# Supporting Information

## Characterization of Hydroxycinnamic Acids Derivatives Binding to Bovine Serum Albumin

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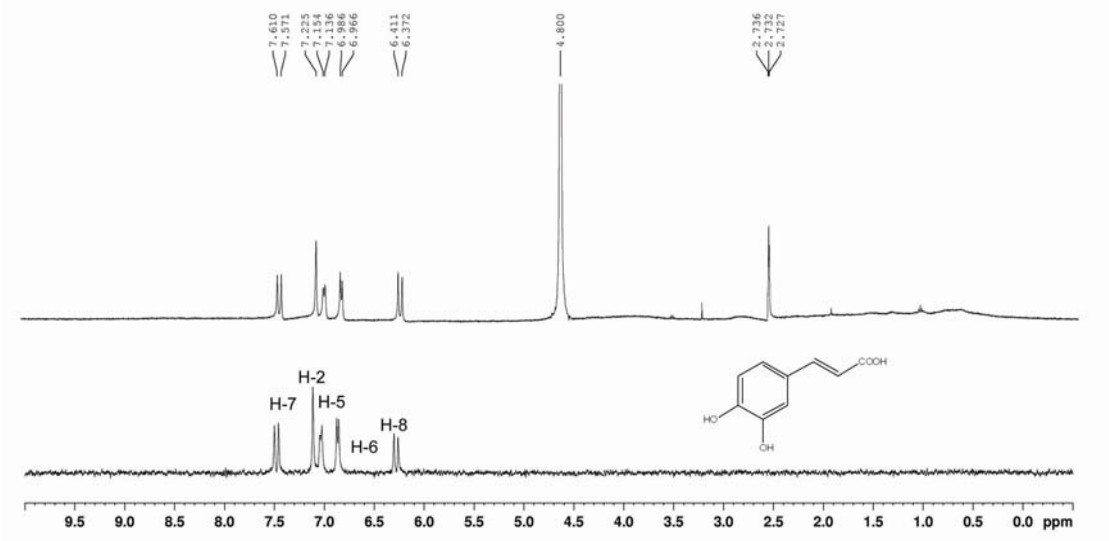


**Figure S1.** (a) $^{1}$H NMR spectrum and (b) STD $^{1}$H NMR spectrum of CFA in the presence of BSA. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

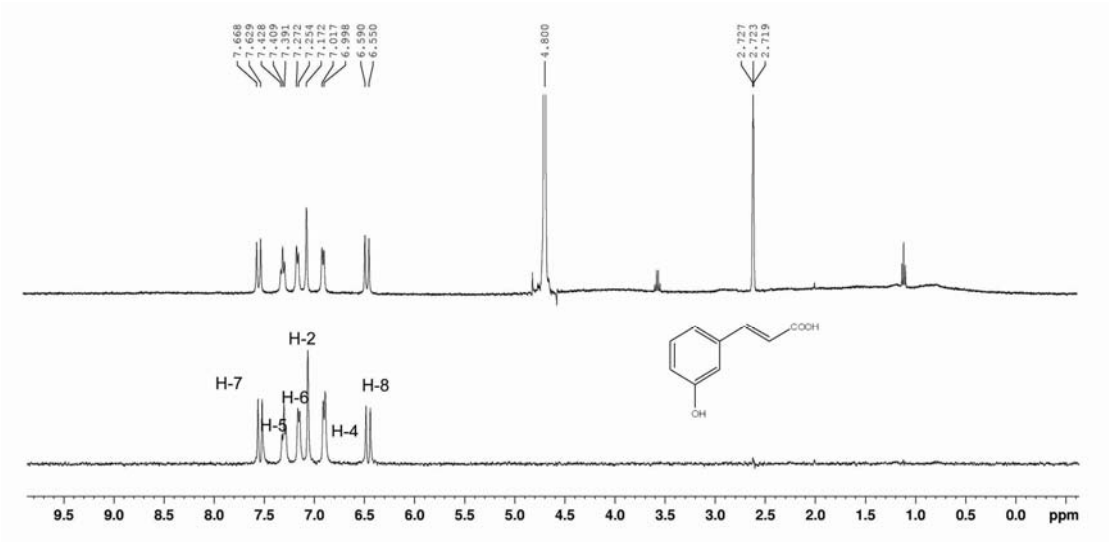


**Figure S2.** (a) $^{1}$H NMR spectrum and (b) STD $^{1}$H NMR spectrum of *m*-CA in the presence of BSA. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

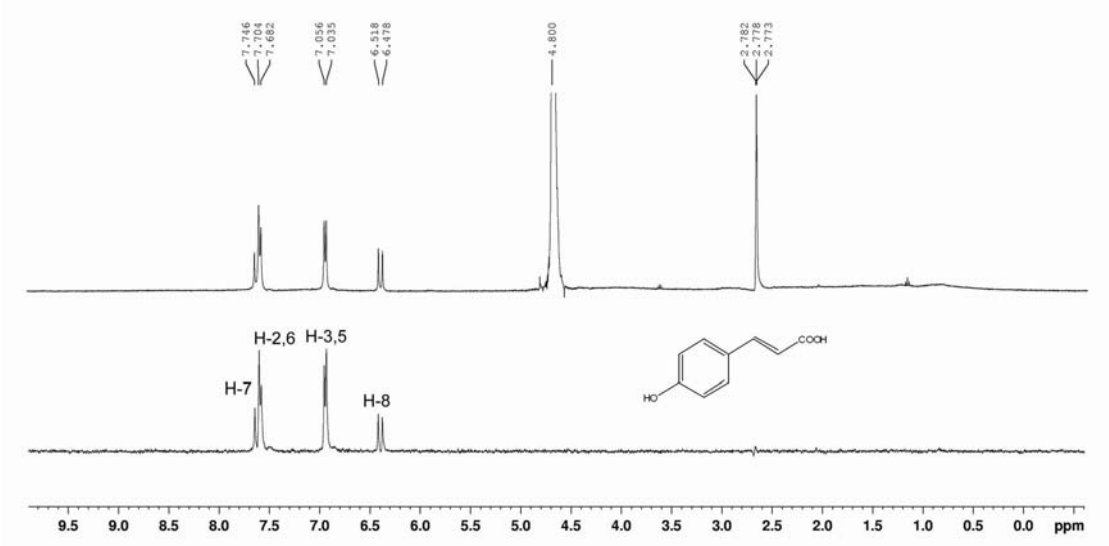


**Figure S3.** (a) $^{1}$H NMR spectrum and (b) STD $^{1}$H NMR spectrum of *p*-CA in the presence of BSA. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

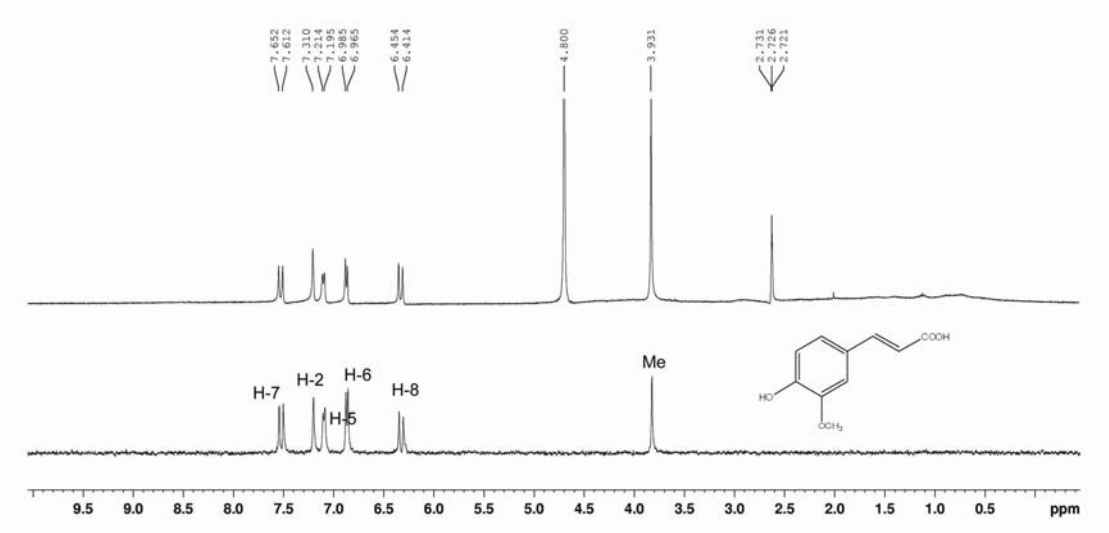


**Figure S4.** (a) $^{1}$H NMR spectrum and (b) STD $^{1}$H NMR spectrum of FA in the presence of BSA. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

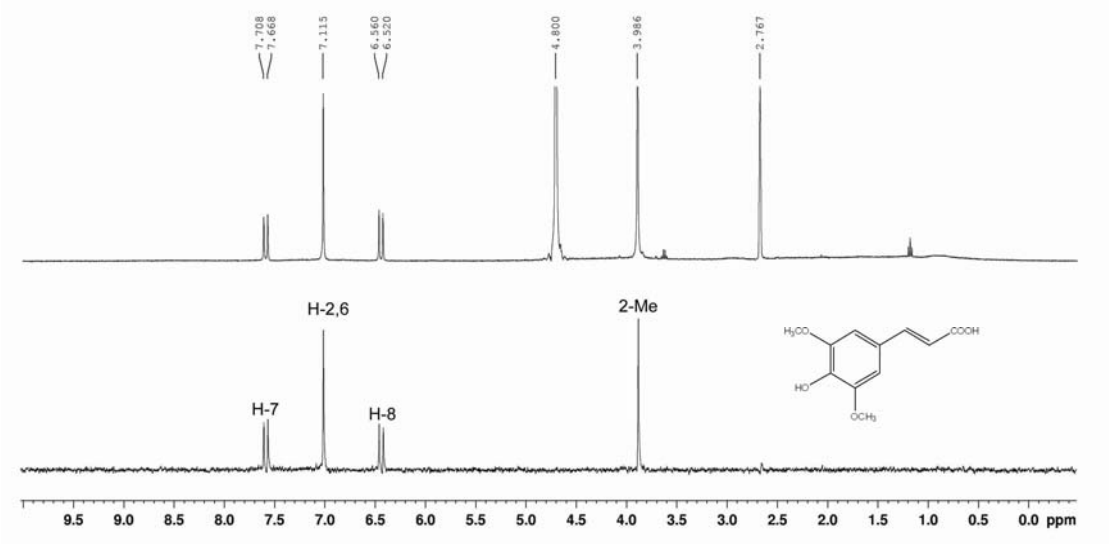


**Figure S5.** (a) $^{1}$H NMR spectrum and (b) $^{1}$H STD NMR spectrum of SA in the presence of BSA. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

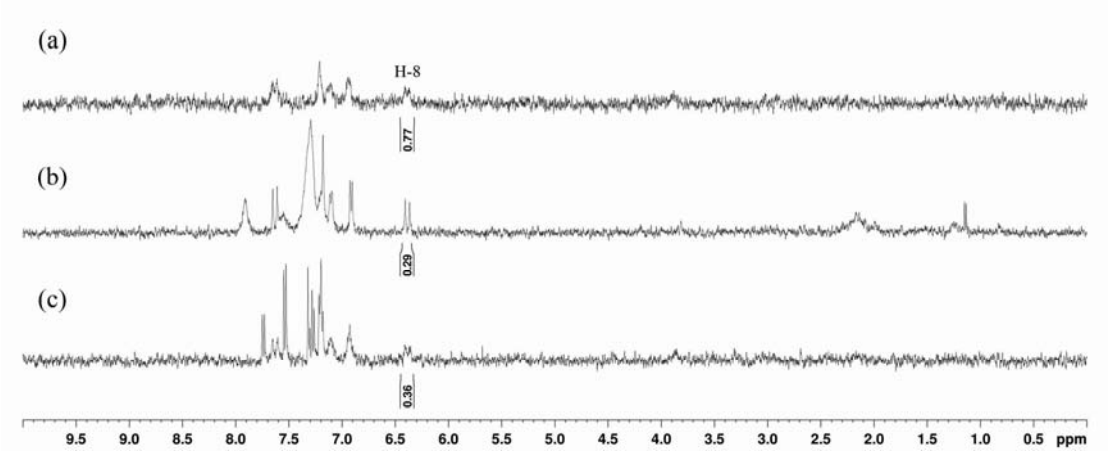


**Figure S6.** (a) $^{1}$H STD NMR of 50 μM BSA, 3 mM CHA without the site probe; (b) $^{1}$H STD NMR of 50 μM BSA, 3 mM CHA in the presence of 4.8 mM WAR; (c) $^{1}$H STD NMR of 50 μM BSA, 3 mM CHA in the presence of 4.8 mM Trp. The STD effects of H-8, calculated as $I_{STD}/I_0$, were shown in the Figure. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

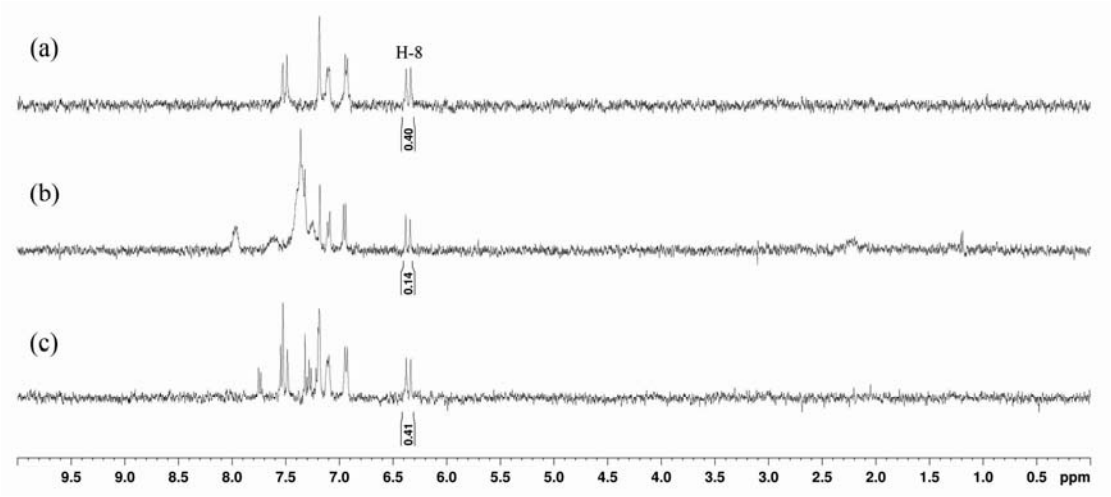


**Figure S7.** (a) $^{1}$H STD NMR of 50 μM BSA, 3 mM CFA without the site probe; (b) $^{1}$H STD NMR of 50 μM BSA, 3 mM CFA in the presence of 4.8 mM WAR; (c) $^{1}$H STD NMR of 50 μM BSA, 3 mM CFA in the presence of 4.8 mM Trp. The STD effects of H-8, calculated as $I_{STD}/I_0$, were shown in the Figure. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

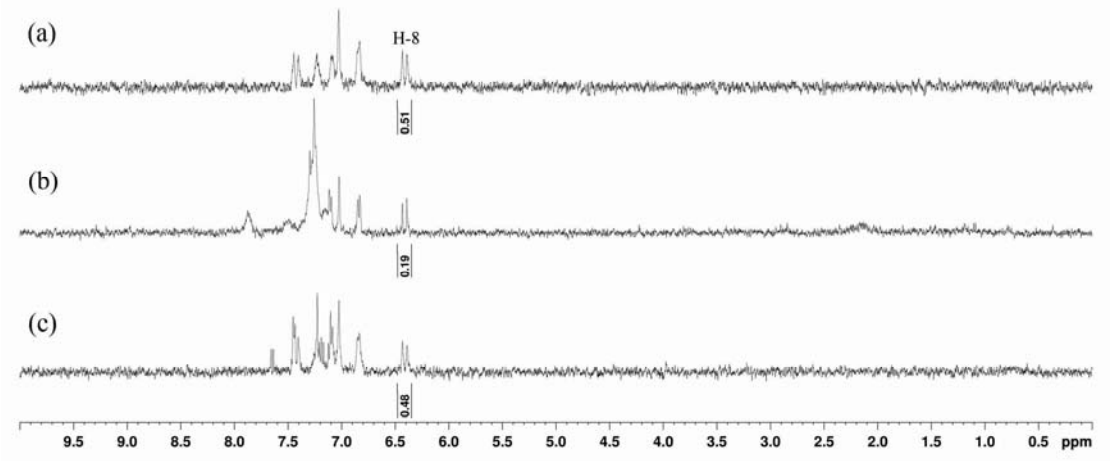


**Figure S8.** (a) $^{1}$H STD NMR of 50 μM BSA, 3 mM *m*-CA without the site probe; (b) $^{1}$H STD NMR of 50 μM BSA, 3 mM m-CA in the presence of 4.8 mM WAR; (c) $^{1}$H STD NMR of 50 μM BSA, 3 mM *m*-CA in the presence of 4.8 mM Trp. The STD effects of H-8, calculated as $I_{STD}/I_0$, were shown in the Figure. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

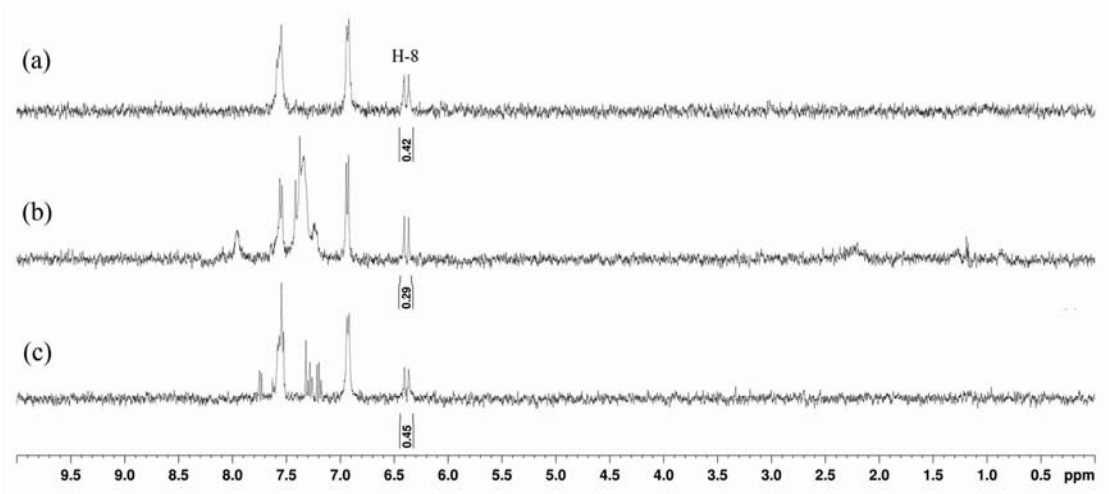


**Figure S9.** (a) $^{1}$H STD NMR of 50 μM BSA, 3 mM 4-CA without the site probe; (b) $^{1}$H STD NMR of 50 μM BSA, 3 mM *p*-CA in the presence of 4.8 mM WAR; (c) $^{1}$H STD NMR of 50 μM BSA, 3 mM *p*-CA in the presence of 4.8 mM Trp. The STD effects of H-8, calculated as $I_{STD}/I_0$, were shown in the Figure. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

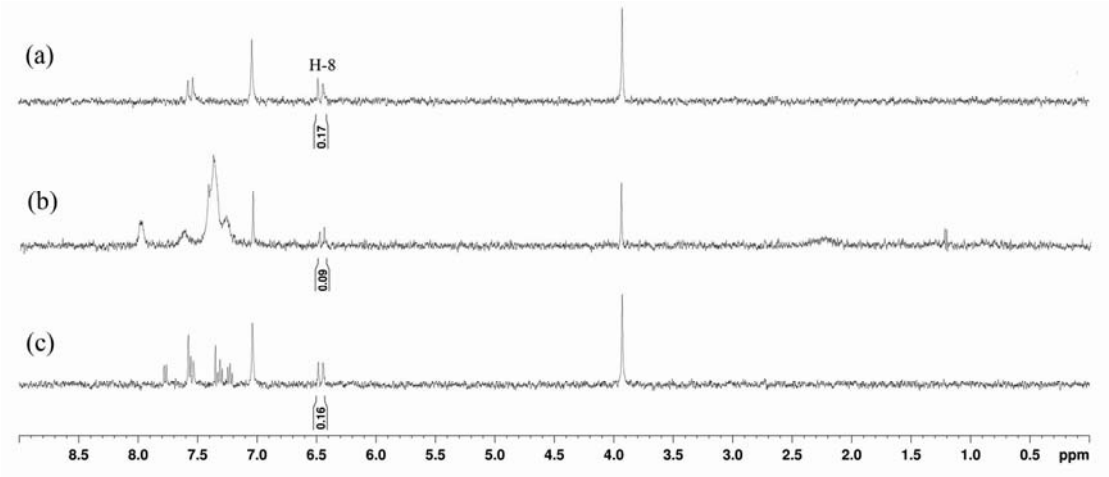


**Figure S10.** (a) $^{1}$H STD NMR of 50 μM BSA, 3 mM SA without the site probe; (b) $^{1}$H STD NMR of 50 μM BSA, 3 mM SA in the presence of 4.8 mM WAR; (c) $^{1}$H STD NMR of 50 μM BSA, 3 mM SA in the presence of 4.8 mM Trp. The STD effects of H-8, calculated as $I_{STD}/I_0$, were shown in the Figure. Spectra were taken at 298 K on a 400 MHz spectrometer with a room temperature probe. NS = 256, TD = 32K, sat pulse = -0.5 ppm for 3.0 sec (see Methods).

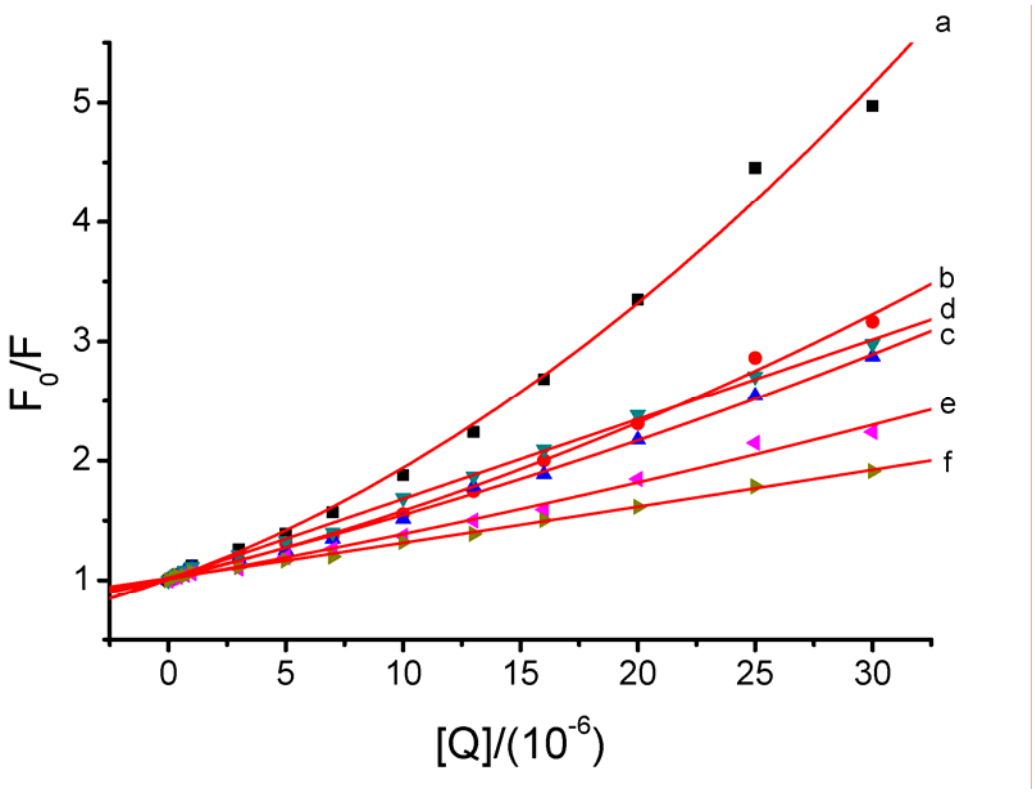


Figure S11. The Stern-Volmer curves of fluorescence quenching of BSA by CHA(a), CFA(b), m-CA(c), p-CA(d), FA(e), SA(f) at 298 K.

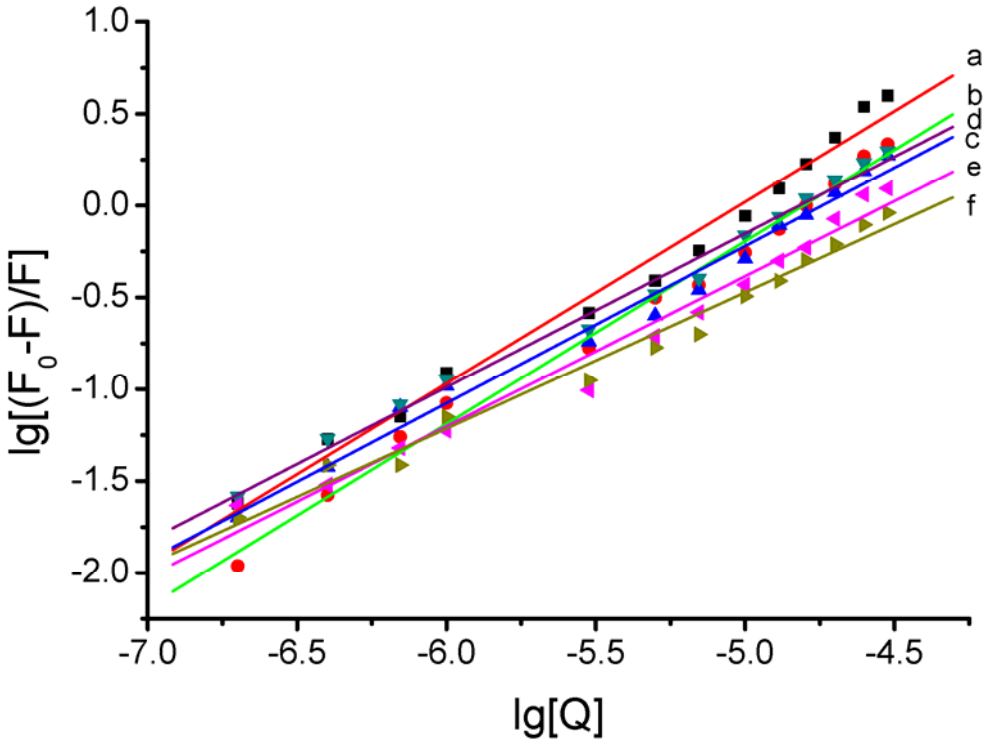


**Figure S12.** Double-log plot of fluorescence quenching of BSA by CHA(a), CFA(b), m-CA(c), p-CA(d), FA(e), SA(f) at 298 K.