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Supplementary material



Fig. S1. (a) IR, (b)  $^{1}$ H-NMR, and (c)  $^{13}$ C-NMR spectra of YM-1.



Fig. S2. (a) IR, (b) <sup>1</sup>H-NMR, and (c) <sup>13</sup>C-NMR spectra of YM-2.



Fig. S3. (a) IR, (b)  $^{1}$ H-NMR, and (c)  $^{13}$ C-NMR spectra of YM-3.



**Fig. S4.** (a-c) Concentration profiles: (a) YM-1, (b) YM-2, and (c) YM-3. (d-f) Concentrations of YM-1, YM-2, and YM-3 plotted against absorbance for calculation of molar extinction coefficient. (g) Overlay of Fluo-emission spectrum of sufanilamide derivatives.



**Fig. S5.** Cyclic voltammogram YM-1, YM-2, and YM-3 without and in the presence of ds-DNA at various scan rates.

Conc uM	Thiourea		YM-1			YM-2			YM-3			
100	96.21	97.04	95.38	52.9	54.92	50.01	55.75	58.42	59.61	48.3	49.97	49.23
75	90.62	89.28	90.31	38.48	38.64	36.82	43.74	45.39	45.39	37.19	38.02	36.36
50	85.55	88.51	86.29	35.12	34.03	34.89	36.08	38.51	39.32	31.46	30.36	31.23
25	82.16	81.33	81.33	15.34	16.99	16.16	26.38	29.69	31.34	14.05	14.88	16.53
12.5	60.67	59.85	59.02	4.85	6.5	6.5	7.63	9.28	10.11	3.56	5.22	2.74
LogIC50	0.9067	0.9354	0.9366	1.976	1.967	2.015	1.931	1.891	1.878	2.023	2.012	2.023
		Avg	0.926233		Avg	1.986		Avg	1.9		Avg	2.019333

Fig. S6. Urease inhibition data for the evaluation of  $IC_{50}$  values.

YM1				
[Compund]	Cancereous MG-U87	Normal HEK-293		
40µM	84.629781	65.97977		
80μΜ	87.691258	70.25695		
120µM	90.38390667	50.28022		
200µM	90.53894667	68.34092		
400µM	95.40420667	91.11583		
IC50	1.154	15.29		
SD	0.317	0.9259		
YM2				
[Compund]	Cancereous MG-U87	Normal HEK-293		
40µM	71.542864	70.368754		
80µM	87.10594333	86.55539		
120µM	87.64110333	86.783		
200µM	87.24621333	87.04603		
400µM	89.21004	88.87709		
IC50	7.024	7.938		
SD	0.374	0.3448		
YM3				
[Compund]	Cancereous MG-U87	Normal HEK-293		
40µM	69.82281333	70.23675		
80µM	61.86046667	86.64138		
120µM	67.52307	86.91958		
200µM	72.46585333	87.44057		
400µM	87.31635333	89.92413		
IC50	9.512	9.304		
SD	0.6682	0.2864		

Fig. S7. Dose dependent % cytotoxicity data for the evaluation of  $IC_{50}$  values.