Supplemental Table 3. Analysis of Relaxation to Equilibrium Data at 25 ^{o}C (see Methods, Fig 6 in Text)

$[Na^+]$ M	[Hep] (μg/mL)	~[Hep] (M)	k_r (s^{-1})	error in k_r (s^{-1})	Fit $[R]_{free}$ (M)	error in $[R]_{free}$ (M)	$K_{heparin}$[1] (M^{-1})	error in $K_{heparin}$ (M^{-1})	Fit k_d[1] (s^{-1})	error in k_d (s^{-1})
Glu^-										
0.34	100	6.70E-06	1.66E-05	2.51E-06	3.75E-12	1.83E-13	2.80E+08	1.30E+07	3.75E-06	7.29E-07
	150	1.00E-05	1.75E-05	2.70E-06	2.56E-12	1.93E-13	2.73E+08	1.92E+07	8.92E-06	1.48E-06
	300	2.00E-05	1.58E-05	2.76E-06	1.20E-12	1.84E-13	2.92E+08	3.90E+07	1.23E-05	3.56E-06
							2.82E+08	9.61E+06	8.31E-06	4.29E-06
0.43										
	100	6.70E-06	0.000135	8.75E-06	2.49E-10	1.77E-11	4.07E+06	2.79E+05	8.80E-06	3.19E-06
	200	1.30E-05	7.67E-05	8.90E-06	1.22E-10	1.06E-11	4.24E+06	3.45E+05	1.65E-05	3.16E-06
	300	2.00E-05	6.80E-05	1.33E-05	1.08E-10	9.68E-12	3.18E+06	2.65E+05	1.64E-05	3.11E-06
	600	4.00E-05	5.00E-05	6.70E-06	6.44E-11	6.63E-12	2.69E+06	2.53E+05	1.41E-05	2.90E-06
	1000	6.70E-05	4.66E-05	5.60E-06	2.64E-11	6.15E-12	3.97E+06	7.54E+05	2.88E-05	9.50E-06
							3.63E+06	6.64E+05	1.69E-05	7.33E-06
0.46										
	100	6.70E-06	0.000108	6.30E-06	3.26E-10	1.77E-11	3.07E+06	1.66E+05	7.47E-06	2.41E-06
	200	1.30E-05	5.93E-05	4.56E-06	1.85E-10	1.09E-11	2.76E+06	1.58E+05	3.73E-06	1.58E-06
	300	2.00E-05	5.48E-05	5.47E-06	1.36E-10	1.02E-11	2.52E+06	1.79E+05	1.35E-05	2.37E-06
	600	4.00E-05	4.16E-05	3.50E-06	6.53E-11	8.10E-12	2.66E+06	2.96E+05	1.94E-05	4.18E-06
	1000	6.70E-05	2.87E-05	3.43E-06	2.96E-11	6.42E-12	3.53E+06	6.32E+05	1.72E-05	6.84E-06
	100	6.70E-06	0.000127	2.37E-05	4.73E-10	2.85E-11	2.07E+06	1.26E+05	1.05E-05	3.32E-06
	300	2.00E-05	5.47E-05	4.64E-06	1.50E-10	1.04E-11	2.28E+06	1.50E+05	9.93E-06	1.87E-06
	600	4.00E-05	3.03E-05	2.28E-06	6.38E-11	6.68E-12	2.72E+06	2.60E+05	1.14E-05	2.17E-06
	1000	6.70E-05	2.45E-05	2.88E-06	3.03E-11	5.56E-12	3.45E+06	5.38E+05	1.40E-05	4.06E-06
							2.79E+06	4.93E+05	1.19E-05	4.79E-06

0.55									
	100	6.70E-06	0.000121	2.03E-05	9.58E-10	9.27E-11	9.47E+05	9.68E+04	1.30E-05	4.54E-06
	200	1.30E-05	7.84E-05	1.48E-05	5.56E-10	6.33E-11	8.69E+05	9.65E+04	1.53E-05	4.12E-06
	300	2.00E-05	6.73E-05	1.37E-05	4.05E-10	5.47E-11	8.14E+05	1.03E+05	2.01E-05	4.97E-06
	600	4.00E-05	4.68E-05	7.44E-06	2.78E-10	4.08E-11	6.04E+05	8.03E+04	1.52E-05	4.18E-06
	1000	6.70E-05	4.12E-05	1.20E-05	1.33E-10	3.69E-11	7.77E+05	1.73E+05	2.64E-05	1.05E-05
							8.02E+05	1.28E+05	1.80E-05	5.38E-06
0.57										
	200	1.30E-05	5.03E-05	4.17E-06	6.80E-10	3.64E-11	6.97E+05	3.92E+04	1.18E-05	1.59E-06
	300	2.00E-05	4.67E-05	6.10E-06	5.54E-10	3.57E-11	5.82E+05	3.83E+04	1.72E-05	2.18E-06
	600	4.00E-05	3.80E-05	4.71E-06	3.22E-10	3.17E-11	5.18E+05	4.87E+04	2.08E-05	3.57E-06
	1000	6.70E-05	3.24E-05	4.02E-06	1.88E-10	2.77E-11	5.44E+05	7.18E+04	2.04E-05	5.34E-06
							5.85E+05	7.88E+04	1.75E-05	4.17E-06
F^-										
0.37										
	100	6.70E-06	5.98E-05	6.15E-06	2.56E-11	1.68E-12	4.09E+07	2.53E+06	1.54E-05	1.91E-06
	150	1.00E-05	2.21E-05	5.27E-06	9.56E-12	8.81E-13	7.31E+07	6.18E+06	1.03E-05	1.87E-06
	300	2.00E-05	1.43E-05	4.10E-06	3.79E-12	6.63E-13	9.22E+07	1.37E+07	1.06E-05	3.67E-06
							6.87E+07	2.60E+07	1.21E-05	2.87E-06
0.45										
	100	6.70E-06	9.45E-05	1.36E-05	2.74E-10	2.63E-11	3.68E+06	3.35E+05	8.73E-06	3.48E-06
	200	1.30E-05	5.20E-05	6.99E-06	1.26E-10	1.40E-11	4.08E+06	4.14E+05	8.71E-06	2.54E-06
	300	2.00E-05	5.26E-05	8.70E-06	9.81E-11	1.34E-11	3.52E+06	4.28E+05	1.54E-05	3.73E-06
	600	4.00E-05	4.23E-05	8.00E-06	4.31E-11	1.07E-11	4.03E+06	8.04E+05	2.16E-05	7.60E-06
	1000	6.70E-05	3.27E-05	9.68E-06	3.05E-11	8.25E-12	3.43E+06	7.32E+05	1.53E-05	6.54E-06
							3.75E+06	2.98E+05	1.40E-05	5.42E-06
0.50										

	100	6.70E-06	9.07E-05	5.10E-06	6.31E-10	3.01E-11	1.51E+06	7.56E+04	2.57E-06	1.33E-06
	300	2.00E-05	5.80E-05	2.86E-06	4.72E-10	3.26E-11	6.92E+05	4.80E+04	3.30E-05	3.46E-06
	600	4.00E-05	4.91E-05	2.90E-06	1.15E-10	1.55E-11	1.49E+06	1.80E+05	2.73E-05	4.85E-06
							1.23E+06	4.68E+05	2.10E-05	1.62E-05
0.61										
	100	6.70E-06	7.56E-05	1.14E-05	7.66E-10	8.65E-11	1.22E+06	1.39E+05	6.38E-05	9.31E-06
	200	1.30E-05	7.61E-05	6.61E-06	7.43E-10	8.92E-11	6.31E+05	7.57E+04	6.70E-05	1.03E-05
	300	2.00E-05	8.85E-05	1.45E-05	6.83E-10	9.55E-11	4.63E+05	6.29E+04	7.47E-05	1.31E-05
	600	4.00E-05	7.34E-05	7.80E-06	4.41E-10	8.12E-11	3.72E+05	6.17E+04	6.86E-05	1.59E-05
	1000	6.70E-05	5.95E-05	1.11E-05	2.33E-10	5.88E-11	4.37E+05	9.11E+04	5.29E-05	1.72E-05
							6.25E+05	3.47E+05	6.54E-05	8.01E-06

[1]The last entries in a column of fit $K_{heparin}$ or k_d values at a given $[Na^+]$ are the average; standard deviation of the average is given in the same row, in the appropriate error column.