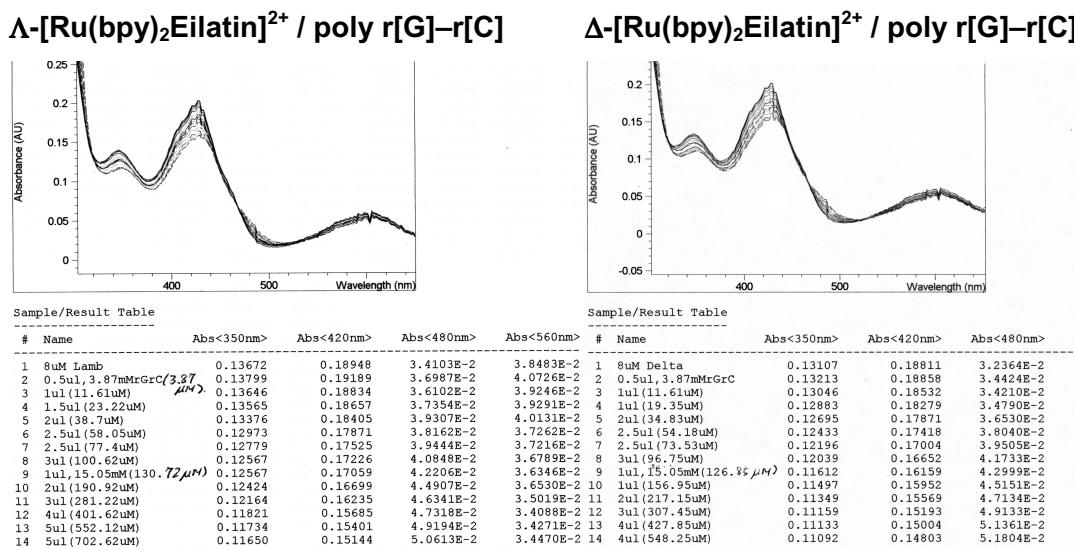
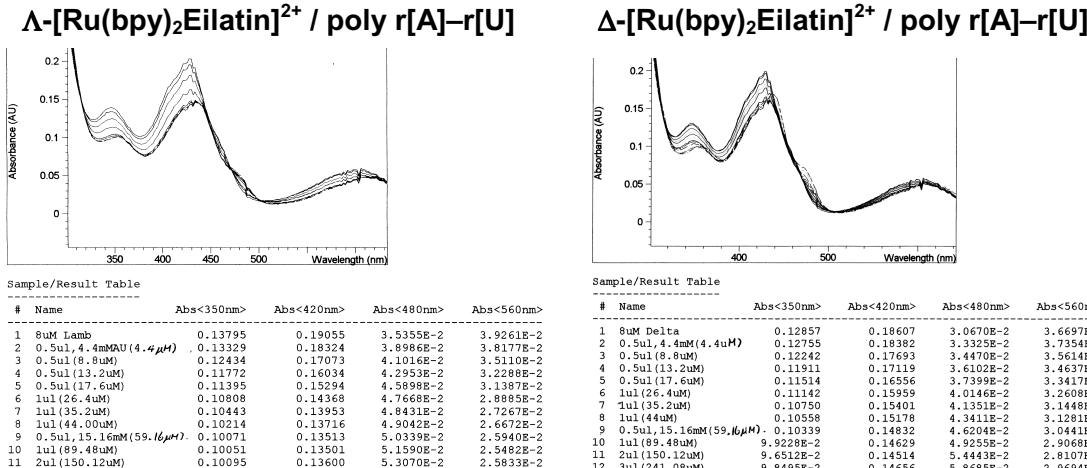


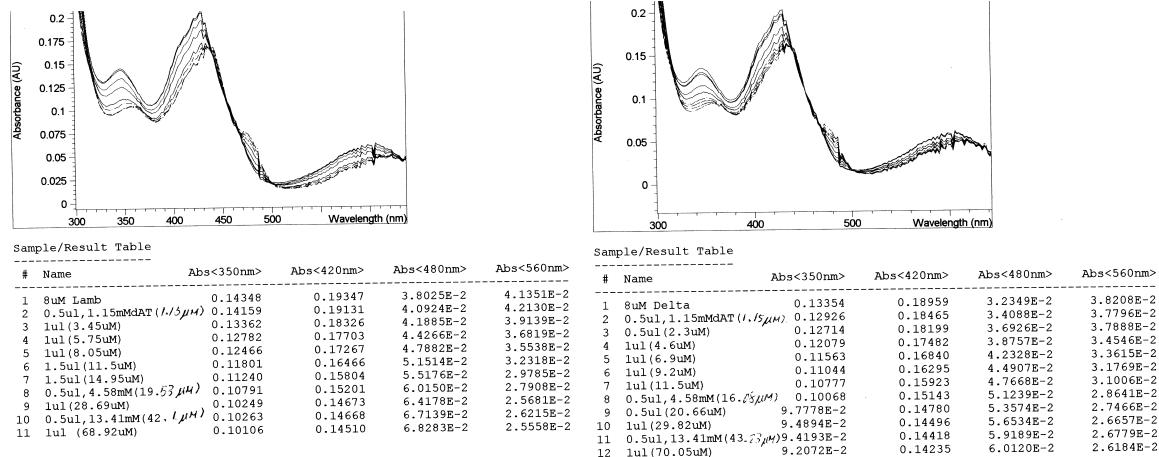
# The DNA and RNA specificity of eilatin Ru(II) complexes as compared to eilatin and ethidium bromide.

Nathan W. Luedtke, Judy S. Hwang, Eileen Nava, Dalia Gut, Moshe Kol, and Yitzhak Tor

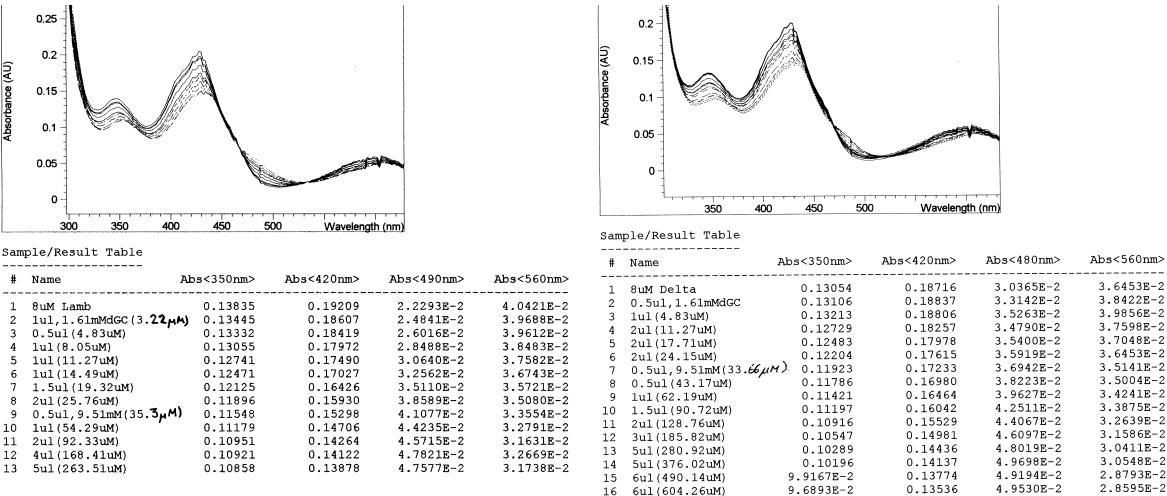
**Supporting Information:** Changes in the UV-vis Absorbance Spectra of Eilatin-Containing Metal Complexes Upon Titration of Polymeric Nucleic Acids.



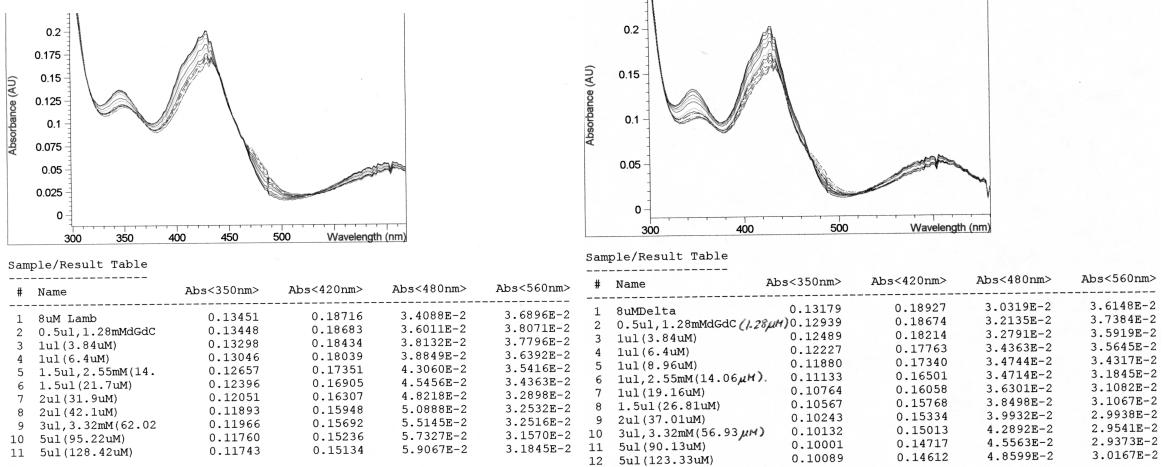
## $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[AT]-d[AT]    $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[AT]-d[AT]



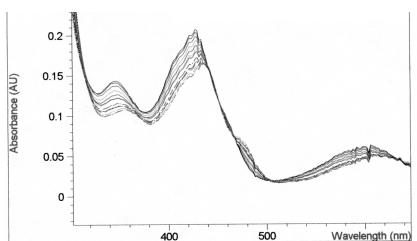
## $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[GC]-d[GC]    $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[GC]-d[GC]



## $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[G]-d[C]



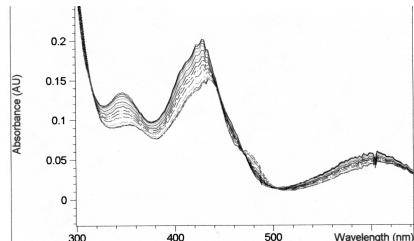
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[A]–d[T]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Lamb	0.14163	0.19394	3.7643E-2	4.1748E-2
2	0.5uL 1.49mM dAdT (1.49 $\mu$ M)	0.14021	0.19113	3.9108E-2	4.1489E-2
3	lul (4.47uM)	0.13649	0.18655	4.1351E-2	3.9566E-2
4	lul (7.45uM)	0.13092	0.18085	4.4250E-2	3.8788E-2
5	lul (10.43uM)	0.12654	0.17555	4.6097E-2	3.6423E-2
6	lul (13.47uM)	0.12254	0.17001	4.7836E-2	3.4988E-2
7	lul (16.39uM)	0.12202	0.16756	5.1117E-2	3.4927E-2
8	2ul (22.35uM)	0.11533	0.16006	5.2536E-2	3.1403E-2
9	2ul (28.31uM)	0.11243	0.15511	5.4764E-2	2.9992E-2
10	2ul (34.27uM)	0.11247	0.15407	5.8044E-2	3.1143E-2
11	lul (4.24mM (42.75 $\mu$ M))	0.10881	0.14929	5.8899E-2	2.9144E-2
12	2ul (59.71uM)	0.10582	0.14668	6.0196E-2	2.8656E-2
13	4ul (93.63uM)	0.10606	0.14619	6.2027E-2	2.9490E-2

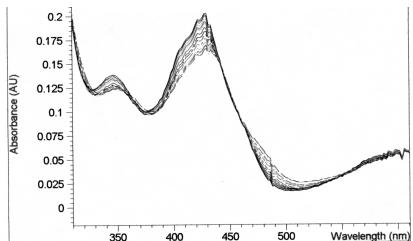
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly d[A]–d[T]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Delta	0.13306	0.19858	3.1693E-2	3.7689E-2
2	0.5uL 1.49mM dAdT (1.49 $\mu$ M)	0.13150	0.18742	3.3905E-2	3.9169E-2
3	lul (4.47uM)	0.12907	0.18445	3.5202E-2	3.8300E-2
4	lul (7.45uM)	0.12689	0.18088	3.5706E-2	3.6682E-2
5	lul (10.43uM)	0.12265	0.17648	3.5980E-2	3.4882E-2
6	lul (13.41uM)	0.11967	0.17168	3.6957E-2	3.3936E-2
7	lul (16.39uM)	0.11613	0.16826	3.7888E-2	3.3091E-2
8	1.5uL 20.86uM)	0.11206	0.16307	3.8818E-2	3.1708E-2
9	2ul (26.82uM)	0.10841	0.15796	4.1153E-2	3.0533E-2
10	3ul (35.76uM)	0.10423	0.15190	4.3625E-2	2.9205E-2
11	1.5uL 4.24mM (48.48 $\mu$ M)	0.7443E-2	0.14313	4.7195E-2	2.7069E-2
12	1.5uL (61.2uM)	9.4086E-2	0.13802	4.9530E-2	2.6154E-2
13	2ul (78.16uM)	9.3658E-2	0.13641	5.1361E-2	2.5864E-2
14	4ul (112.08uM)	9.3155E-2	0.13530	5.3406E-2	2.6245E-2

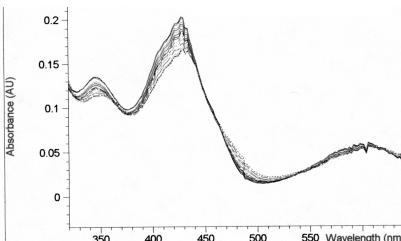
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[I]–r[C]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Lamb	0.13696	0.19043	3.5110E-2	3.9551E-2
2	2ul, 2mM C (8uM)	0.13542	0.18893	3.5995E-2	3.9917E-2
3	3ul (20uM)	0.13518	0.18776	3.7094E-2	4.0298E-2
4	2.5ul, 3.95mM (39.75 $\mu$ M)	0.13030	0.18513	3.8071E-2	3.9658E-2
5	3ul (63.45uM)	0.13329	0.18237	3.9032E-2	3.9062E-2
6	lul, 14.93mM (93.3 $\mu$ M)	0.13135	0.18073	4.0619E-2	3.9398E-2
7	2ul (153.03uM)	0.12849	0.17642	4.1260E-2	3.8177E-2
8	3ul (242.61uM)	0.12703	0.17249	4.3304E-2	3.7766E-2
9	4ul (362.05uM)	0.12617	0.16962	4.6539E-2	3.7628E-2
10	6ul (541.21uM)	0.12605	0.16609	5.0201E-2	3.7770E-2
11	7ul (750.23uM)	0.12343	0.16148	5.2612E-2	3.6676E-2
12	7ul (959.25uM)	0.12326	0.16121	5.5091E-2	3.7064E-2
13	8ul (1198.13uM)	0.12498	0.15829	5.8441E-2	3.8910E-2
14	8ul (1437.01uM)	0.12448	0.15608	5.9540E-2	3.8727E-2

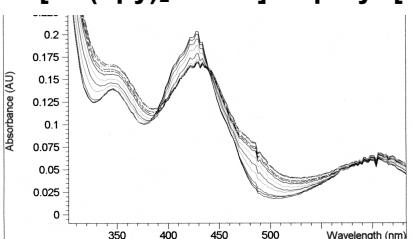
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[I]–r[C]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Delta	0.13307	0.19003	3.2501E-2	3.8284E-2
2	1ul, 2mM C (4uM)	0.13380	0.18993	3.3661E-2	3.9216E-2
3	2ul (12uM)	0.13219	0.18822	3.4149E-2	3.9215E-2
4	3ul (24uM)	0.12852	0.18416	3.3661E-2	3.8162E-2
5	3ul (36uM)	0.12694	0.18207	3.4363E-2	3.7872E-2
6	6ul, 3.95mM (51.8uM)	0.12625	0.17987	3.5461E-2	3.7933E-2
7	3ul (75.5uM)	0.12503	0.17719	3.6026E-2	3.7109E-2
8	1ul, 14.93mM (105.26 $\mu$ M)	0.12190	0.17455	3.6713E-2	3.6667E-2
9	1.ul (150.17uM)	0.12161	0.17278	3.8284E-2	3.6697E-2
10	3ul (239.75uM)	0.11992	0.16931	3.9978E-2	3.5934E-2
11	5ul (389.05uM)	0.11932	0.16531	4.3777E-2	3.5742E-2
12	6ul (516.21uM)	0.11726	0.16138	4.5502E-2	3.4892E-2
13	6ul (747.37uM)	0.11458	0.15688	4.7052E-2	3.4607E-2
14	7ul (956.39uM)	0.11382	0.15477	4.9744E-2	3.5156E-2
15	7ul (1165.41uM)	0.11554	0.15372	5.2216E-2	3.6179E-2

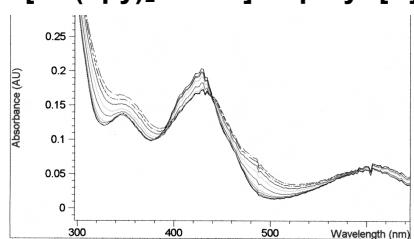
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[A]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Lamb	0.13719	0.19093	3.6331E-2	4.0573E-2
2	0.5ul, 1.1mM A(1.1 $\mu$ M)	0.13716	0.18822	3.9032E-2	4.1870E-2
3	lul (3.3uM)	0.13693	0.18364	4.2053E-2	4.0710E-2
4	2ul (7.7uM)	0.14203	0.17773	5.2399E-2	4.2419E-2
5	2ul (12.1uM)	0.14519	0.16948	6.0486E-2	4.1489E-2
6	2ul (16.5uM)	0.14960	0.16446	6.8588E-2	4.2526E-2
7	2ul (20.9uM)	0.15509	0.16249	7.4844E-2	4.4128E-2
8	2.5ul (26.4uM)	0.15773	0.16121	7.7042E-2	4.4937E-2
9	1.5ul, 2.6mM (34.2 $\mu$ M)	0.16006	0.16147	7.9208E-2	4.6051E-2
10	0.5ul, 11.02mM (45.27 $\mu$ M)	0.16412	0.16295	8.2916E-2	4.8370E-2
11	lul (67.26uM)	0.16406	0.16118	8.2413E-2	4.7394E-2
12	2ul (111.34uM)	0.16570	0.16177	8.3878E-2	4.8172E-2

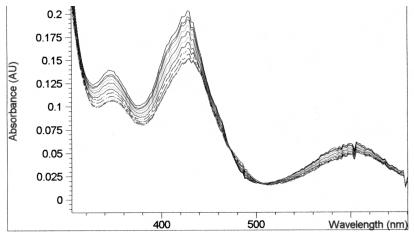
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[A]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<490nm>	Abs<560nm>
1	8uM Delta	0.13597	0.19110	1.8982E-2	3.8483E-2
2	0.5ul, 1.1mM A(1.1 $\mu$ M)	0.13420	0.18762	2.0594E-2	3.8574E-2
3	0.5ul (2.2mM)	0.13646	0.18629	2.3590E-2	3.9261E-2
4	1ul (4.4uM)	0.13637	0.18115	2.7084E-2	3.8422E-2
5	2ul (8.8uM)	0.14043	0.17329	3.6102E-2	3.8483E-2
6	2ul (13.2uM)	0.14421	0.16721	4.6570E-2	4.0756E-2
7	2ul (17.6uM)	0.15149	0.16437	5.4733E-2	4.2084E-2
8	2.5ul (23.1uM)	0.15756	0.16420	6.0165E-2	4.3777E-2
9	1.5ul, 2.6mM (30.9	0.16306	0.16502	6.4713E-2	4.5227E-2

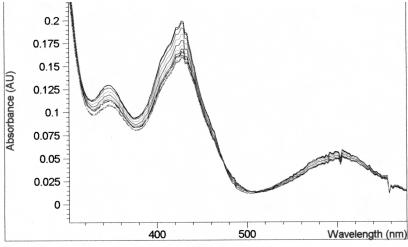
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[U]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Lamb	0.13809	0.19075	3.6346E-2	4.0451E-2
2	lul(1.02mM(2.04 μM))	0.13365	0.18492	3.7186E-2	4.0054E-2
3	0.5uL(3.06μM)	0.13184	0.19195	3.7521E-2	3.9246E-2
4	lul(5.1uM)	0.12852	0.17632	3.8528E-2	3.7949E-2
5	lul(7.14uM)	0.12527	0.17030	3.8940E-2	3.6438E-2
6	lul(9.18uM)	0.12196	0.16458	3.9917E-2	3.5416E-2
7	lul(11.22uM)	0.11818	0.15948	4.0466E-2	3.4058E-2
8	1.5uL(14.28uM)	0.11488	0.15353	4.1870E-2	3.2806E-2
10	1.5uL(2.15mM(24.3 μM))	0.10648	0.14281	4.3503E-2	3.1036E-2
11	2uL(33.41uM)	0.10789	0.14331	4.4891E-2	3.1631E-2
12	3uL(46.31uM)	0.10631	0.14268	4.5410E-2	3.1891E-2
13	0.5uL(20.36mM(66.67 μM))	0.10732	0.14333	4.5837E-2	3.1754E-2

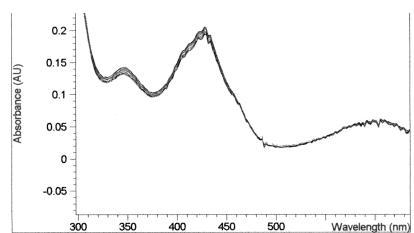
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[U]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Delta	0.12868	0.18596	2.9892E-2	3.6758E-2
2	0.5uL(2.5mM(1.02 μM))	0.12865	0.18448	3.1784E-2	3.7659E-2
3	lul(3.06μM)	0.12552	0.17944	3.3340E-2	3.6865E-2
4	lul(5.1uM)	0.12180	0.17303	3.3646E-2	3.5522E-2
5	lul(7.14uM)	0.11801	0.16727	3.4210E-2	3.4317E-2
6	lul(9.18uM)	0.11543	0.16206	3.4485E-2	3.3035E-2
7	lul(11.22uM)	0.11327	0.15837	3.4546E-2	3.2166E-2
8	2uL(16.32uM)	0.11160	0.15614	3.4744E-2	3.1616E-2
10	2.5uL(33.52uM)	0.10759	0.15193	3.4948E-2	3.1250E-2
11	2.5uL(44.27uM)	0.10748	0.15140	3.5339E-2	3.1722E-2
12	3uL(57.17uM)	0.10727	0.15021	3.5217E-2	3.1250E-2
13	0.5uL(20.36mM(64.67 μM))	0.10663	0.14973	3.6316E-2	3.1067E-2

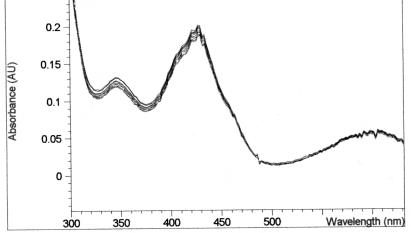
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[C]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<480nm>	Abs<560nm>
1	8uM Lamb	0.14102	0.19347	3.7309E-2	4.1702E-2
2	0.5uL(2.5mM(2.5 μM))	0.13974	0.19272	3.7476E-2	4.2313E-2
3	lul(7.5uM)	0.13788	0.18555	3.6636E-2	4.1499E-2
4	2uL(17.5uM)	0.13765	0.18101	3.6743E-2	4.1351E-2
5	lul(32.5uM)	0.13628	0.18017	3.6530E-2	4.1412E-2
6	4uL(52.5uM)	0.13545	0.18910	3.6621E-2	4.1443E-2
7	5uL(77.5uM)	0.13380	0.18672	3.6285E-2	4.0955E-2
8	6uL(107.5uM)	0.13190	0.18413	3.5812E-2	4.0680E-2
9	7uL(142.5uM)	0.13098	0.18283	3.6392E-2	4.0985E-2
10	0.5uL(72.9mM(215.4 μM))	0.12946	0.18190	3.6495E-2	4.0985E-2
11	lul(361.2uM)	0.12988	0.18152	3.6560E-2	4.0848E-2
12	1.5uL(534.9uM)	0.13092	0.18259	3.8956E-2	4.2969E-2

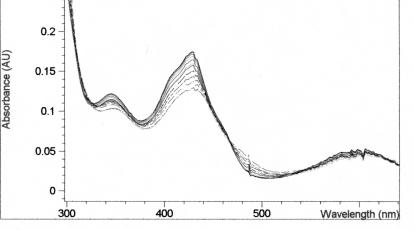
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[C]



Sample/Result Table

#	Name	Abs<350nm>	Abs<380nm>	Abs<420nm>	Abs<450nm>
1	8uM Delta	0.12883	9.6130E-2	0.18651	0.11432
2	lul(2.5mMrc(5uM))	0.13039	9.7595E-2	0.18878	0.11612
3	2uL(15uM)	0.12596	9.4284E-2	0.18565	0.11467
4	2uL(25uM)	0.12532	9.4208E-2	0.18504	0.11404
5	3uL(40uM)	0.12434	9.3521E-2	0.18439	0.11371
6	4uL(60uM)	0.12383	9.2712E-2	0.18245	0.11259
7	5uL(85uM)	0.12277	9.1660E-2	0.18066	0.11179
6	6uL(115uM)	0.12024	9.0240E-2	0.17871	0.11055
7	7uL(150uM)	0.11884	8.9493E-2	0.17630	0.10881
9	7uL(200uM)	0.11876	8.8882E-2	0.17577	0.10869
10	0.5uL(72.9mM(222 uM))	0.11876	8.7952E-2	0.17444	0.10786
11	1uL(368.7uM)	0.11717	8.7952E-2	0.17444	0.10786
12	1.5uL(514.5uM)	0.11703	8.8089E-2	0.17381	0.10847
13	2uL(660.3uM)	0.11810	8.8913E-2	0.17374	0.10858

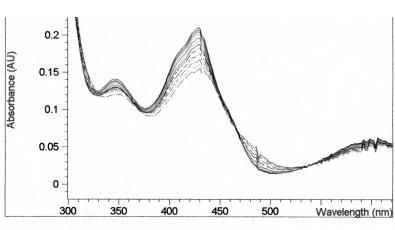
### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[G]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<490nm>	Abs<560nm>
1	8uM Lamb	0.11986	0.16434	3.6377E-2	3.6377E-2
2	0.5uL(0.374mMrcG(c.37 μM))	0.11900	0.16368	3.6972E-2	3.6972E-2
3	lul(1.12uM)	0.11714	0.16165	3.9998E-2	3.6407E-2
4	2uL(2.62uM)	0.11568	0.15886	2.0477E-2	3.6011E-2
5	3uL(4.86uM)	0.11349	0.15515	2.0554E-2	3.4775E-2
6	4uL(7.85uM)	0.11169	0.15065	2.2125E-2	3.4515E-2
7	5uL(11.22uM)	0.10979	0.14879	2.4551E-2	3.4958E-2
8	6uL(19.07uM)	0.10866	0.14253	2.7039E-2	3.3661E-2
9	7uL(30.29uM)	0.10982	0.13686	3.0792E-2	3.3676E-2
10	10uL(45.25uM)	0.10774	0.13107	3.3264E-2	3.2806E-2
11	3uL(67.69uM)	0.10280	0.12422	3.3401E-2	3.1021E-2
12	0.5uL(37.4mM(105 μM))	0.10373	0.12434	3.7460E-2	3.4317E-2

### $\Delta$ -[Ru(bpy)<sub>2</sub>Eilatin]<sup>2+</sup> / poly r[G]



Sample/Result Table

#	Name	Abs<350nm>	Abs<420nm>	Abs<490nm>	Abs<560nm>
1	8uM Delta	0.13914	0.19736	1.9531E-2	4.1153E-2
2	0.5uL(0.374mMrcG(c.37 μM))	0.13722	0.19498	1.9714E-2	4.0939E-2
3	lul(1.12uM)	0.13557	0.19255	1.9928E-2	4.0634E-2
4	2uL(2.62uM)	0.13356	0.18922	2.0325E-2	4.0054E-2
5	3uL(4.86uM)	0.13147	0.18518	2.1225E-2	3.9444E-2
6	4uL(7.85uM)	0.12965	0.18076	2.3010E-2	3.9124E-2
7	5uL(13.74mM(11. uM))	0.12813	0.17722	2.4950E-2	3.7888E-2
8	6uL(20.09uM)	0.12674	0.17472	2.6144E-2	3.6902E-2
9	7uL(30.30uM)	0.12585	0.17285	2.7414E-2	3.6032E-2
10	2uL(45.25uM)	0.12460	0.15939	3.7460E-2	3.7811E-2
11	3uL(67.69uM)	0.12480	0.15404	3.9978E-2	3.7415E-2
12	0.5uL(105.12uM)	0.12068	0.14850	4.1107E-2	3.6438E-2