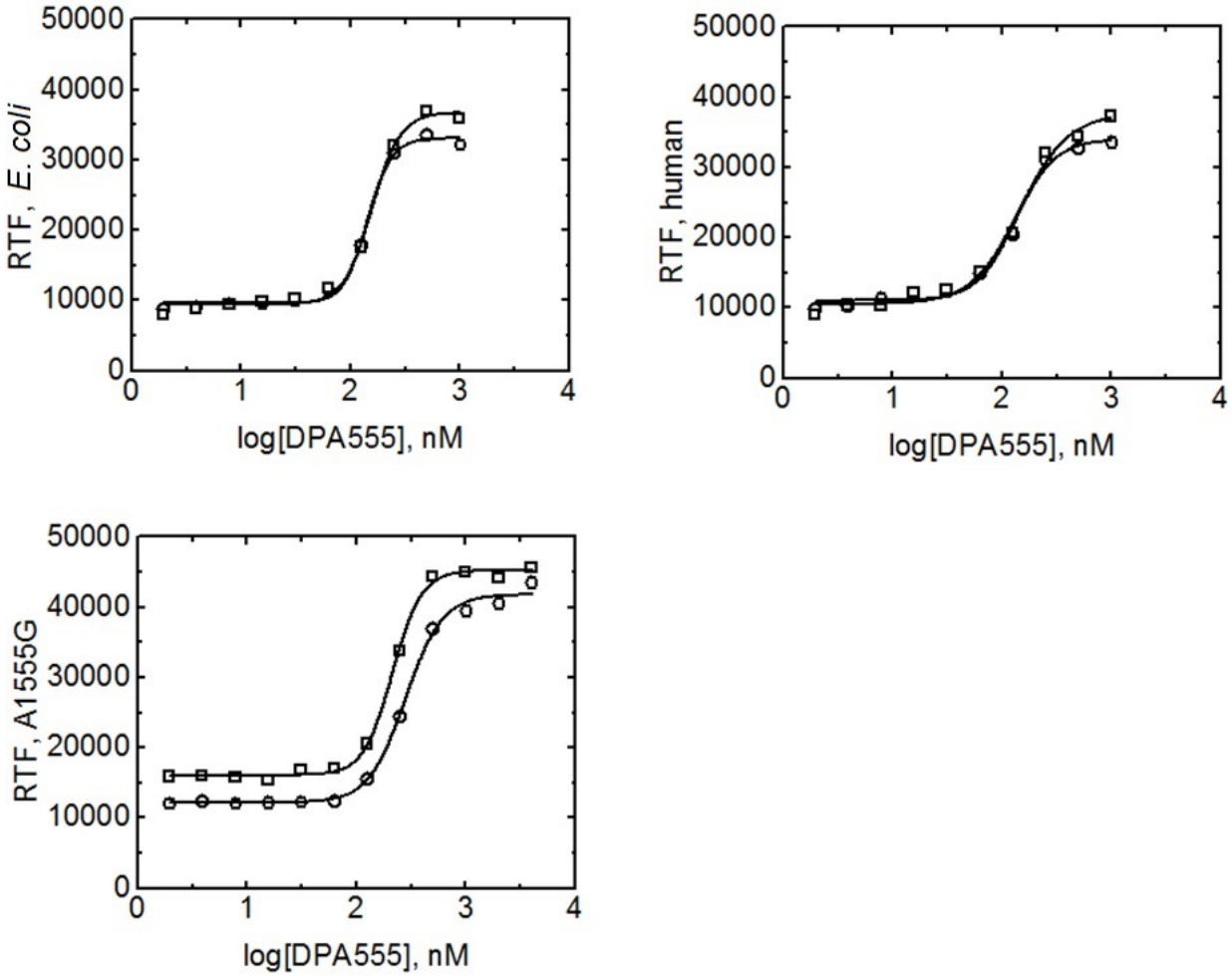


Figure S2. Titration plots of 100 nM A-site:F-NEO complex with compound **5**. IC_{50} values for *E. coli*, human cytosolic, and A1555G A-sites were 151 ± 10 nM, 140 ± 10 nM, and 249 ± 47 nM, respectively.

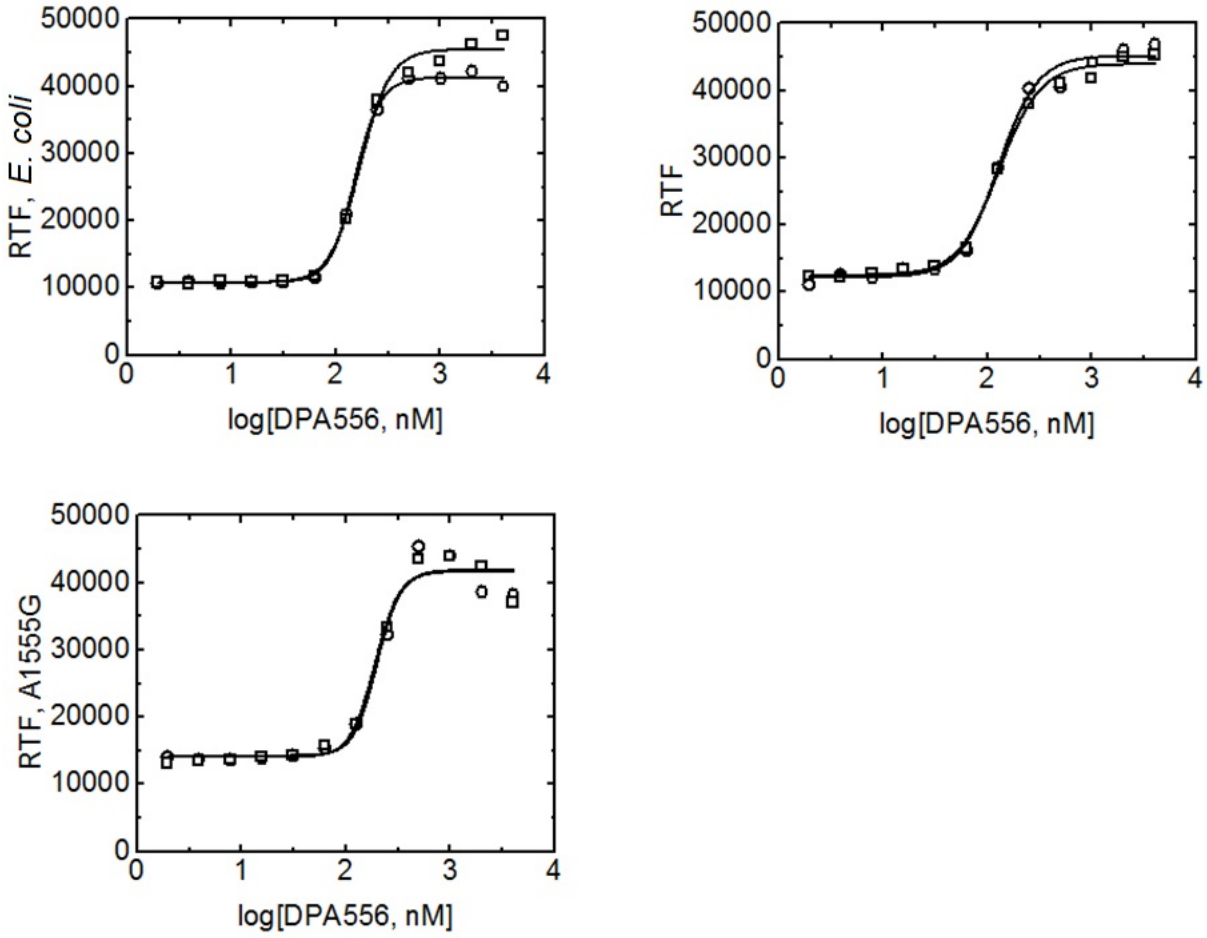
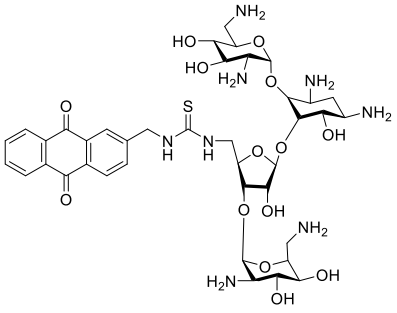
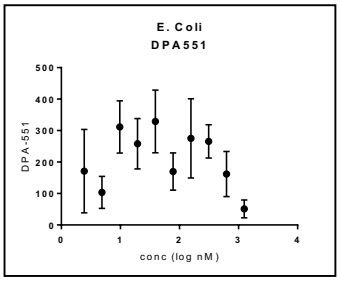
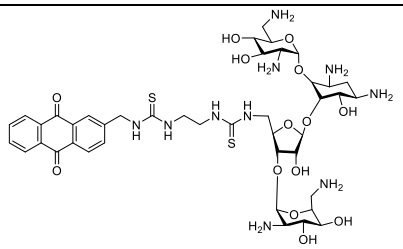
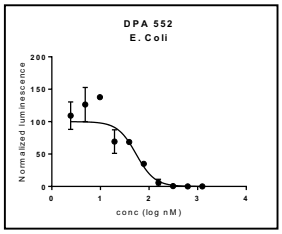
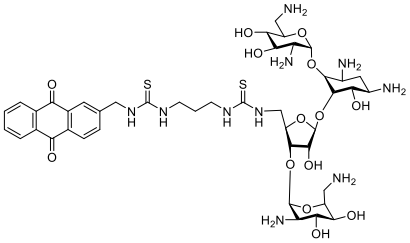
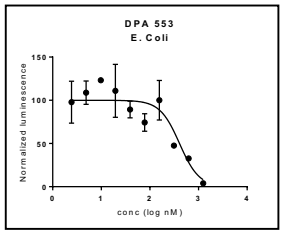
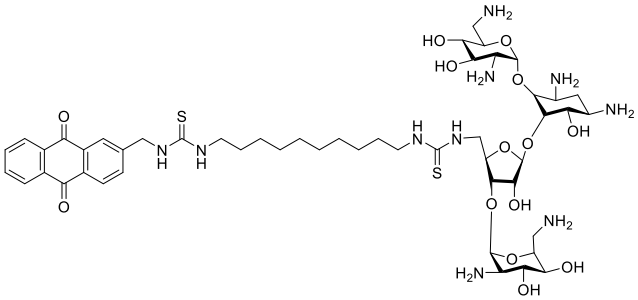
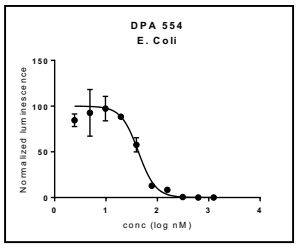
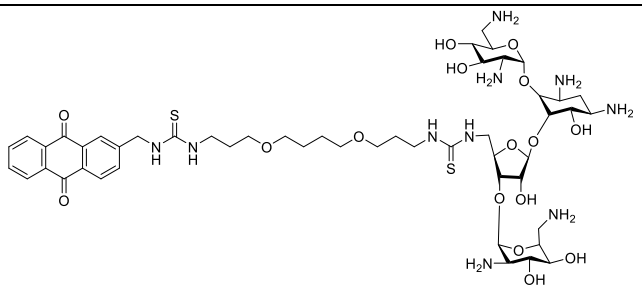
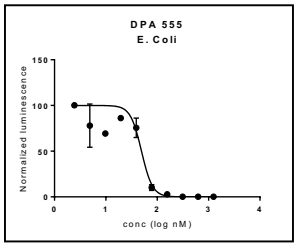
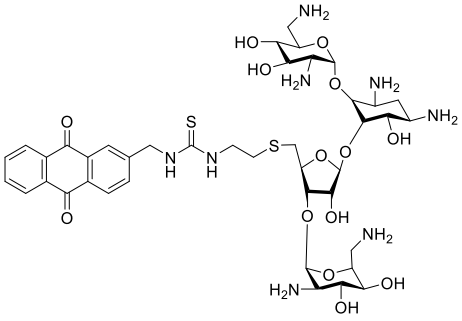
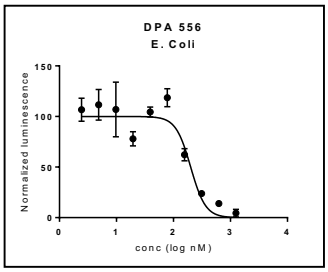
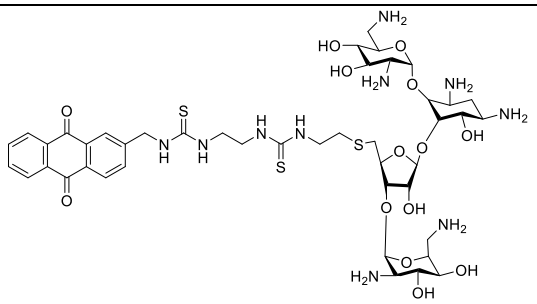
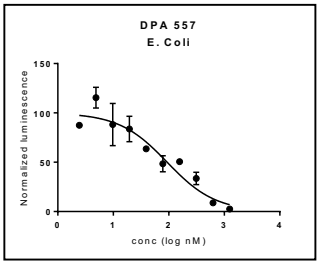
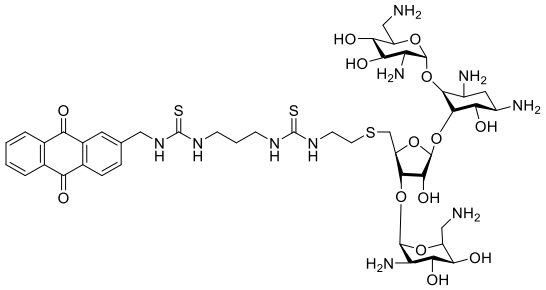
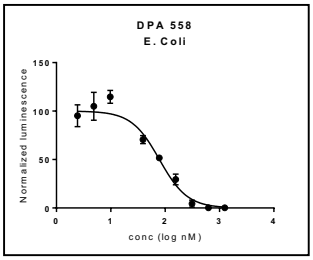
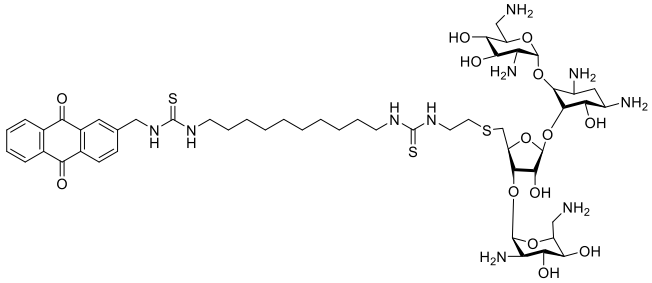
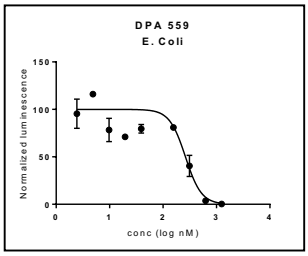
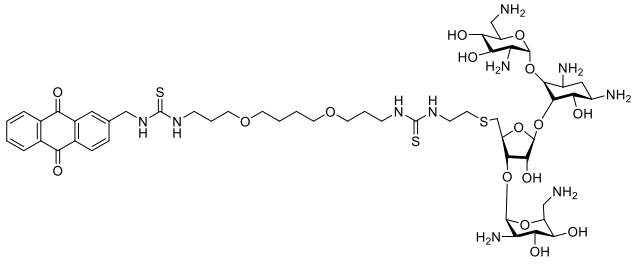
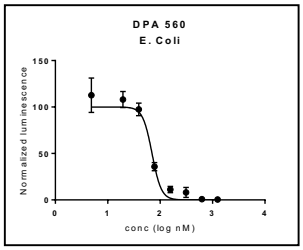
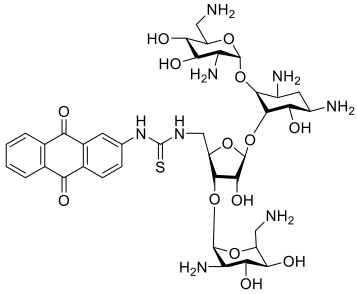
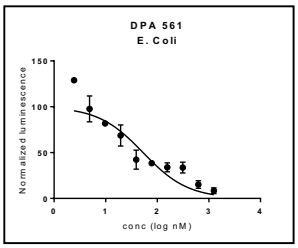


Figure S3. Titration plots of 100 nM A-site:F-NEO complex with compound **6**. IC_{50} values for *E. coli*, human cytosolic, and A1555G A-sites were 162 ± 13 nM, 129 ± 1 nM, and 196 ± 4 nM, respectively.

Compound	Structure	Cell Free Data	IC_{50} (nM)
DPA551 1			NI

DPA552 2			50±8.8
DPA553 3			303±28
DPA554 4			40.3±6.7
DPA555 5			35.4±3.5
DPA556 6			178±18

DPA557 7			91±1.7
DPA558 8			101±16
DPA559 9			250±35
DPA560 10			71.4±2
DPA561 11			63.7±8.5

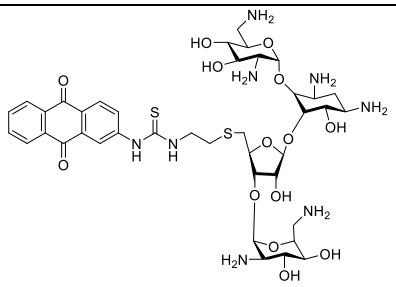
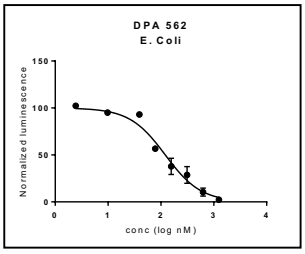
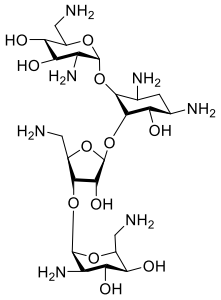
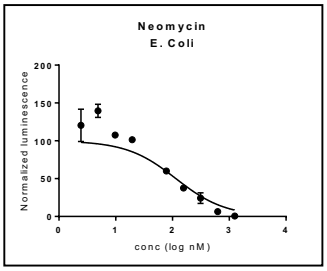
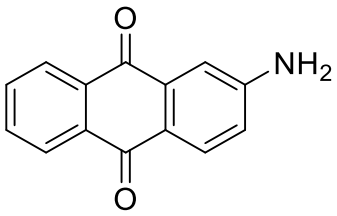
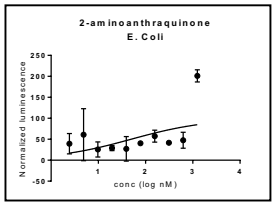
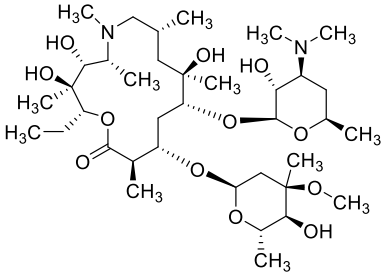
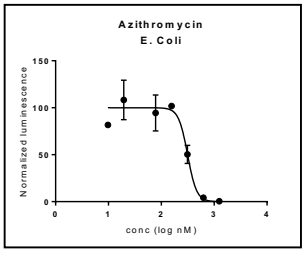
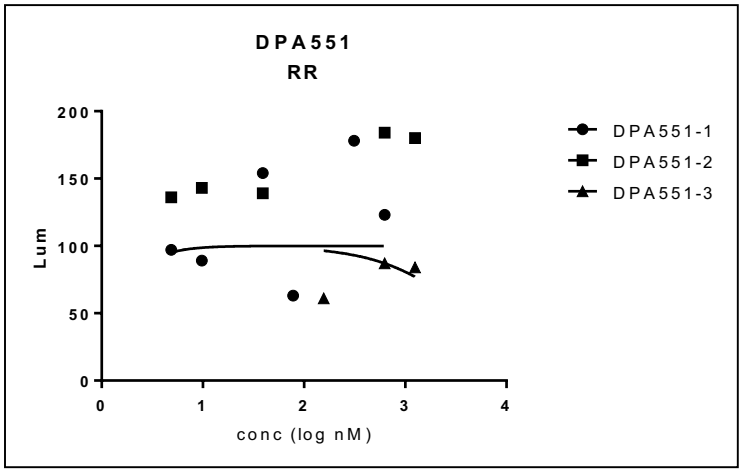
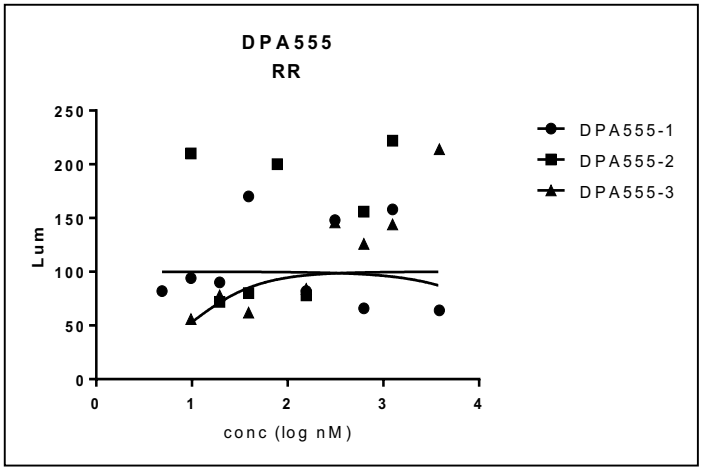
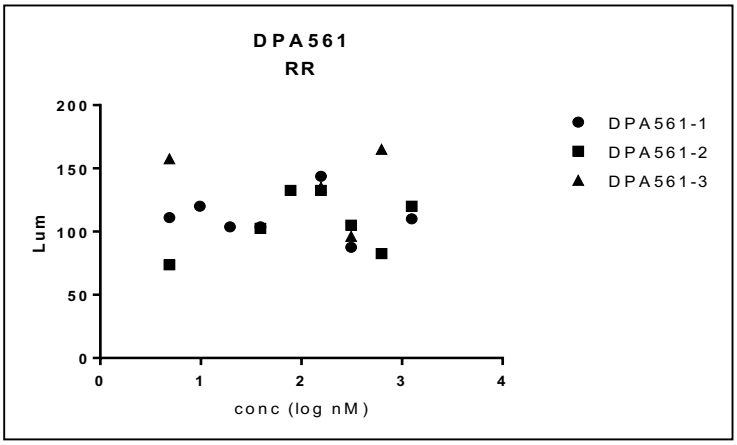
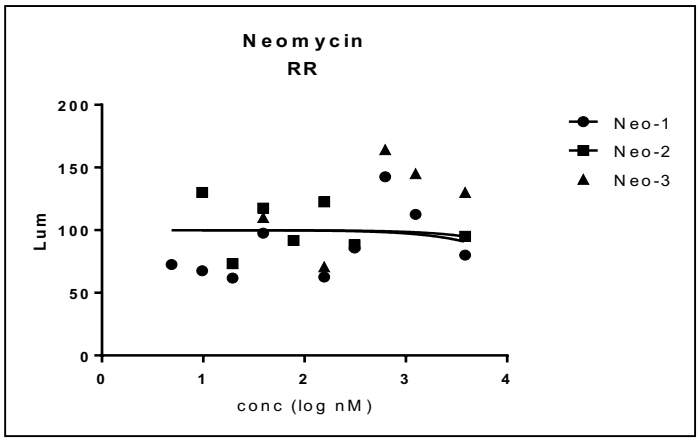
DPA562 12			164±8
Neomycin NEO			139.7±10
2-amino anthraquinone			NI
Aziththromycin			337.1±37

Figure S4. IC_{50} of anthraquinone-neomycin conjugates in cell-free luciferase inhibition assays for prokaryotic systems. IC_{50} is the concentration of the compound that inhibits translation of luciferase as determined in the cell-free translation assay described in the Material and Methods.









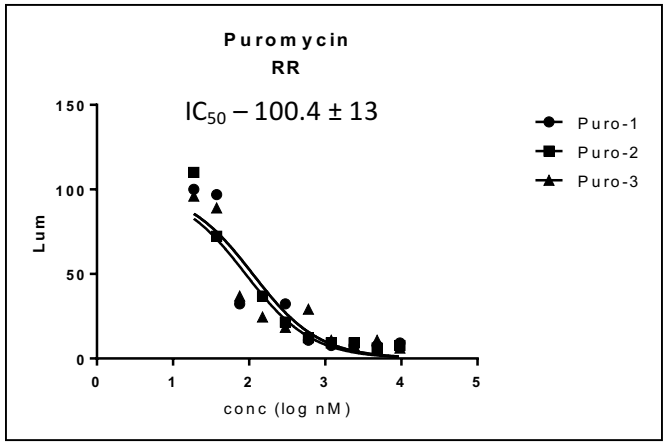


Figure S5. IC_{50} of anthraquinone-neomycin conjugates in cell-free luciferase inhibition assays for eukaryotic systems. IC_{50} is the concentration of the compound that inhibits translation of luciferase as determined in the cell-free translation assay described in the Material and Methods.