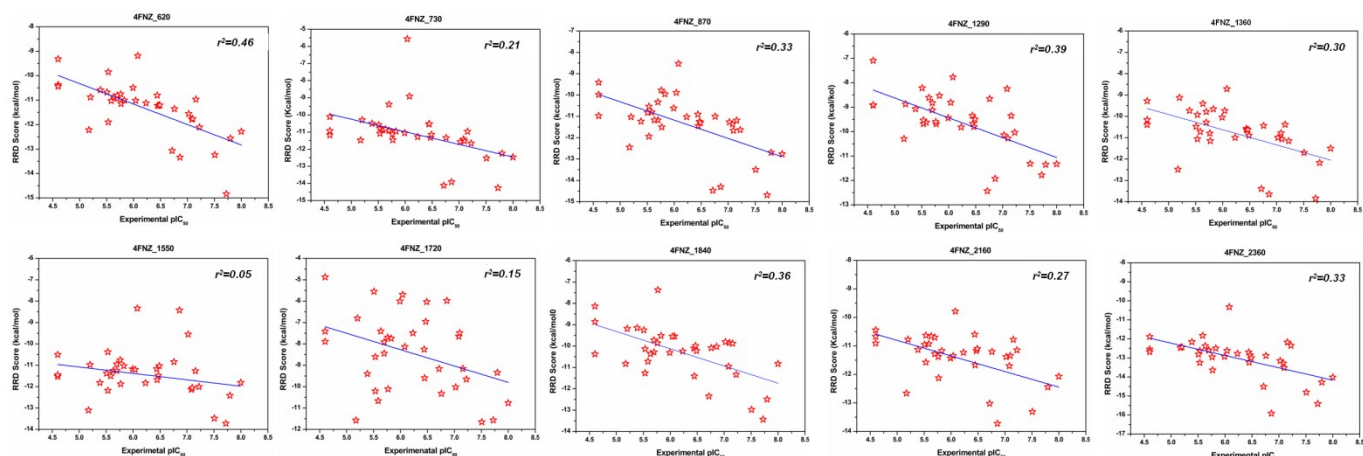


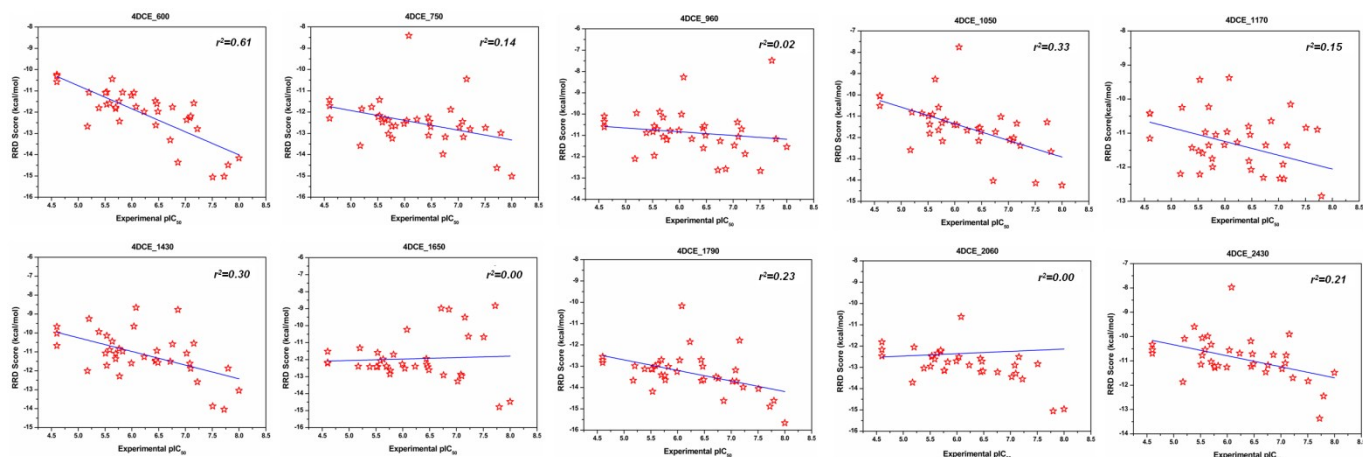
Supporting Materials

Table S1. The individual energy components of the binding free energies predicted by MM/GBSA based on three different solute dielectric constants (kcal/mol).

system	$\epsilon_{in}=1$					$\epsilon_{in}=2$					$\epsilon_{in}=4$				
	ΔE_{ele}	ΔG_{GB}	ΔE_{vdw}	ΔG_{SA}	ΔG_{bind}	ΔE_{ele}	ΔG_{GB}	ΔE_{vdw}	ΔG_{SA}	ΔG_{bind}	ΔE_{ele}	ΔG_{GB}	ΔE_{vdw}	ΔG_{SA}	ΔG_{bind}
1	-28.92	45.58	-61.60	-5.23	-50.17	-14.46	22.5	-61.60	-5.23	-58.79	-7.23	10.96	-61.60	-5.23	-63.10
14	-34.05	51.44	-65.41	-5.49	-53.51	-17.02	25.39	-65.41	-5.49	-62.54	-8.51	12.37	-65.41	-5.49	-67.05
11a	-29.63	46.71	-58.38	-5.15	-46.46	-14.82	23.06	-58.38	-5.15	-55.29	-7.41	11.23	-58.38	-5.15	-59.71
11b	-29.02	44.33	-58.4	-4.98	-48.07	-14.51	21.89	-58.40	-4.98	-56.01	-7.26	10.66	-58.4	-4.98	-59.98
11c	-34.70	51.37	-59.77	-5.19	-48.29	-17.35	25.36	-59.77	-5.19	-56.95	-8.68	12.36	-59.77	-5.19	-61.28
11d	-27.33	46.18	-64.35	-5.62	-51.13	-13.67	22.80	-64.35	-5.62	-60.84	-6.83	11.11	-64.35	-5.62	-65.70
11e	-34.61	52.99	-64.96	-5.48	-52.06	-17.30	26.16	-64.96	-5.48	-61.58	-8.65	12.74	-64.96	-5.48	-66.35
11f	-31.64	46.38	-58.35	-5.18	-48.79	-15.82	22.89	-58.35	-5.18	-56.45	-7.91	11.15	-58.35	-5.18	-60.28
11g	-29.73	46.7	-60.48	-5.15	-48.67	-14.87	23.05	-60.48	-5.15	-57.44	-7.43	11.23	-60.48	-5.15	-61.83
11h	-33.38	49.95	-63.55	-5.4	-52.38	-16.69	24.66	-63.55	-5.4	-60.98	-8.35	12.01	-63.55	-5.4	-65.28
11i	-30.51	45.57	-62.64	-5.23	-52.81	-15.26	22.5	-62.64	-5.23	-60.63	-7.63	10.96	-62.64	-5.23	-64.54
11j	-26.37	44.7	-66.15	-5.80	-53.62	-13.19	22.07	-66.15	-5.8	-63.07	-6.59	10.75	-66.15	-5.80	-67.79
11k	-31.69	48.18	-66.40	-5.83	-55.74	-15.85	23.78	-66.40	-5.83	-64.29	-7.92	11.59	-66.40	-5.83	-68.57
11l	-32.65	48.24	-62.23	-5.27	-51.90	-16.32	23.82	-62.23	-5.27	-60.01	-8.16	11.60	-62.23	-5.27	-64.06
11m	-30.90	46.13	-61.99	-5.26	-52.02	-15.45	22.77	-61.99	-5.26	-59.93	-7.72	11.09	-61.99	-5.26	-63.88
11n	-33.46	46.73	-60.53	-5.12	-52.37	-16.73	23.07	-60.53	-5.12	-59.31	-8.36	11.24	-60.53	-5.12	-62.77
11o	-37.45	55.30	-66.02	-5.46	-53.63	-18.73	27.3	-66.02	-5.46	-62.91	-9.36	13.3	-66.02	-5.46	-67.54
11p	-35.50	54.32	-63.93	-5.40	-50.51	-17.75	26.81	-63.93	-5.40	-60.27	-8.87	13.06	-63.93	-5.40	-65.14
11q	-35.23	52.71	-68.93	-5.82	-57.26	-17.62	26.02	-68.93	-5.82	-66.34	-8.81	12.68	-68.93	-5.82	-70.88
11r	-32.28	53.82	-68.54	-5.97	-52.97	-16.14	26.57	-68.54	-5.97	-64.08	-8.07	12.94	-68.54	-5.97	-69.64
11s	-26.65	47.07	-68.00	-5.84	-53.44	-13.33	23.23	-68.00	-5.84	-63.94	-6.66	11.32	-68.00	-5.84	-69.19
11t	-26.99	49.63	-70.47	-6.06	-53.88	-13.50	24.5	-70.47	-6.06	-65.51	-6.75	11.94	-70.47	-6.06	-71.33
11u	-31.56	50.28	-69.68	-6.04	-56.99	-15.78	24.82	-69.68	-6.04	-66.68	-7.89	12.09	-69.68	-6.04	-71.52
11v	-34.32	54.70	-72.59	-5.97	-58.19	-17.16	27.00	-72.59	-5.97	-68.72	-8.58	13.16	-72.59	-5.97	-73.99
7a	-28.42	40.92	-50.47	-4.50	-42.48	-14.21	20.2	-50.47	-4.5	-48.99	-7.11	9.84	-50.47	-4.50	-52.24
7b	-30.53	43.75	-58.51	-5.03	-50.31	-15.26	21.6	-58.51	-5.03	-57.2	-7.63	10.52	-58.51	-5.03	-60.64
7c	-31.01	44.55	-56.67	-4.96	-48.1	-15.51	22.00	-56.67	-4.96	-55.15	-7.75	10.72	-56.67	-4.96	-58.67
7d	-25.19	38.33	-56.17	-4.87	-47.89	-12.59	18.92	-56.17	-4.87	-54.71	-6.30	9.22	-56.17	-4.87	-58.11
7e	-32.38	43.48	-54.99	-4.76	-48.65	-16.19	21.47	-54.99	-4.76	-54.48	-8.10	10.46	-54.99	-4.76	-57.39
7f	-28.82	44.27	-58.11	-5.05	-47.72	-14.41	21.85	-58.11	-5.05	-55.72	-7.21	10.65	-58.11	-5.05	-59.72
7g	-30.06	43.71	-56.56	-4.87	-47.77	-15.03	21.58	-56.56	-4.87	-54.87	-7.51	10.51	-56.56	-4.87	-58.42
7h	-27.54	41.00	-53.81	-4.71	-45.06	-13.77	20.24	-53.81	-4.71	-52.04	-6.89	9.86	-53.81	-4.71	-55.54
7i	-30.66	43.00	-57.14	-4.90	-47.97	-15.33	21.23	-57.14	-4.90	-54.55	-7.66	10.34	-57.14	-4.90	-57.85
7j	-34.68	49.71	-58.42	-4.98	-48.36	-17.34	24.54	-58.42	-4.98	-56.19	-8.67	11.96	-58.42	-4.98	-60.11
7k	-26.70	41.13	-58.66	-4.94	-49.17	-13.35	20.30	-58.66	-4.94	-56.65	-6.68	9.89	-58.66	-4.94	-60.38
7l	-29.58	44.29	-57.48	-5.01	-47.78	-14.79	21.87	-57.48	-5.01	-55.41	-7.40	10.65	-57.48	-5.01	-59.23

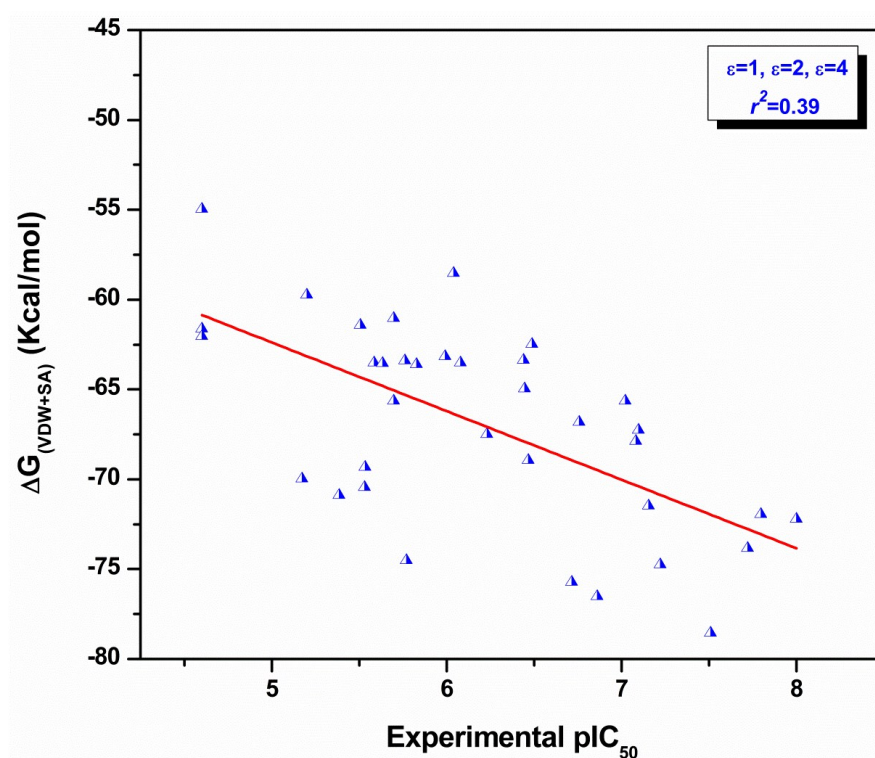


(a)

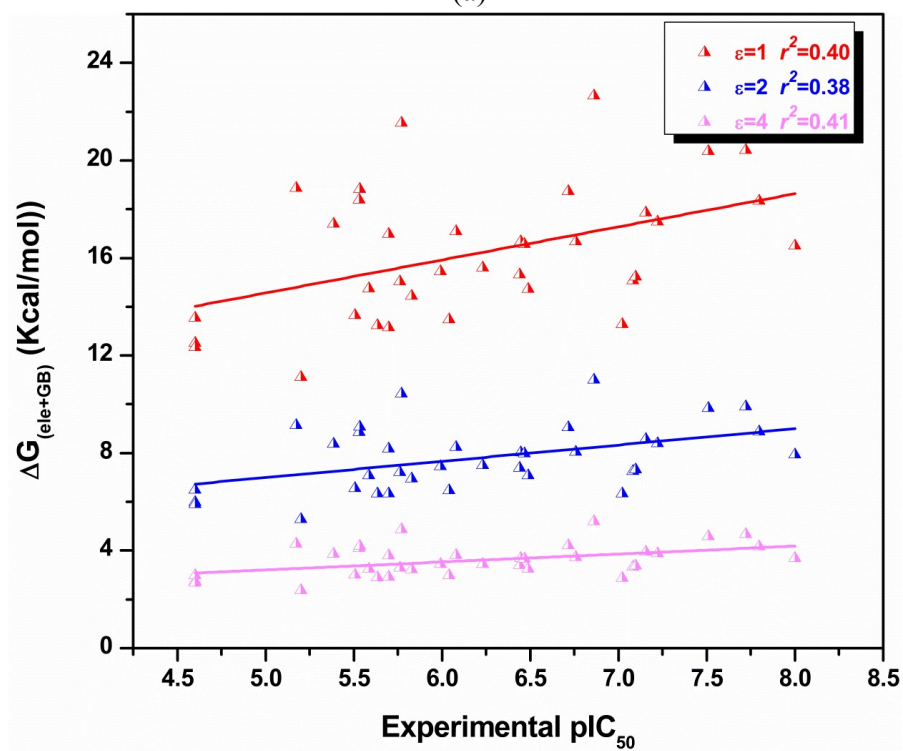


(b)

Figure S1. Correlations between the experimental bioactivities and the docking scores based on different conformations extracted from the MD trajectories for (a) 4FNZ and (b) 4DCE.



(a)



(b)

Figure S2. Correlations between the experimental bioactivities and (a) nonpolar energy components or (b) polar energy components based on three different solute dielectric constants.