

Supplementary Table 1. *Time resolved fluorescence data of HSA in the absence and presence of PYZ.*

HSA: PYZ	α_1	τ_1 (ns)	α_2	τ_2 (ns)	τ_{avg} (ns)	χ^2
1:0	0.39	2.27	0.64	6.47	5.62	0.9801
1:5	0.42	2.12	0.59	6.23	5.39	0.9684
1:12	0.46	1.88	0.56	6.19	5.33	0.9563

Supplementary Table 2. *Time resolved fluorescence data of HSA in the absence and presence of PYZ.*

BSA: PYZ	α_1	τ_1 (ns)	α_2	τ_2 (ns)	τ_{avg} (ns)	χ^2
1:0	0.86	6.32	0.18	2.65	6.18	1.10
1:5	0.84	6.10	0.17	1.68	5.92	0.9939
1:12	0.82	6.04	0.15	1.61	5.82	0.9723

Supplementary Table 3: Effect of Site Markers on Binding of PYZ to HSA

Parameters	Without site markers	with warfarin	with Diazepam
$K_{sv}(M^{-1})$	2.29×10^4	1.45×10^4	2.10×10^4
R^2	0.99	0.99	0.99

Supplementary Table 4: Effect of Site Markers on Binding of PYZ to BSA

Parameters	Without site markers	with warfarin	with Diazepam
$K_{sv}(M^{-1})$	1.05×10^4	$.98 \times 10^4$	$.63 \times 10^4$
R^2	0.99	0.99	0.99

Supplementary Table 5: Per cent α helical content of BSA and HSA in the absence and presence of different concentration of pyrazinamide.

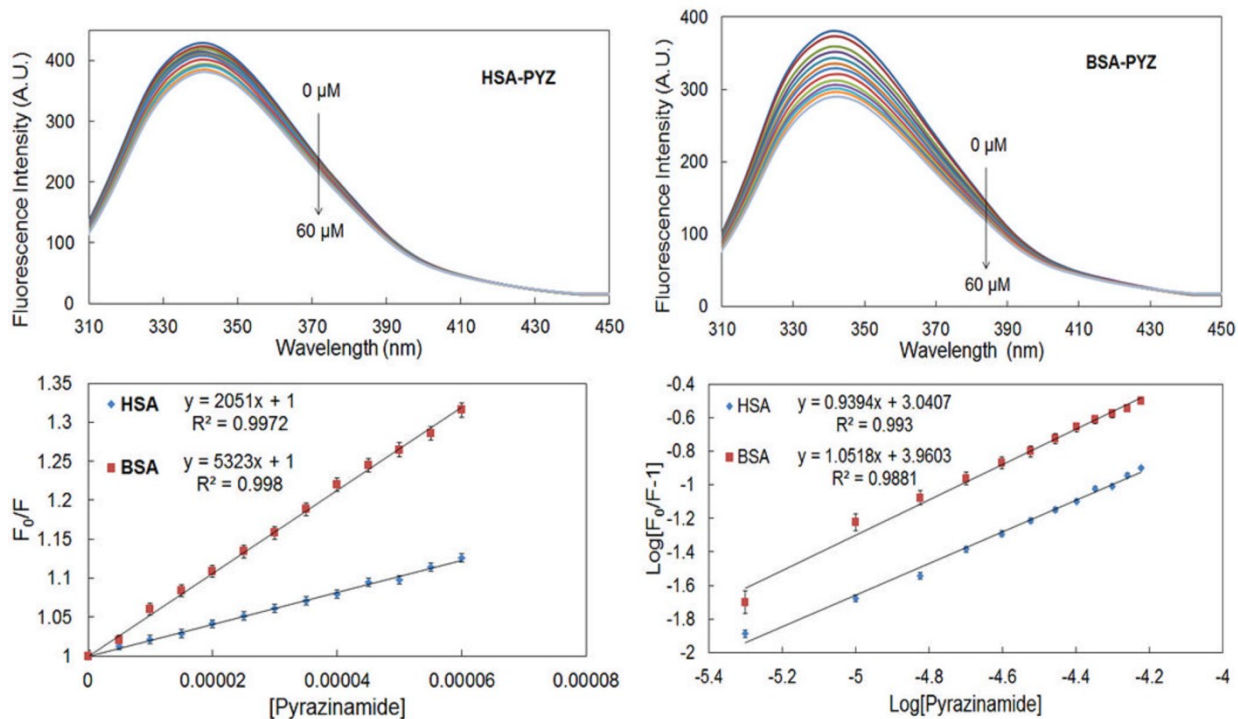
Conditions	Hydrodynamic radii (nm)
HSA	57.42±0.67
HSA + PYZ (1:5)	60.24±0.55
HSA + PYZ (1:12)	62.62±0.38
BSA	66.30±0.02
BSA + PYZ (1:5)	69.39±0.03
BSA + PYZ (1:12)	72.22±0.02

Supplementary Table 6: Hydrodynamic radii and polydispersity values of HSA/BSA in the absence and presence of different concentration of PYZ

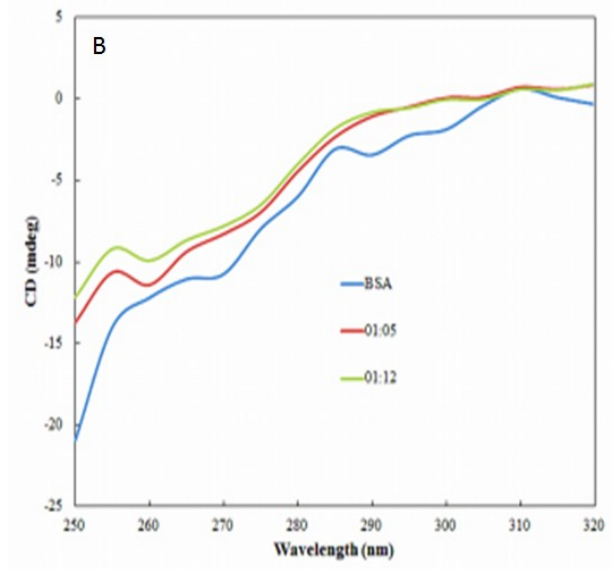
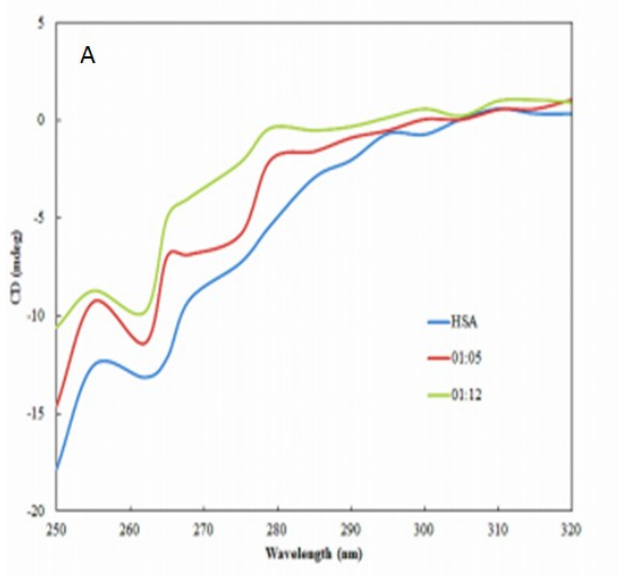
Conditions	Hydrodynamic radii (nm)	Polydispersity value (%)
HSA	3.4±0.04	11.5
HSA + PYZ (1:5)	3.2±0.02	12.1
HSA + PYZ (1:12)	2.6±0.03	13.2
BSA	3.7±0.02	11.8
BSA + PYZ (1:5)	3.3±0.03	13.2
BSA + PYZ (1:12)	3.1±0.02	13.5

Supplementary Table 7: Molecular docking parameters of HSA/BSA-PYZ complex

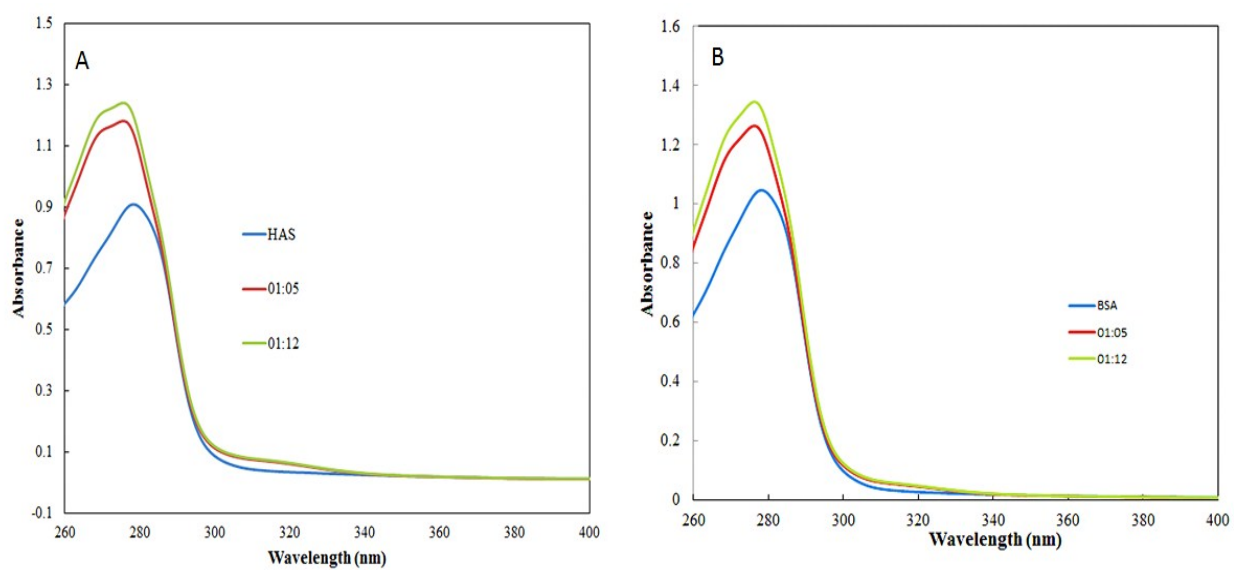
Protein	Binding Site	Amino acids	Forces involved	ΔG (kcalmol ⁻¹)
HSA	Site I	Leu 219	Hydrophobic and H-Bonding	-3.47
		Leu 238		
		Arg 257		
		Leu 260		
		Ser 287		
		Ile 290		
		Ala 291		
		Tyr 401		
BSA	Site II	Lys 402	Hydrophobic and H-Bonding	-6.53
		Asn 405		
		Ala 406		
		Leu 429		
		Met 548		
		Lys 545		
		Asp 549		



Supplementary Figure 1: PYZ-induced fluorescence quenching of (A) HSA and (B) BSA. The concentration of protein was 5 μM and the concentration of PYZ was varied from 0-60 μM . The intrinsic fluorescence of the proteins was measured upon excitation at 295 nm in 20 mM sodium phosphate buffer, pH 7.4 at 298 K, (C) Stern-Volmer plot for HSA/BSA- PYZ interactions (D) Logarithmic Stern-Volmer plot for HSA/BSA- PYZ interactions at 298 K.



Supplementary figure 2: Near-UV CD spectra of (A) HSA (15 μM) and (B) BSA (15 μM) alone and in the presence of PYZ.



Supplementary Figure 3: UV Absorption spectra of (A) HSA and (B) BSA in absence and presence of PYZ.