

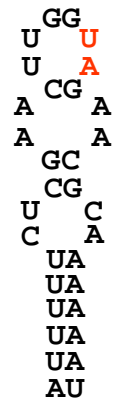
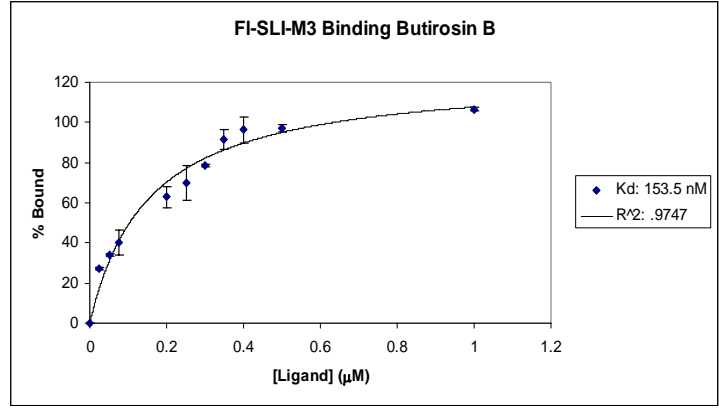
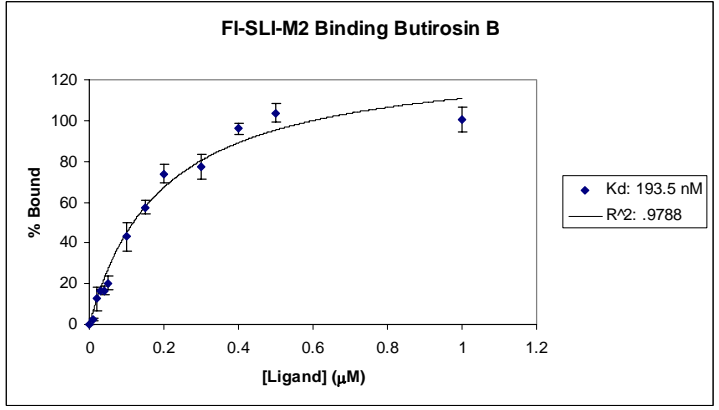
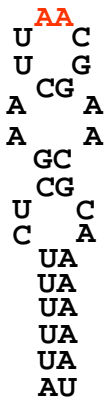
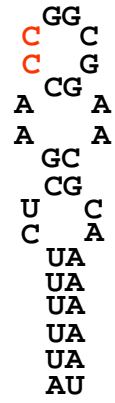
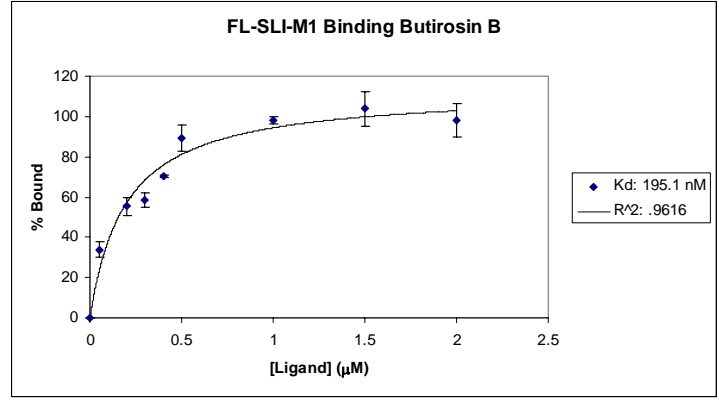
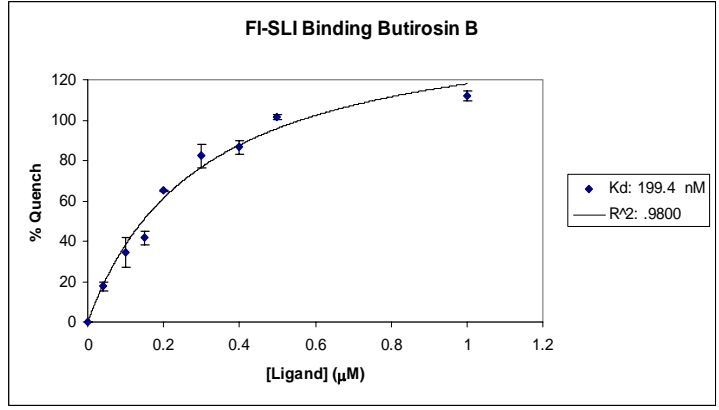
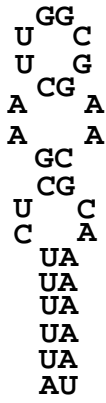
**The Relationship Between Aminoglycosides' RNA Binding Proclivity
and Their Antiplasmid Effect on an IncB Plasmid**

Jason R. Thomas, Johna C. B. DeNap, Margaret L. Wong, and Paul J. Hergenrother

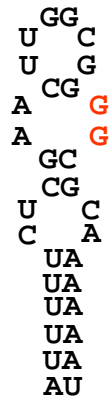
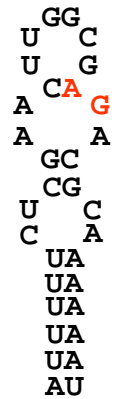
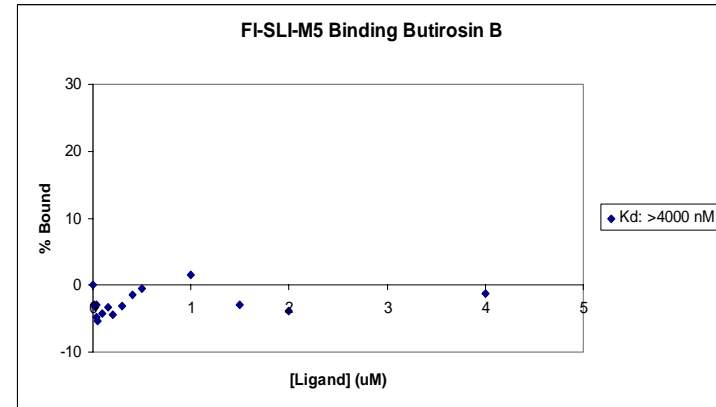
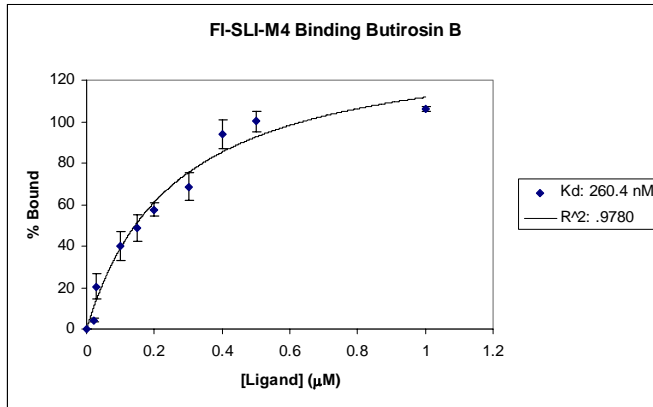
*Department of Chemistry
Roger Adams Laboratory
University of Illinois, Urbana, IL 61801*

Supporting Information

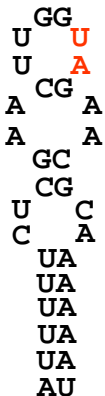
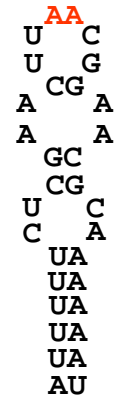
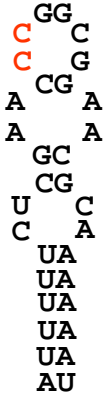
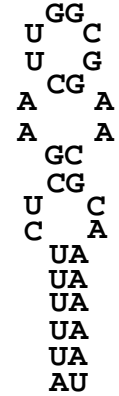
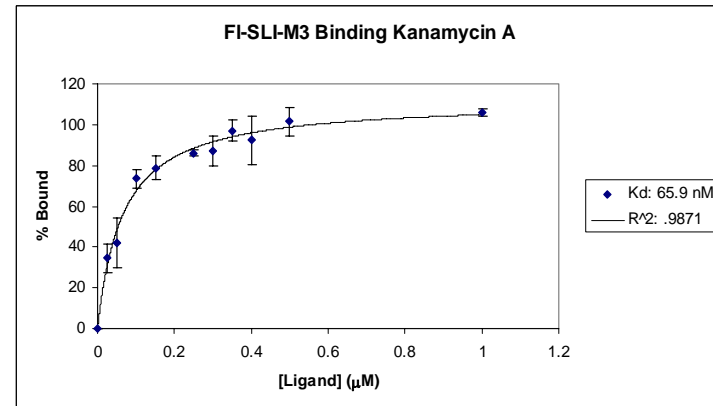
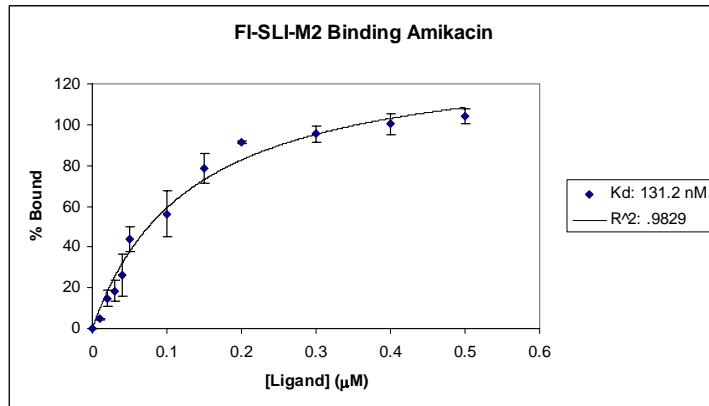
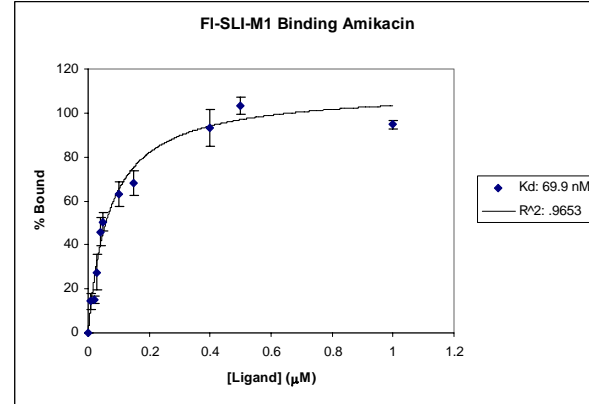
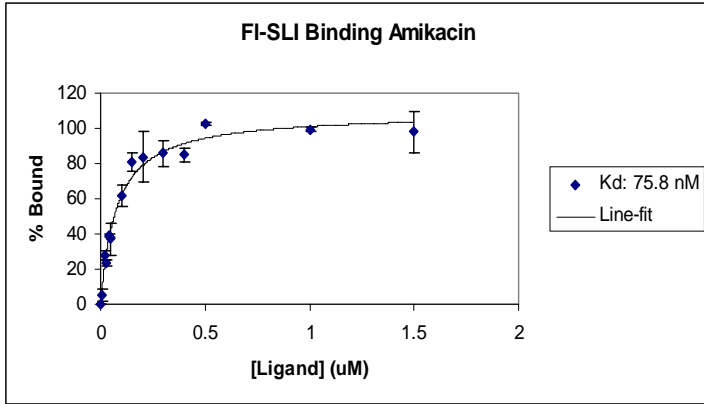
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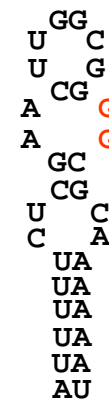
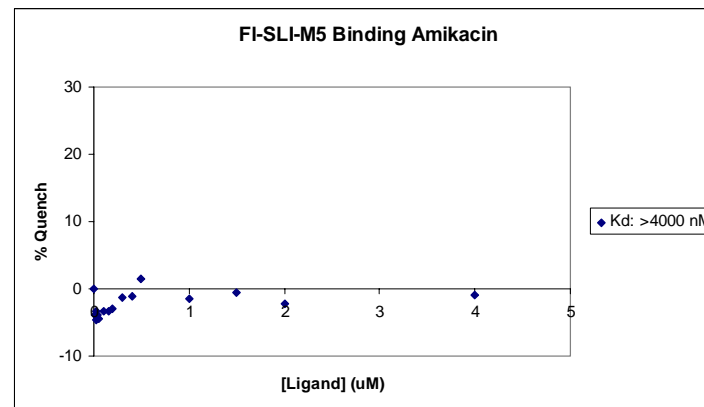
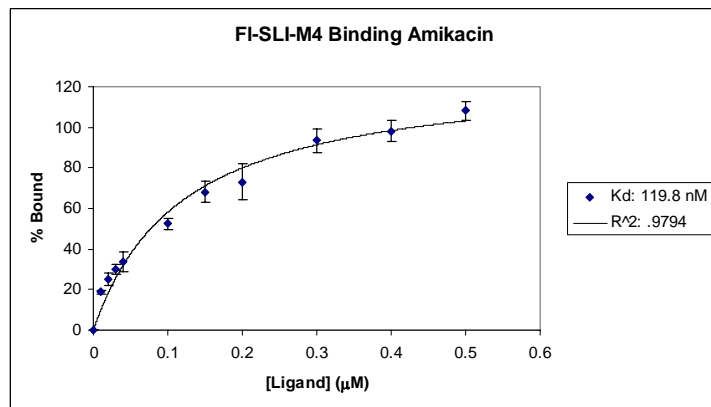
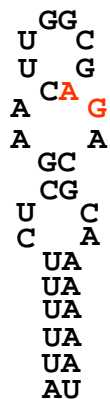
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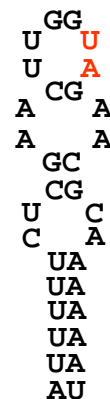
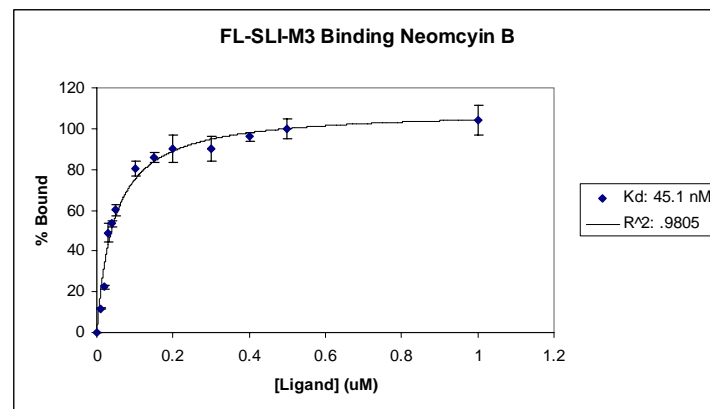
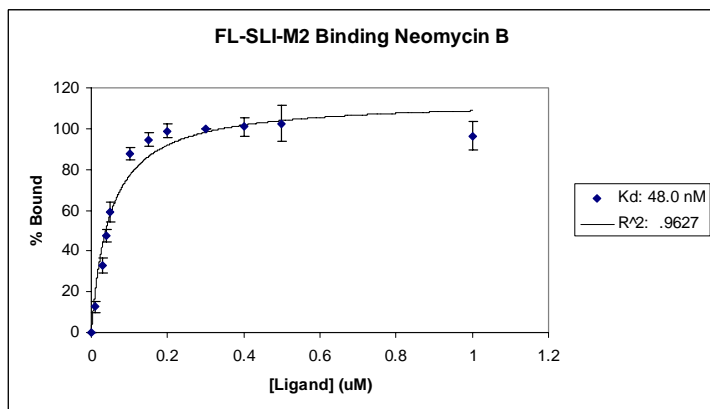
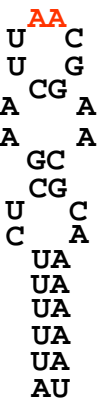
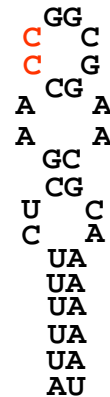
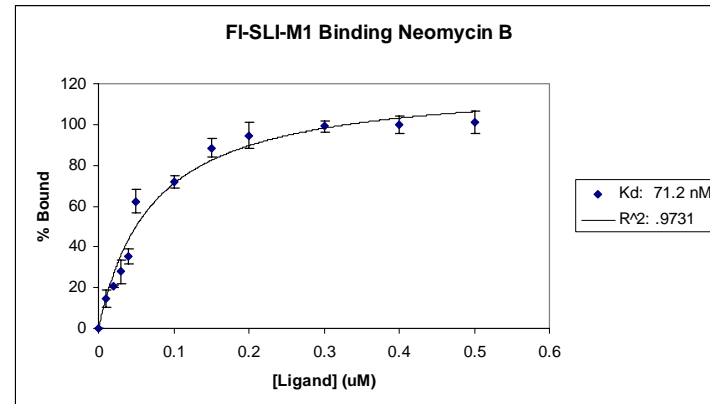
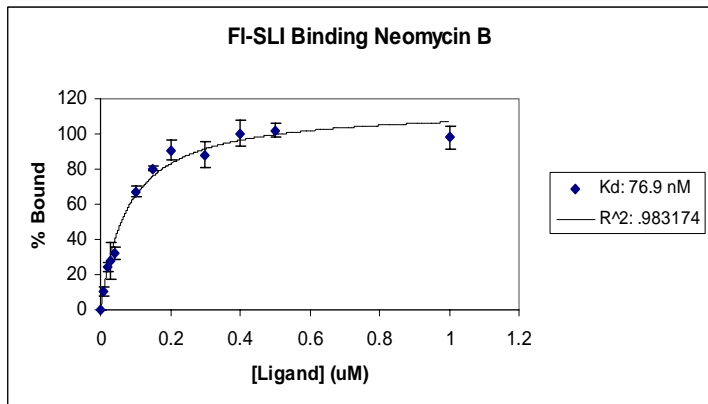
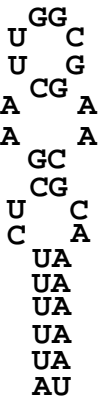
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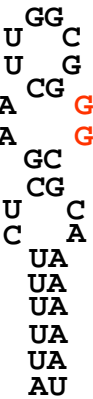
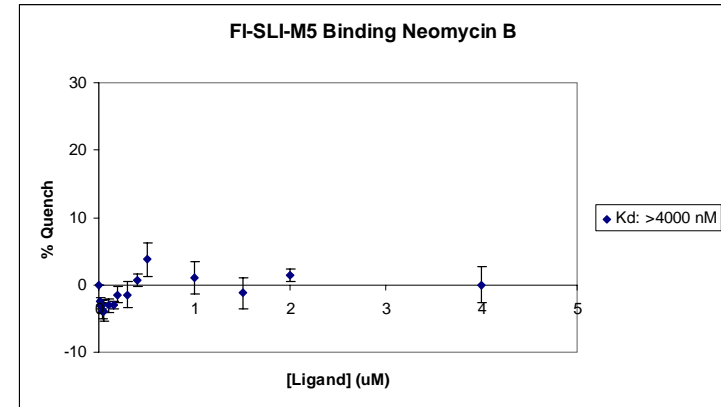
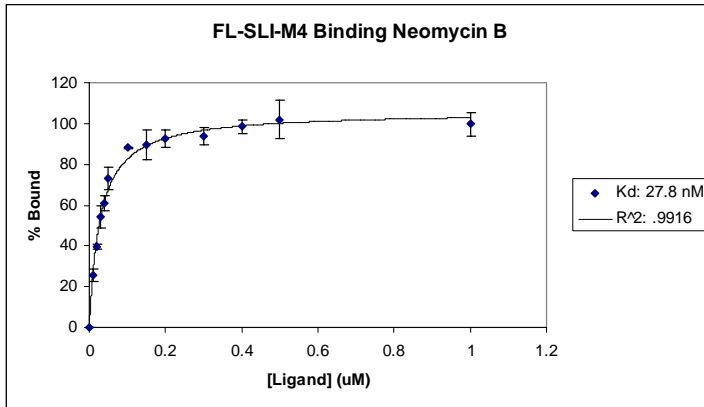
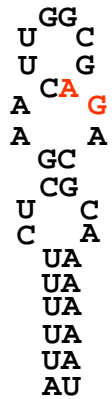
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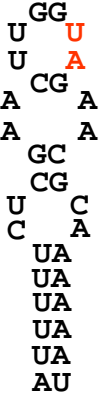
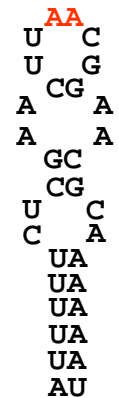
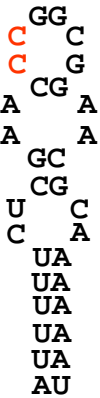
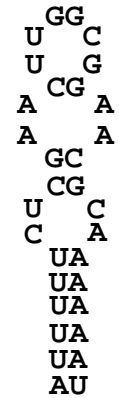
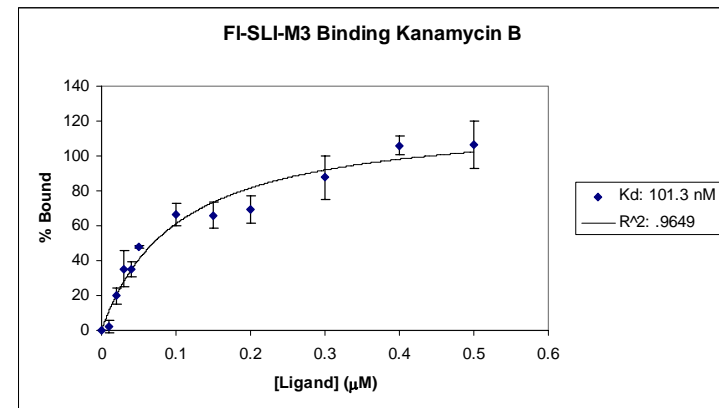
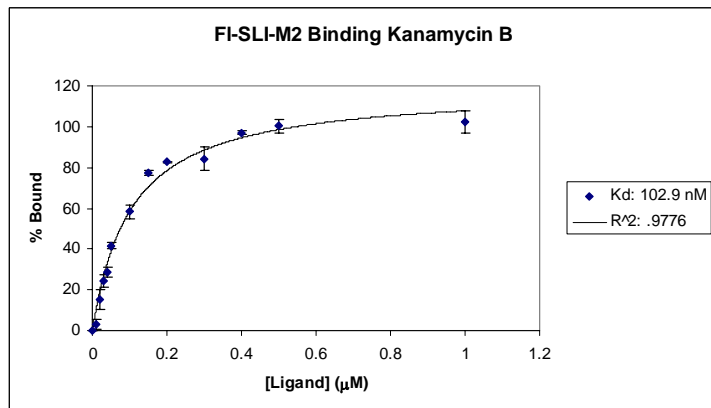
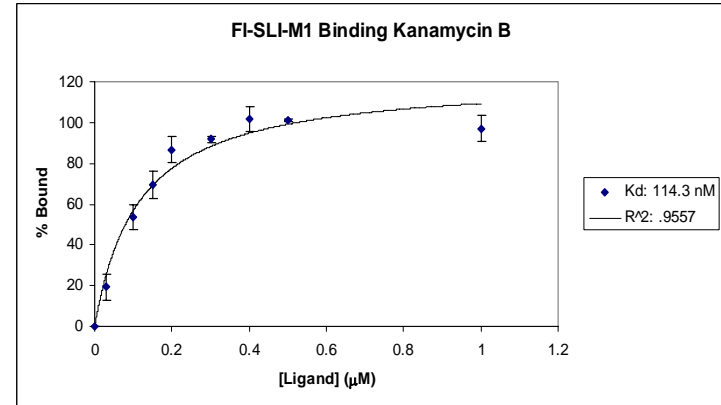
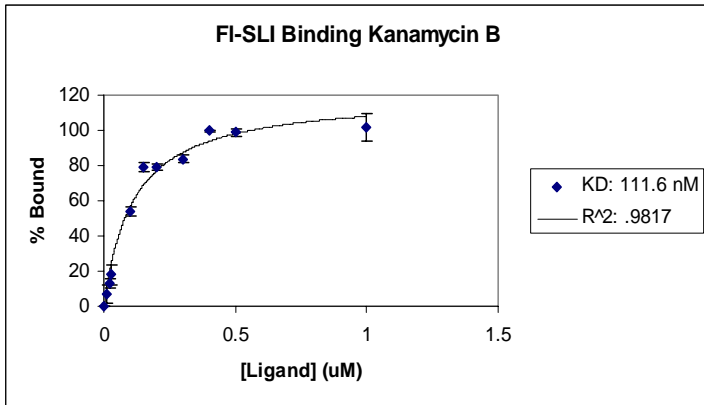
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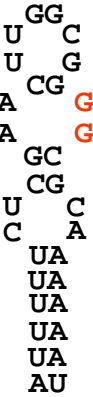
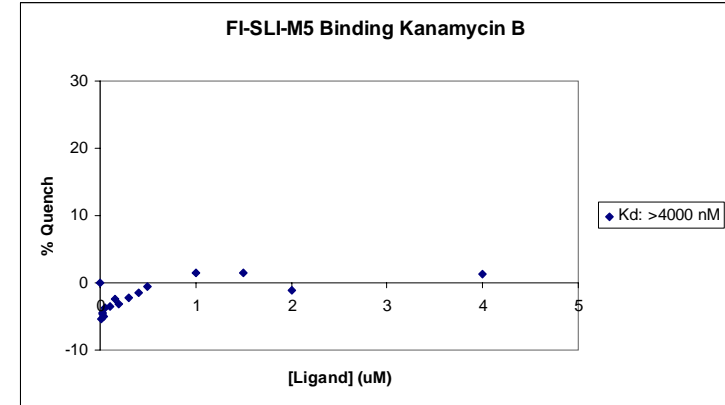
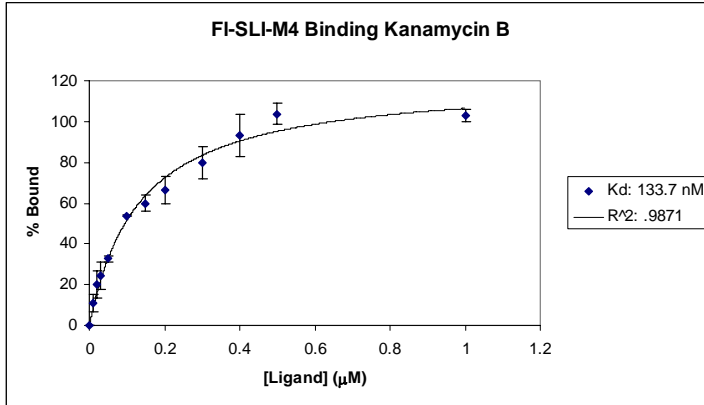
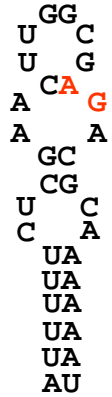
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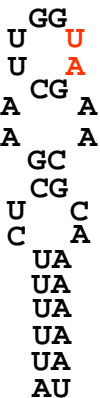
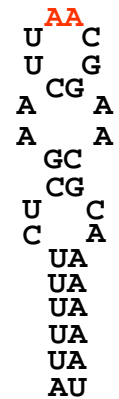
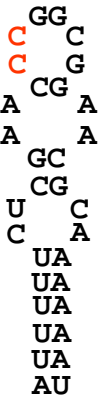
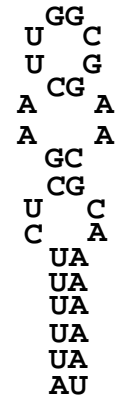
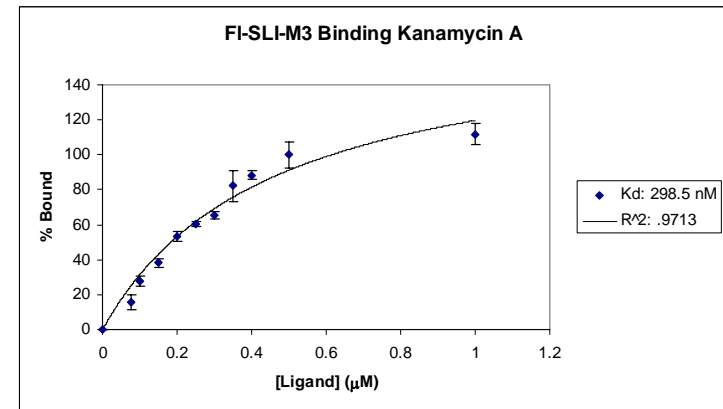
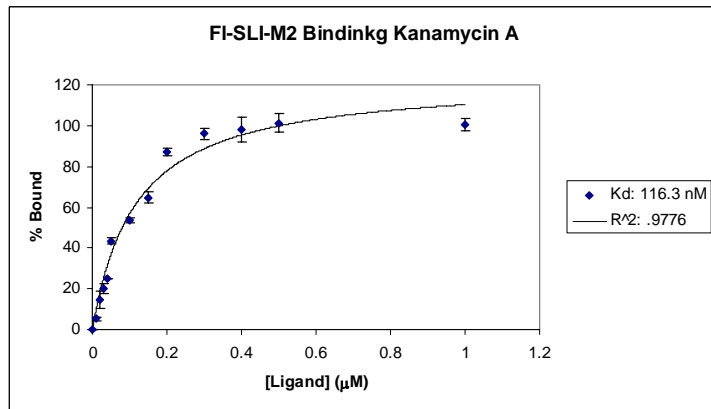
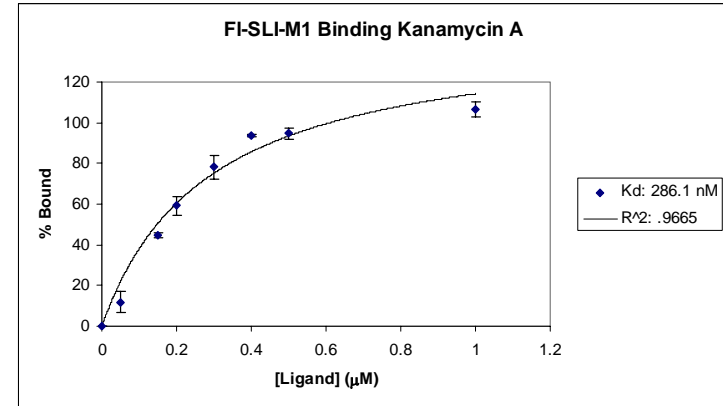
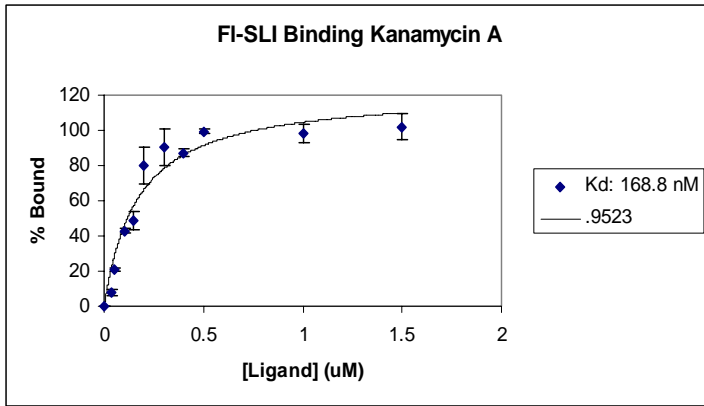
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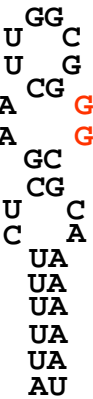
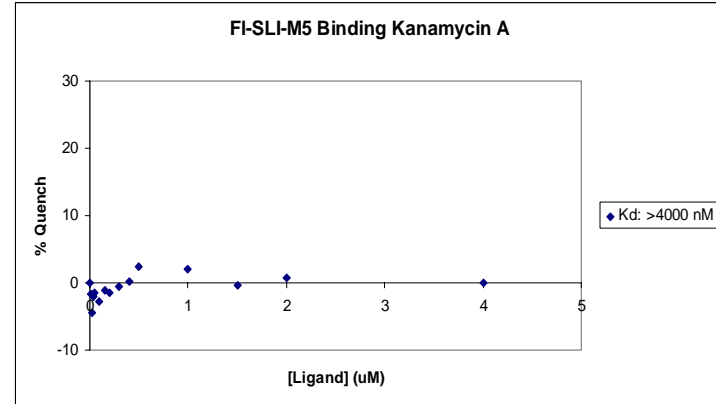
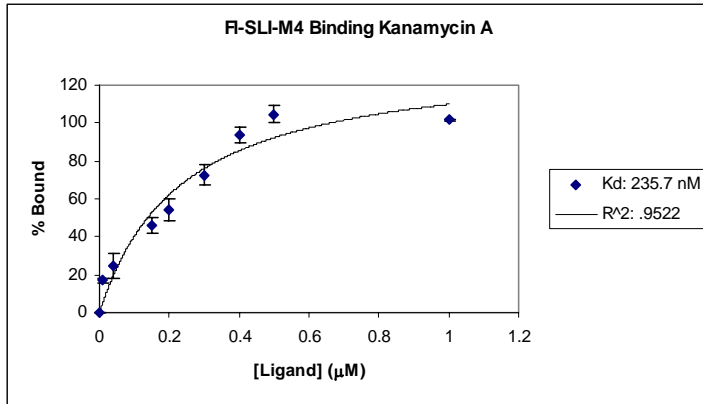
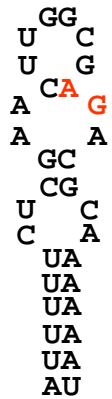
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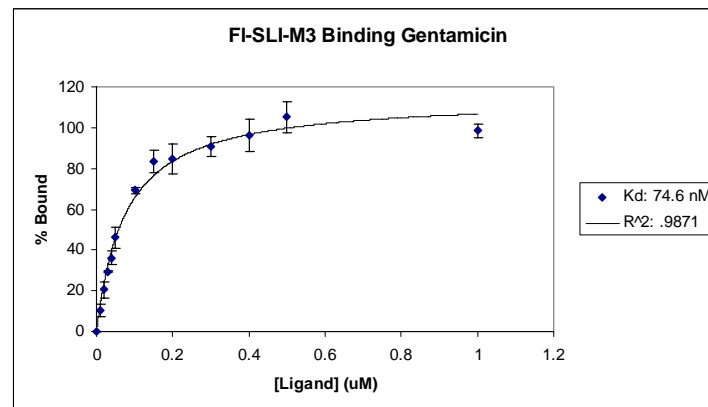
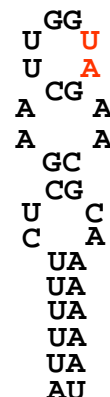
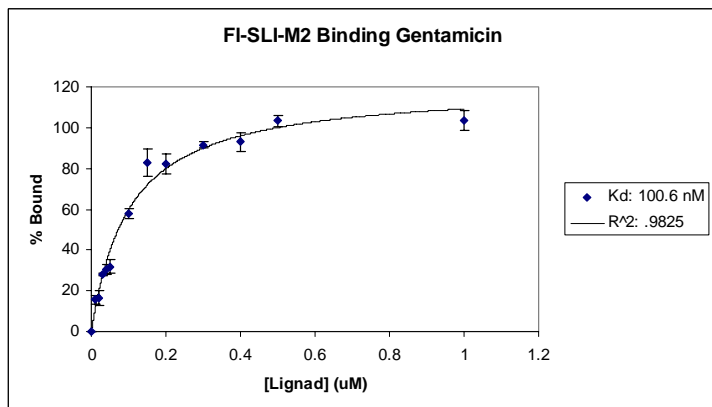
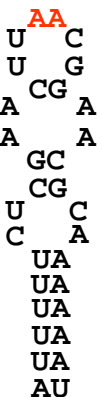
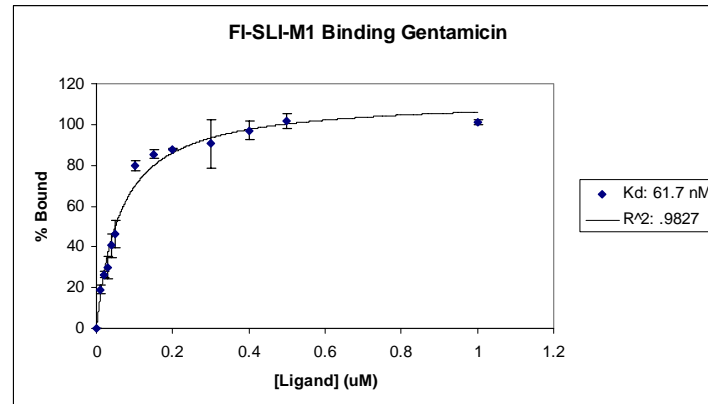
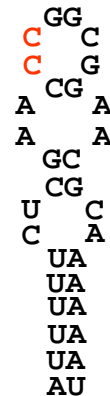
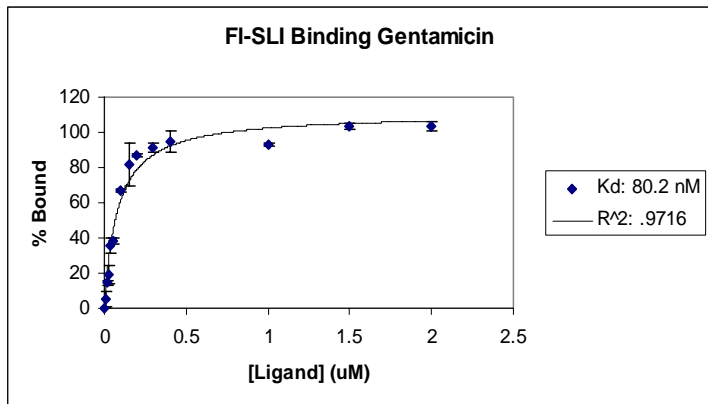
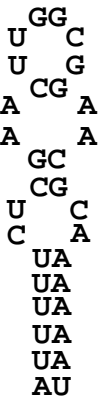
Kanamycin A Binding FI-SLI and Mutants



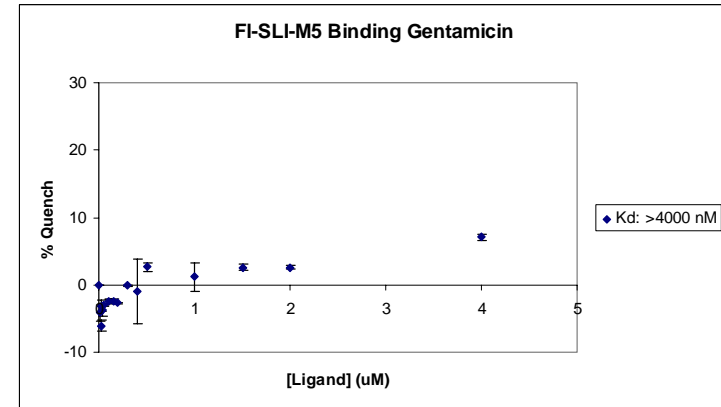
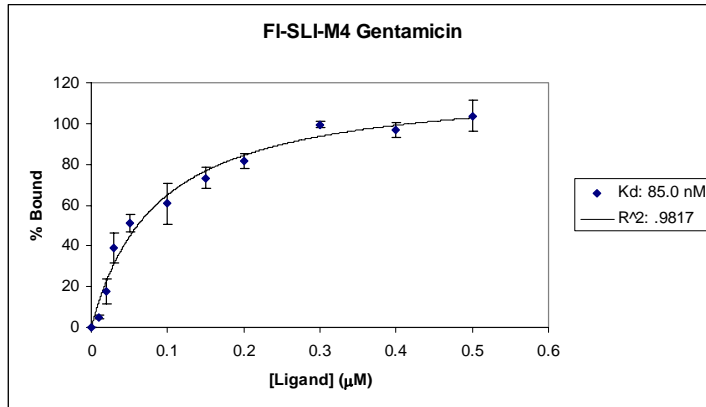
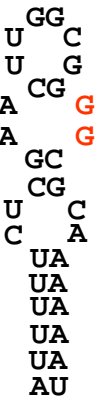
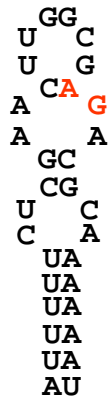
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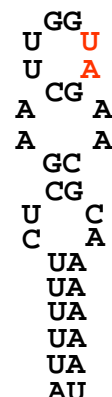
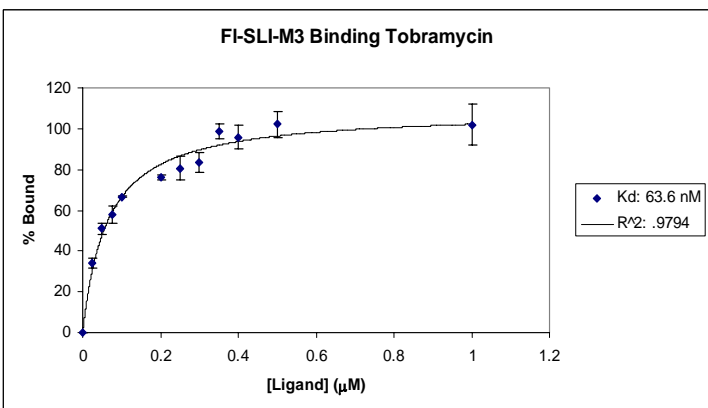
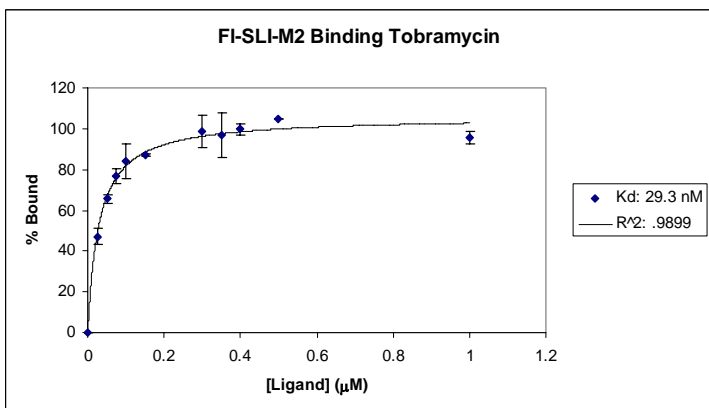
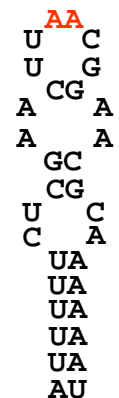
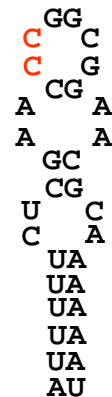
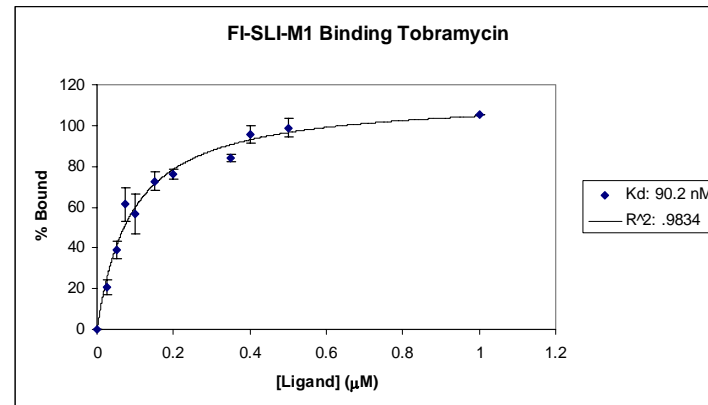
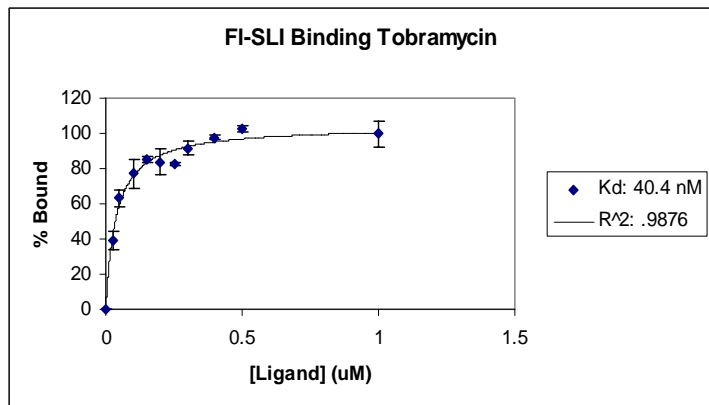
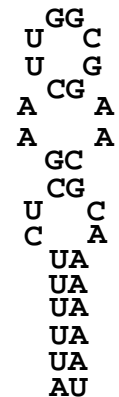
Gentamicin Binding FI-SLI and Mutants



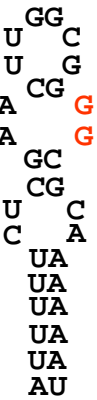
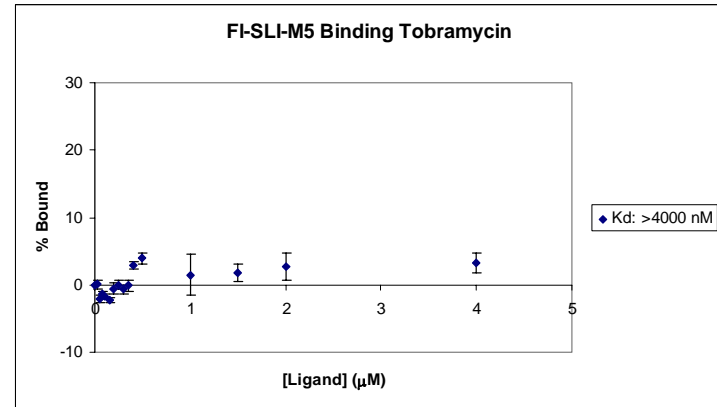
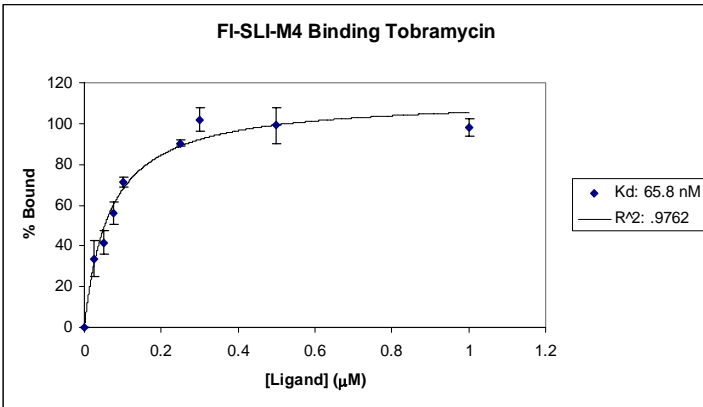
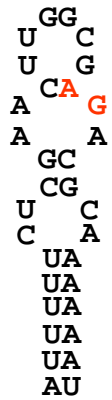
Gentamicin Binding FI-SLI and Mutants



Tobramycin Binding FI-SLI and Mutants

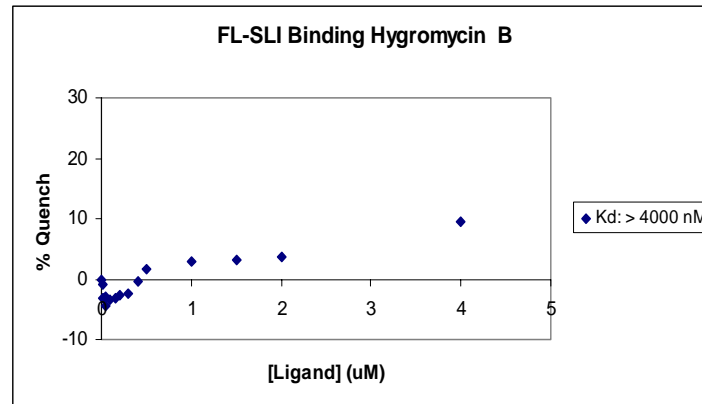


Tobramycin Binding Fl-SLI and Mutants

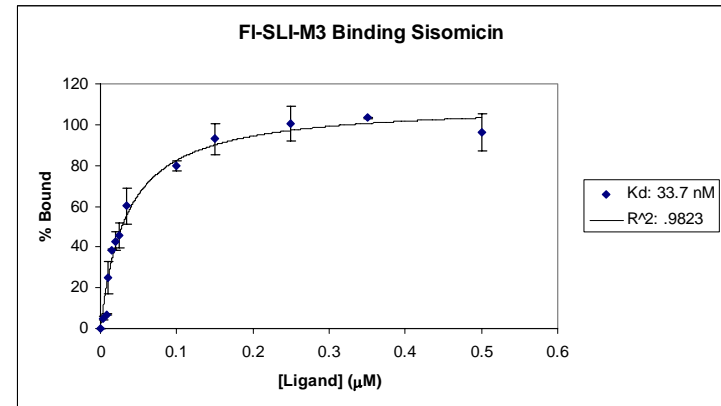
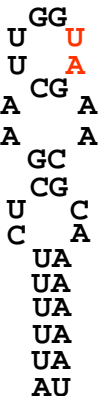
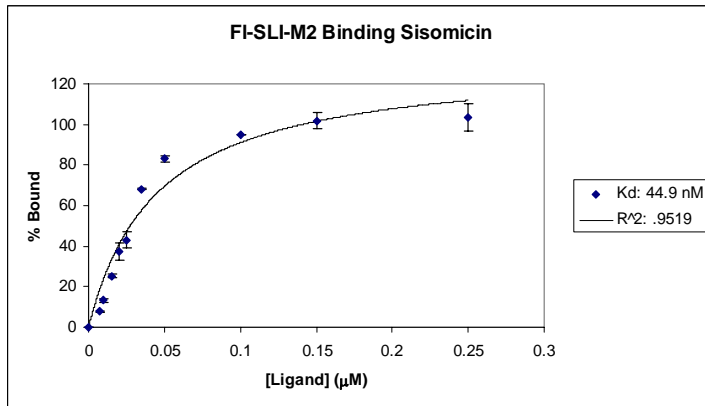
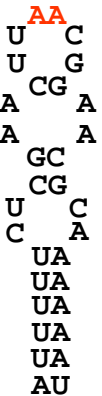
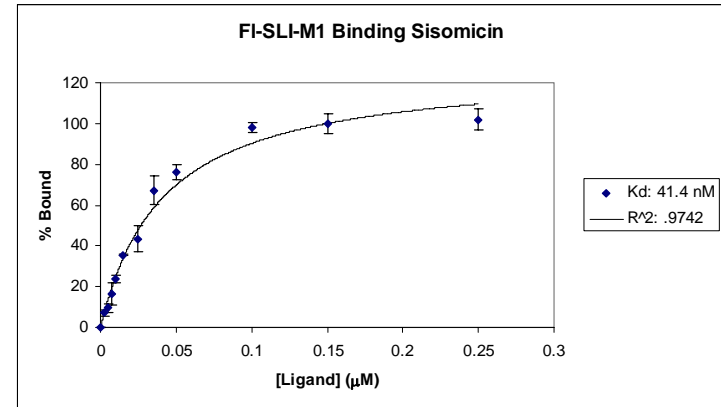
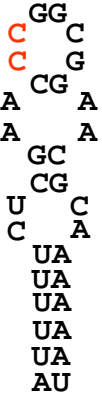
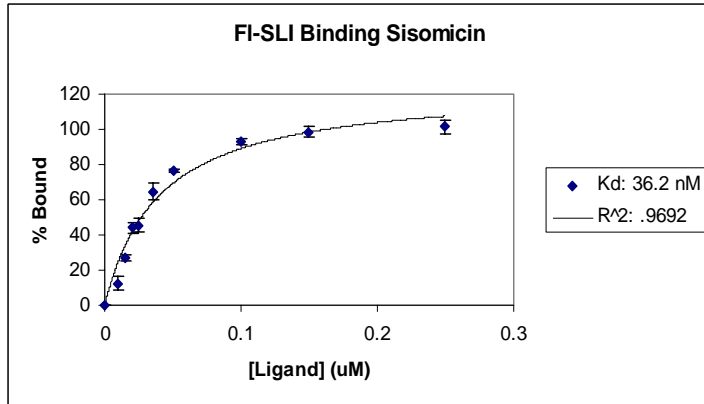
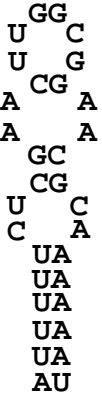


Hygromycin B Binding Fl-SLI

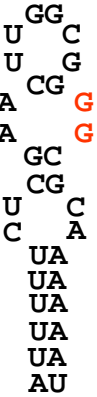
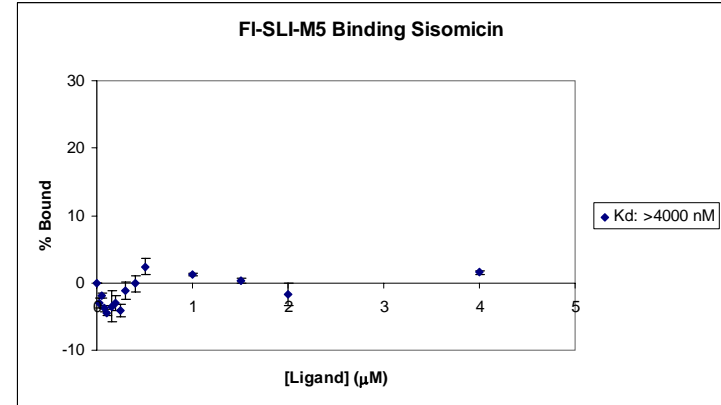
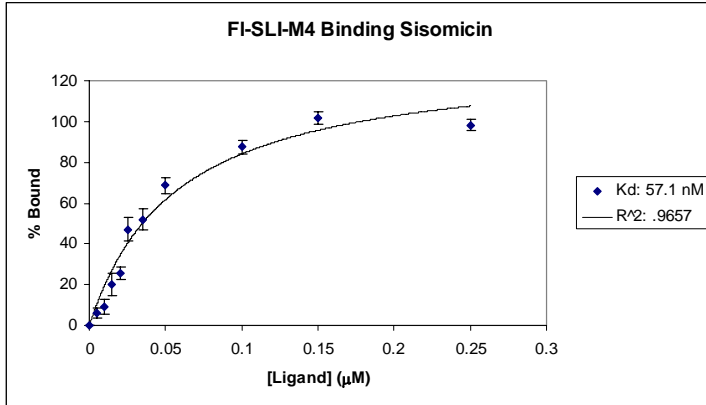
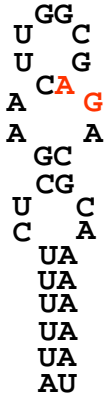
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C C A
UA
UA
UA
UA
UA
AU



Sisomicin Binding Fl-SLI and Mutants

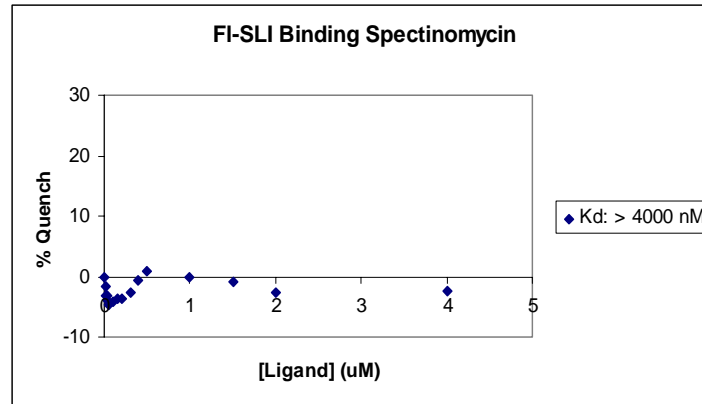


Sisomicin Binding Fl-SLI and Mutants

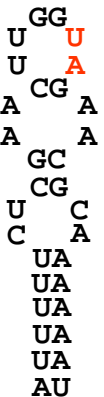
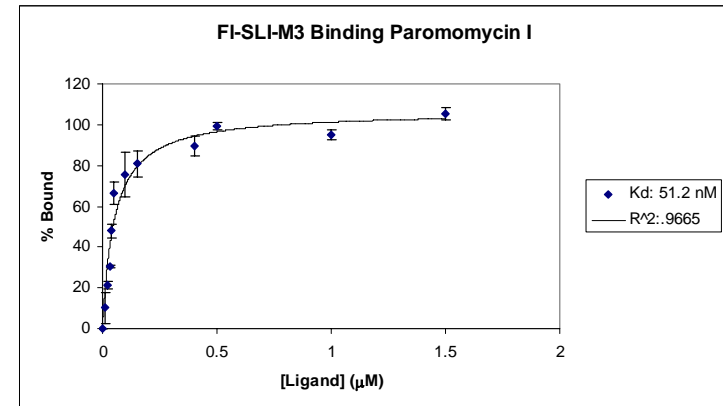
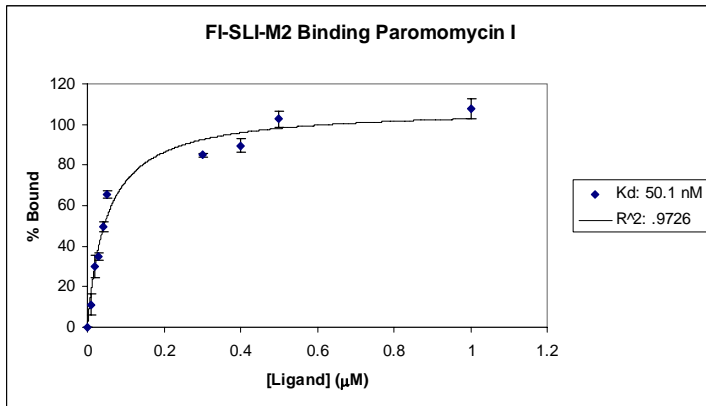
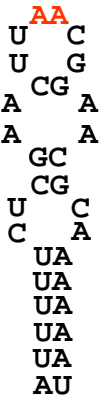
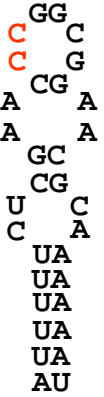
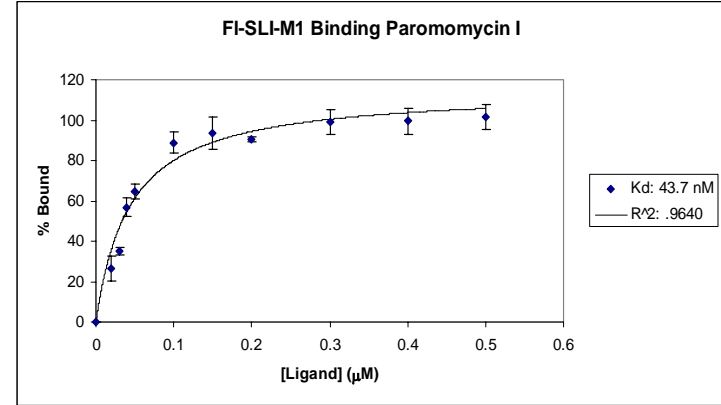
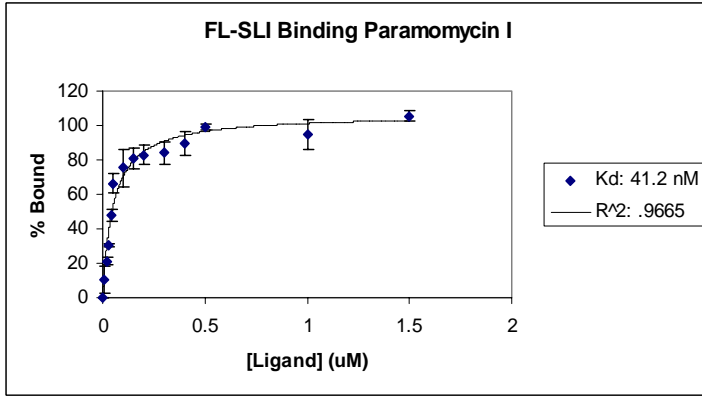
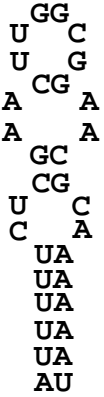


Spectinomycin Binding Fl-SLI

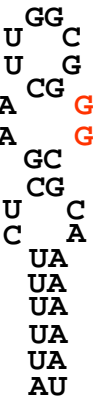
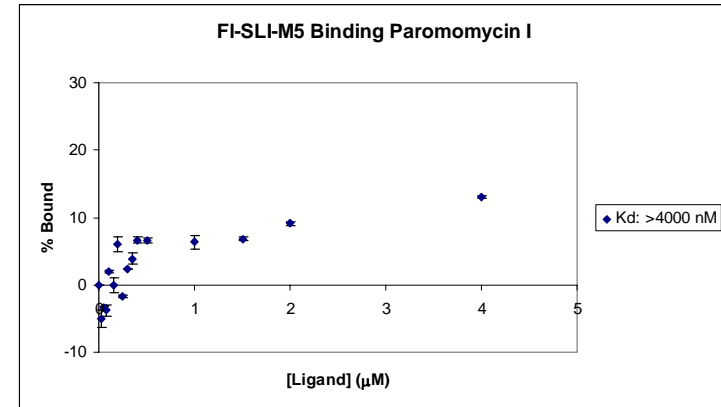
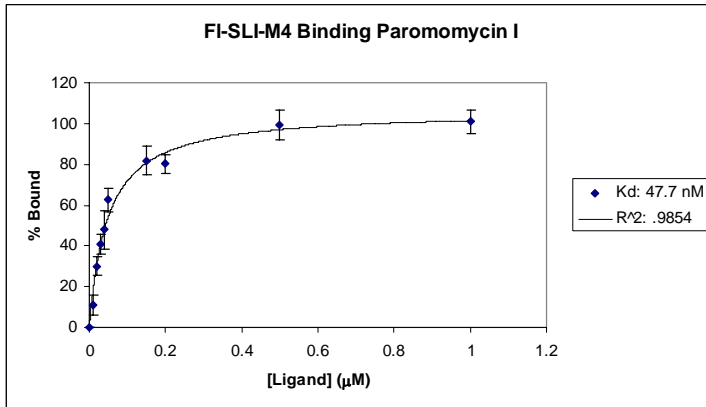
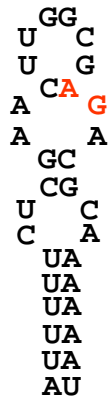
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AU



Paromomycin I Binding Fl-SLI and Mutants

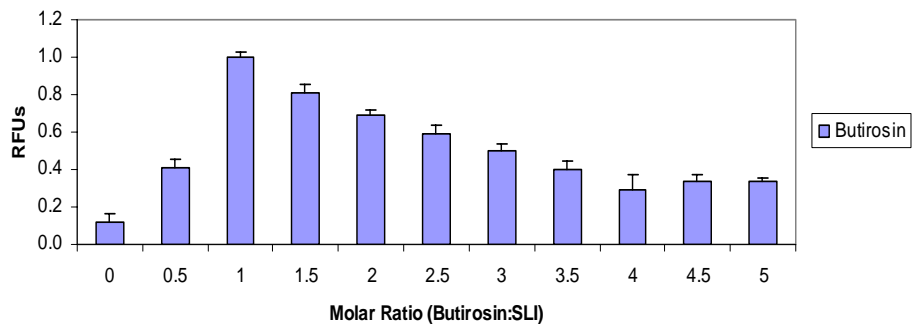


Paromomycin Binding Fl-SLI and Mutants

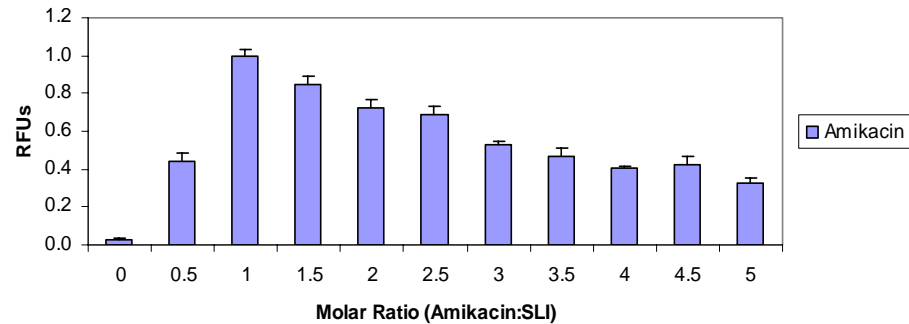


Job Plot Analysis

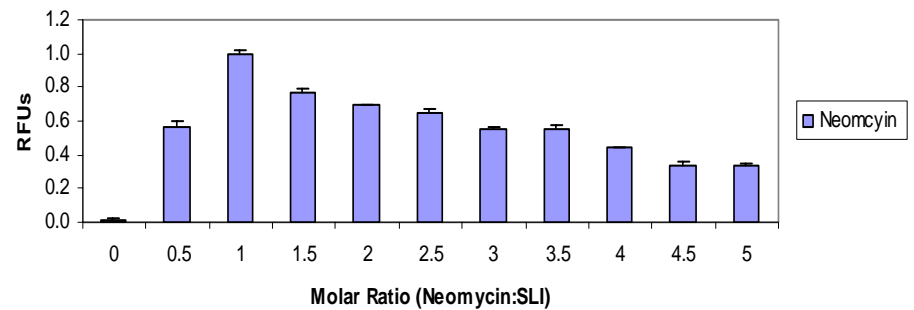
FI-SLI Binding Butirosin B: Job Plot



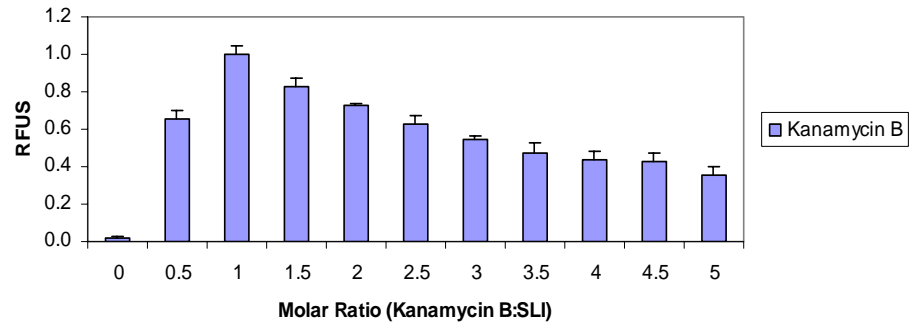
FI-SLI Binding Amikacin: Job Plot



FI-SLI Binding Neomycin B Job Plot

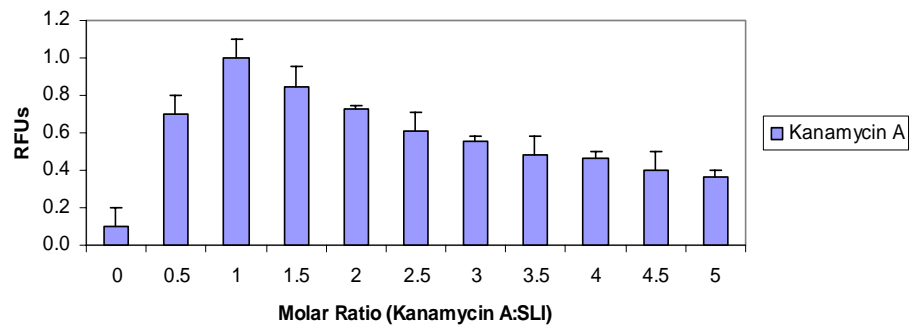


FI-SLI Binding Kanamycin B: Job Plot

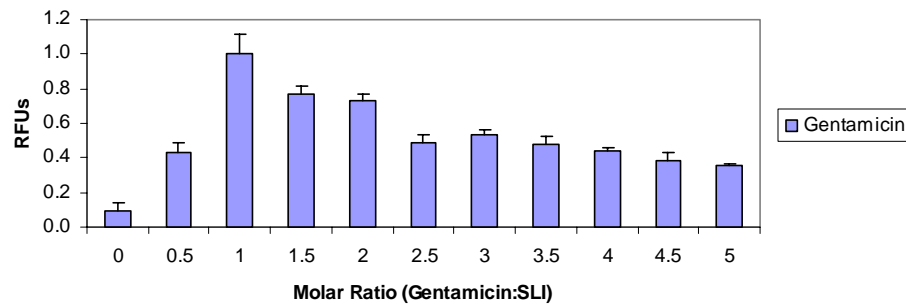


Job Plot Analysis

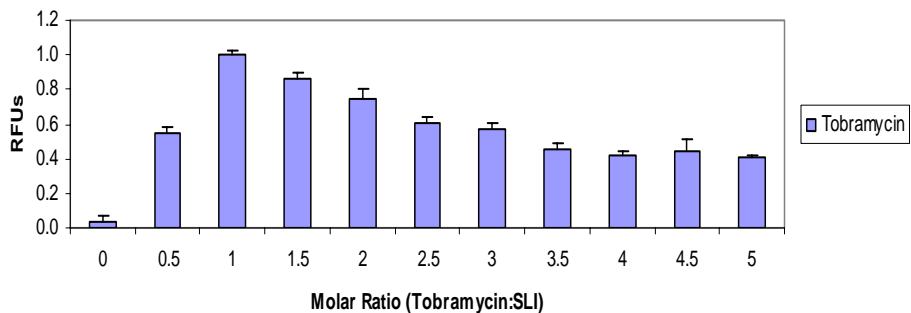
FI-SLI Binding Kanamycin A: Job Plot



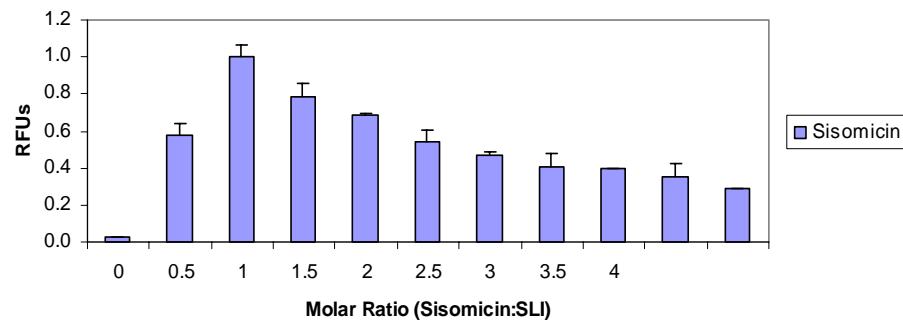
FI-SLI Binding Gentamicin: Job Plot



FI-SLI Binding Tobramycin: Job Plot

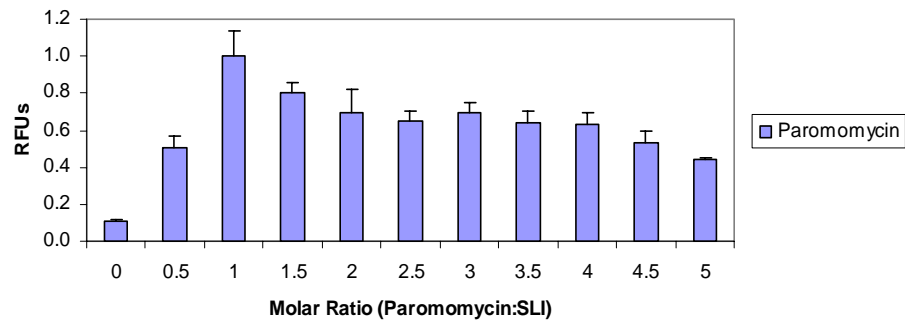


FI-SLI Binding Sisomicin: Job Plot

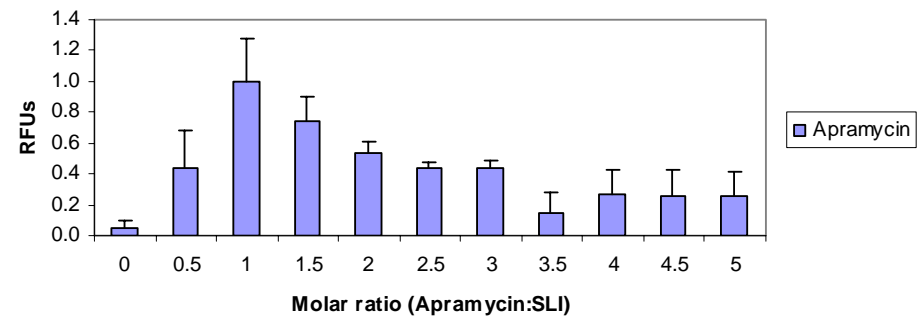


Job Plot Analysis

FI-SLI Binding Paromomycin I: Job Plot



FI-SLI Binding Apramycin: Job Plot



Raw Data Used to Generate Figure 5

Aminoglycoside	MIC ($\mu\text{g/mL}$)	Concentration Tested ($\mu\text{g/mL}$)	% Plasmid Loss After ~250 Generations	K_d for SLI (nM)	Relative SLI Binding Ability (4000/ K_d)
Controls			12		
Hygromycin B	128	70	4	4000	1
Sisomicin	2	1.6	7	26	153
Spectinomycin	64-128	57	8	4000	1
Neomycin B	16	8	15	77	52
Tobramycin	4	2	18	125	32
Kanamycin A	16	8	24	169	24
Kanamycin B	8	6	25	112	36
Butirosin B	16	10	33	288	14
Amikacin	32	12	33	76	53
Paromomycin I	32	18	43	116	35
Gentamicin	4	2	50	80	50
Apramycin	32	18	90	93	43