

Determination of Absorbance Value Corresponding to Maximum Fluorescence Intensity Obtainable with Right Angle Measurement Geometry

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Sl no.	Description	Page no.
Table ESM-1	Absorbance, emission and D_{abs} data for Quinine sulphate in instrument A.	2
Table ESM-2	Absorbance, emission and D_{abs} data for Quinine sulphate in Instrument B.	2
Figure ESM-1	Primary IFE: a=Trp, b=3-HF.	3
Figure ESM-2	UV spectra of: (a) QS; (b) Trp; (c) 3-HF; (d) HA; (e) DOX in urine; (e) DOX in urine.	3
Figure ESM-3	Fluorescence spectra of: (a) QS ex. at 345 nm; (b) Trp ex. at 280 nm; (c) 3-HF ex. at 344 nm, (d) HA ex. at 270 nm, (e) Doxorubicin in urine ex. at 325 nm.	4

Electronic Supplementary Information

Table ESM-1: Absorbance, emission and D_{abs} data for Quinine sulphate in instrument A.

Conc. of QS ($\mu\text{g/mL}$)	Abs. at 346 nm	Instrument A		
		Emission Intensity	D_{abs} Eq. 5; $x=0.2$ & $y=0.8$	Eq. 7
1	0.03	4.7E+05	0.02	0.02
10	0.15	2.4E+06	0.13	0.13
20	0.30	4.0E+06	0.21	0.21
30	0.45	4.9E+06	0.27	0.27
40	0.59	5.5E+06	0.31	0.30
50	0.74	5.9E+06	0.33	0.32
60	0.89	6.1E+06	0.34	0.32
70	1.04	6.1E+06	0.34	0.31
80	1.17	6.2E+06	0.34	0.30
90	1.33	6.1E+06	0.33	0.29
100	1.46	5.8E+06	0.32	0.27
110	1.61	5.7E+06	0.31	0.25
120	1.75	5.5E+06	0.29	0.23
130	1.90	5.2E+06	0.28	0.21
140	2.04	4.8E+06	0.27	0.19

Table ESM-2: Absorbance, emission and D_{abs} data for Quinine sulphate in Instrument B.

Conc. of QS ($\mu\text{g/mL}$)	Abs. at 346 nm	Instrument B		
		Emission Intensity	D_{abs} Eq. 5; $x=0.2$ & $y=0.8$	Eq. 7
1	0.03	69.8	0.02	0.02
10	0.15	262.5	0.13	0.13
20	0.30	432.2	0.21	0.21
30	0.45	527.0	0.27	0.27
40	0.59	603.6	0.31	0.30
50	0.74	632.4	0.33	0.32
60	0.89	662.3	0.34	0.32
70	1.04	693.8	0.34	0.31
80	1.17	682.8	0.34	0.30
90	1.33	684.8	0.33	0.29
100	1.46	641.5	0.32	0.27
110	1.61	601.6	0.31	0.25
120	1.75	597.2	0.29	0.23
130	1.90	589.8	0.28	0.21
140	2.04	582.1	0.27	0.19

Electronic Supplementary Information

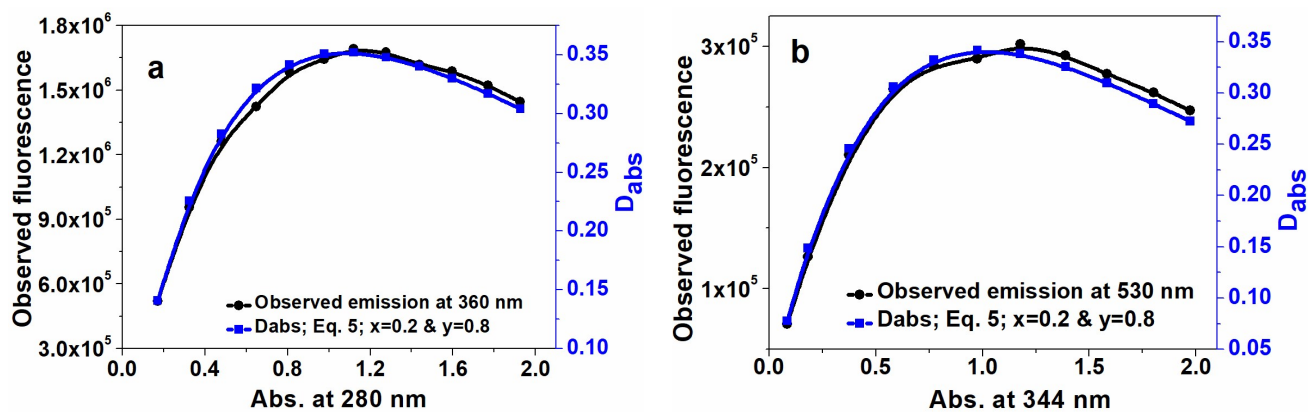


Figure ESM-1: Primary IFE: a=Trp, b=3-HF.

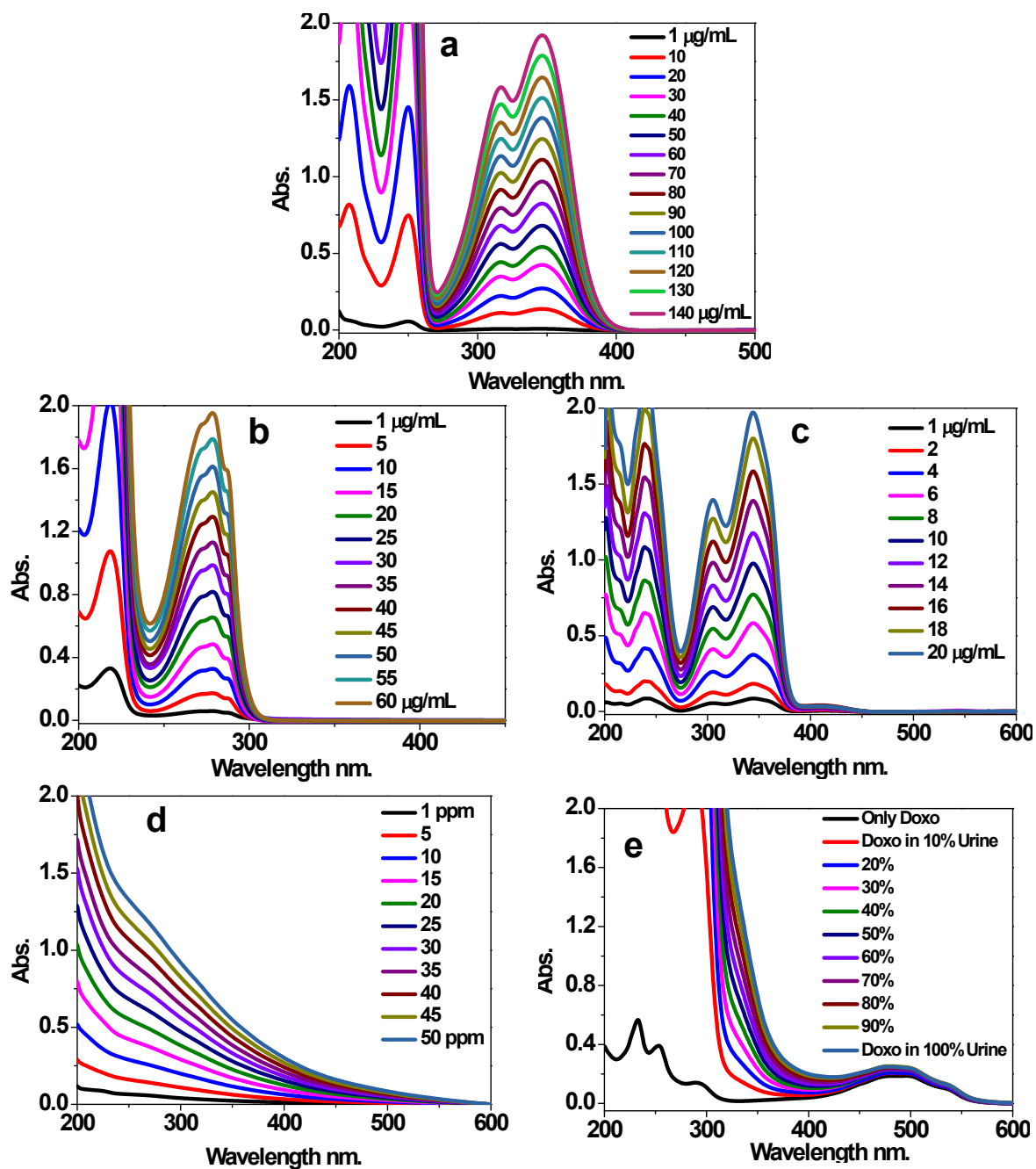


Figure ESM-2: UV spectra of: (a) QS; (b) Trp; (c) 3-HF; (d) HA; (e) Urine with Doxorubicin.

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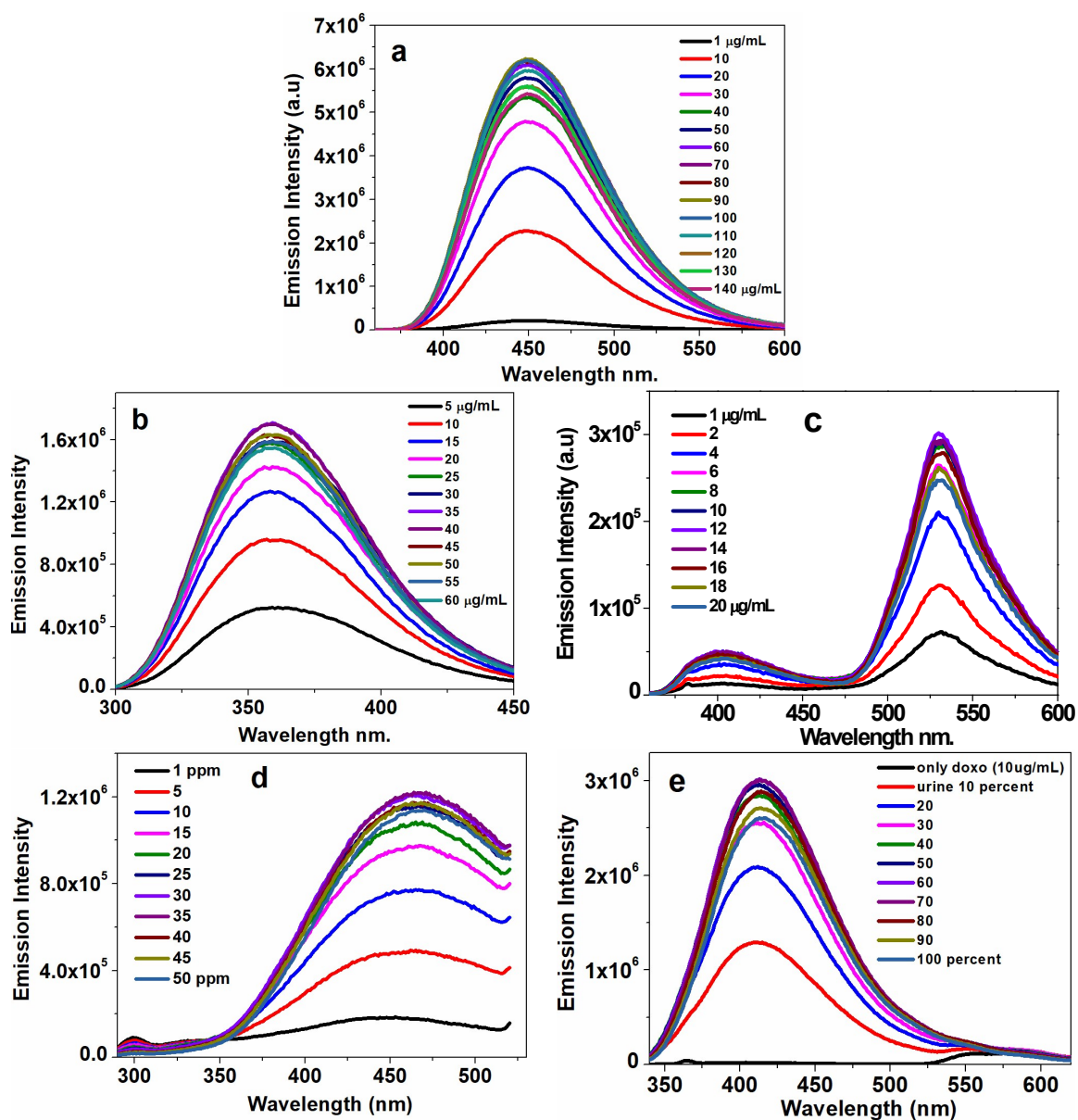


Figure ESM-3: Fluorescence spectra of: (a) QS ex. at 345 nm; (b) Trp ex. at 280 nm; (c) 3-HF ex. at 344 nm, (d) HA ex. at 270 nm, (e) Urine spiked with Doxorubicin ex. at 325 nm.