Supporting Information:

Spectroscopic Studies on the Antioxidant and Anti-tyrosinase activities of Anthraquinone Derivatives

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Calculation for IC_{50} value of DPPH radical scavenging activity

Table S1 Calculation for IC_{50} value of **compound 1**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
1	43.03	39.91	46.48	>100

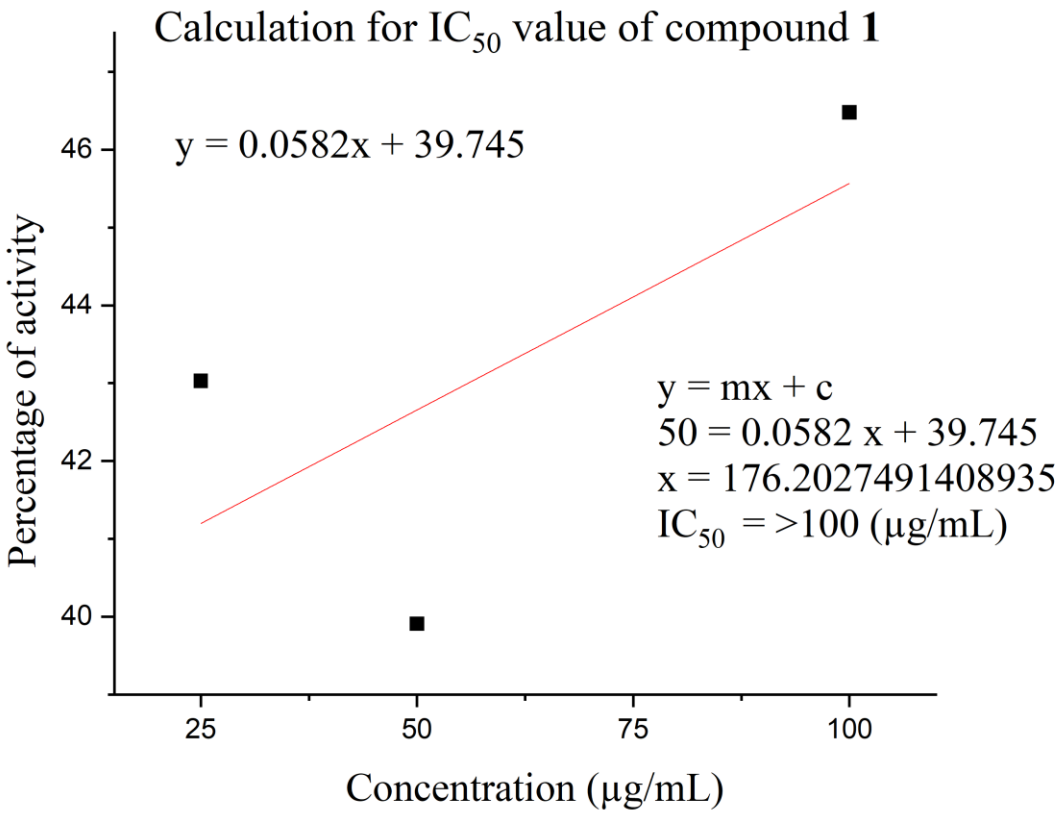


Table S2 Calculation for IC_{50} value of **compound 2**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
2	44.4	50.57	64.4	46.68

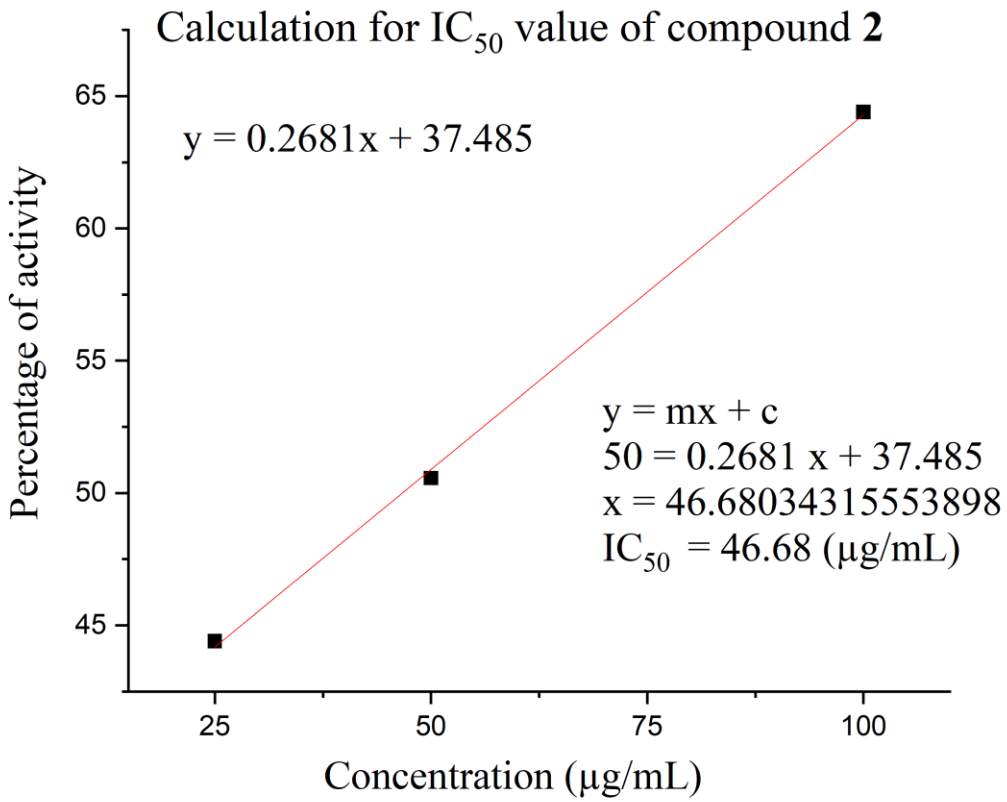
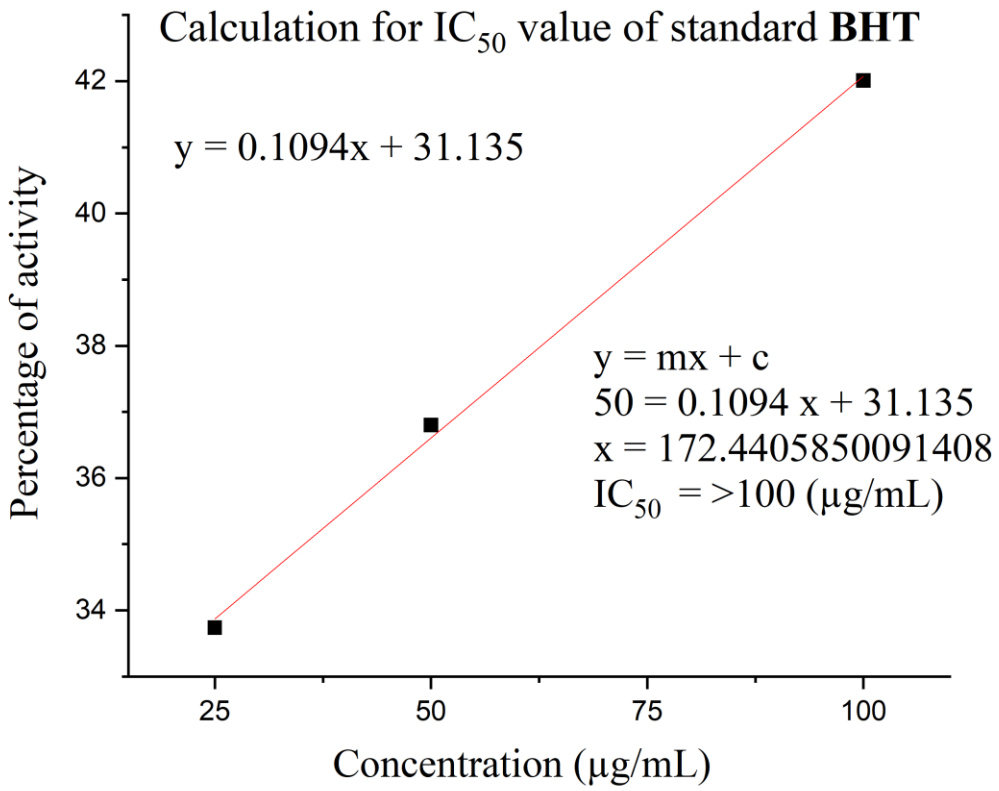


Table S3 Calculation for IC_{50} value of standard **BHT**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
BHT	33.74	36.8	46.48	>100



Calculation for IC_{50} value of hydroxyl radical scavenging activity

Table S4 Calculation for IC_{50} value of **compound 1**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
1	0	10.5	37.63	>100

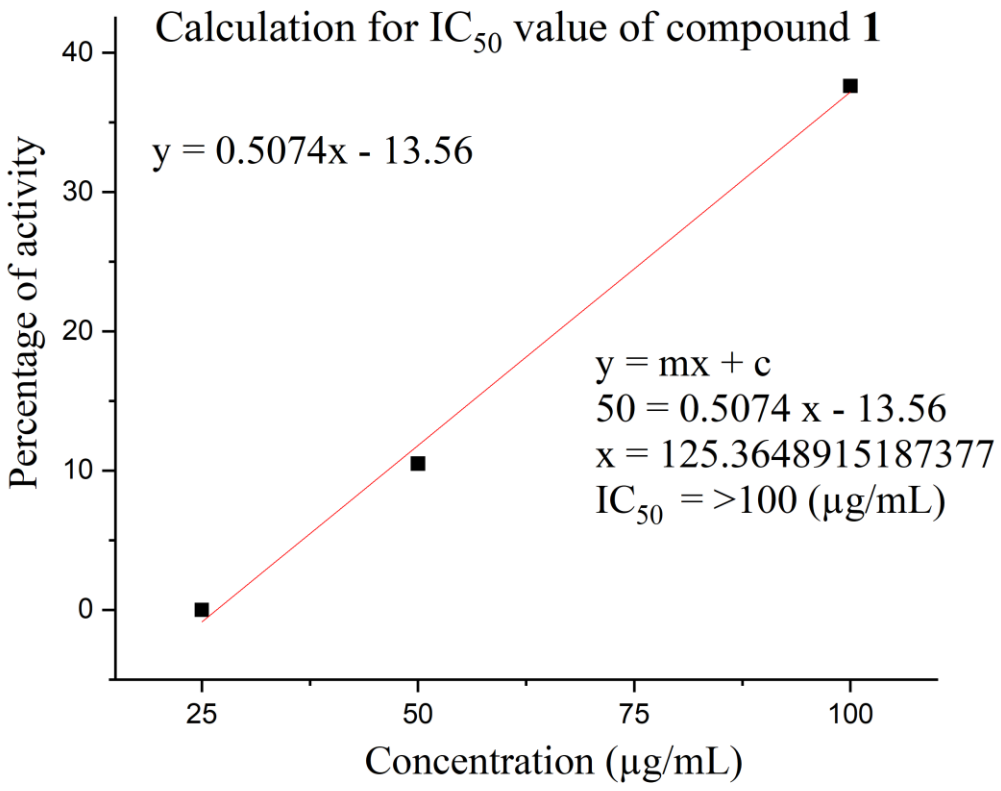


Table S5 Calculation for IC_{50} value of **compound 2**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
2	20.71	29.5	55.8	89.12

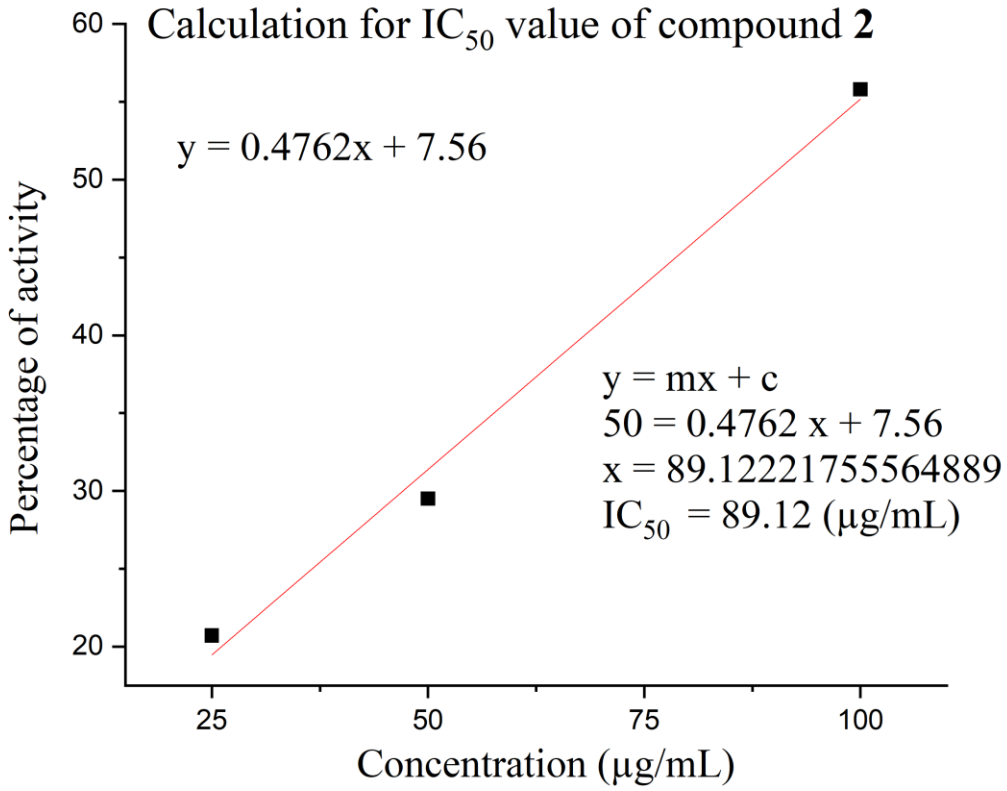
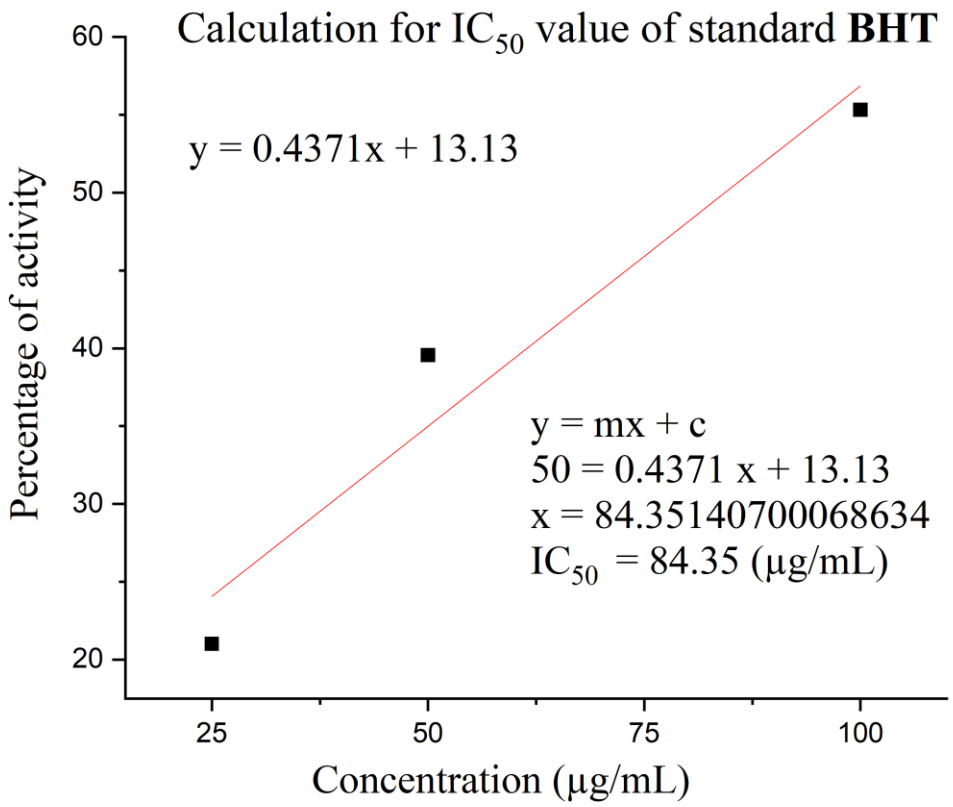


Table S6 Calculation for IC_{50} value of standard **BHT**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
BHT	21.01	39.56	55.32	84.35



Calculation for IC_{50} value of hydrogen peroxide radical scavenging activity

Table S7 Calculation for IC_{50} value of **compound 1**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
1	42.03	37.11	49.43	>100

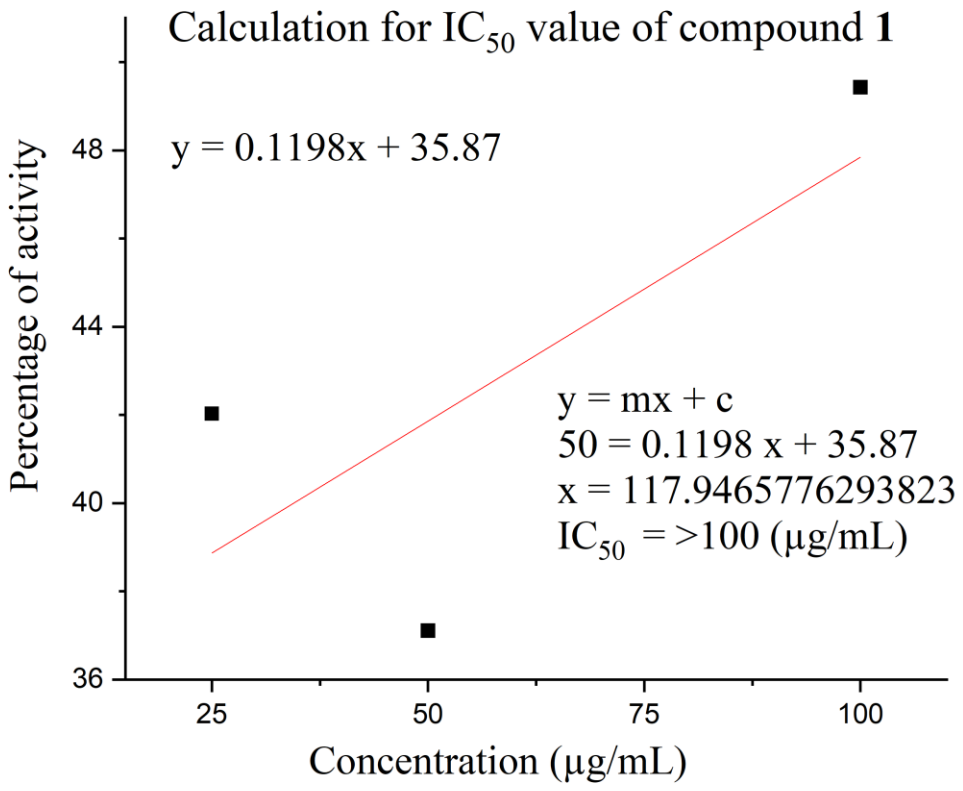


Table S8 Calculation for IC_{50} value of **compound 2**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
2	41.14	52.5	66.4	48.14

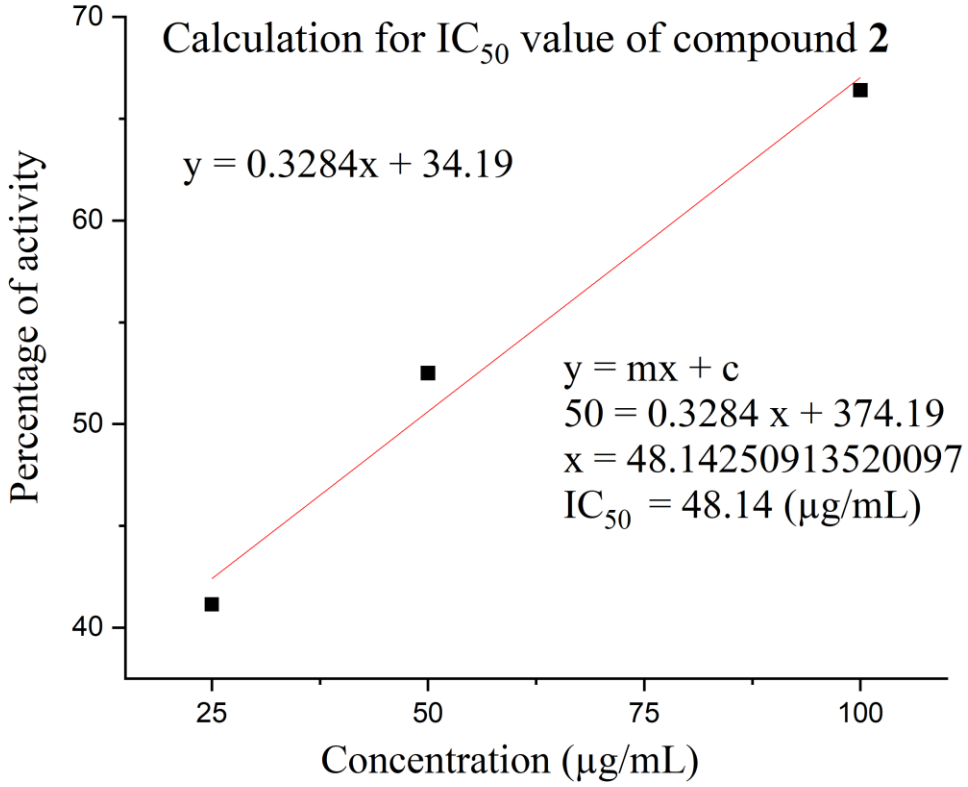
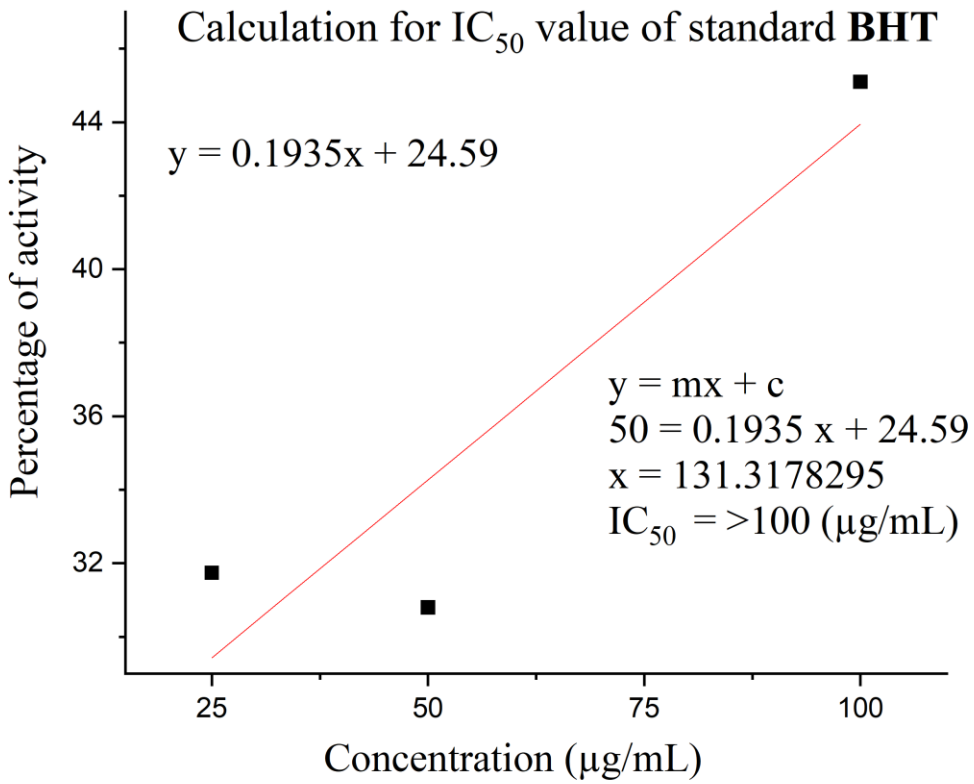


Table S9 Calculation for IC_{50} value of standard **BHT**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
BHT	31.74	30.8	45.1	>100



Calculation for IC_{50} value of nitric oxide radical scavenging activity

Table S10 Calculation for IC_{50} value of **compound 1**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
1	40.03	34.11	47.43	>100

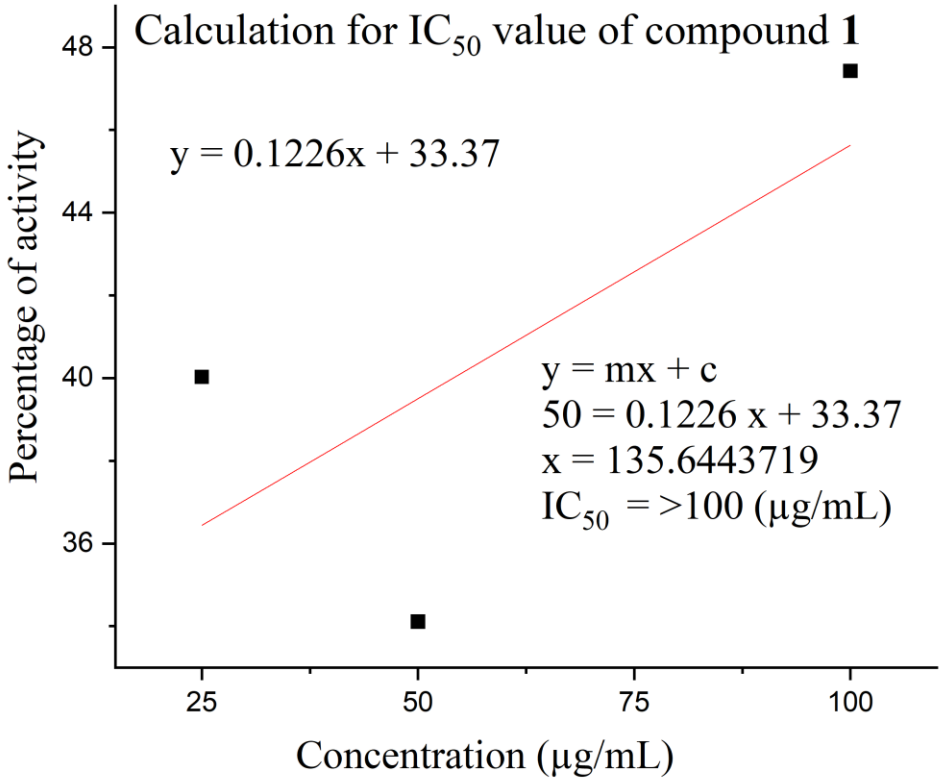


Table S11 Calculation for IC_{50} value of **compound 2**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
2	38.14	55.5	61.4	52.38

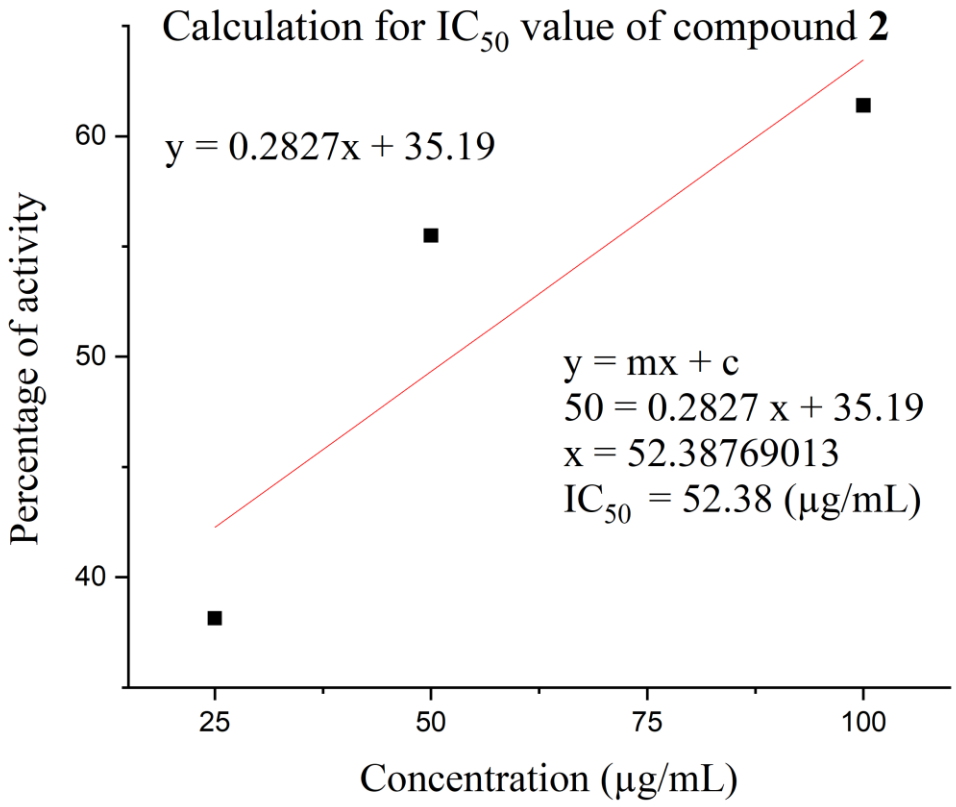
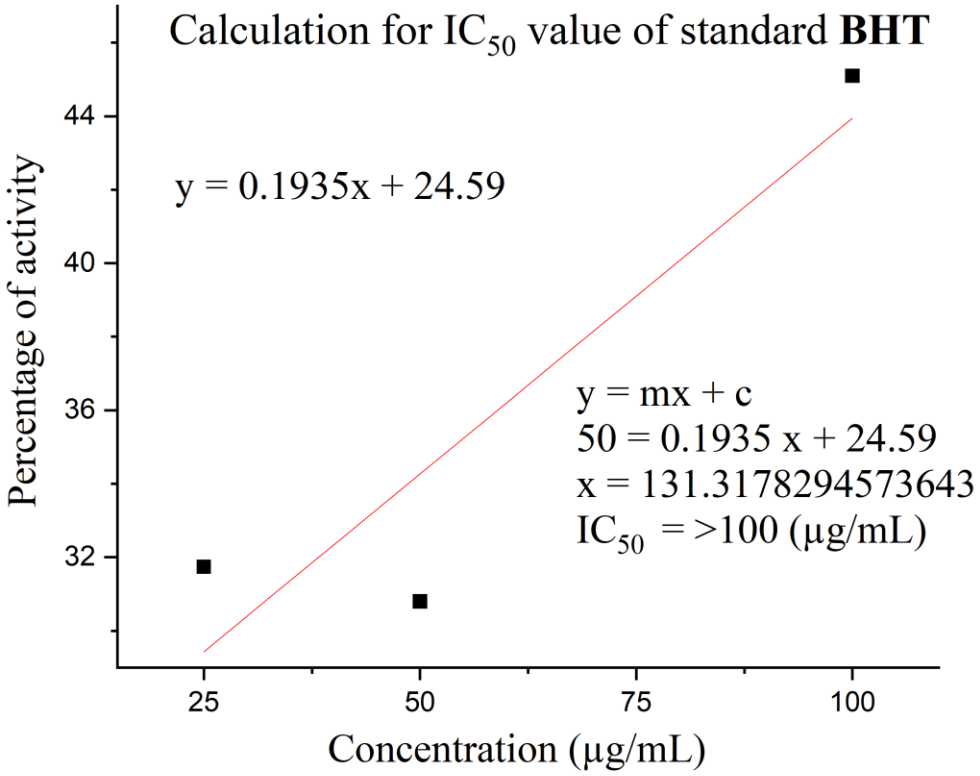


Table S12 Calculation for IC_{50} value of standard **BHT**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
BHT	28.74	32.81	46.1	>100



Calculation for IC_{50} value of anti-tyrosinase activity

Table S13 Calculation for IC_{50} value of **compound 1**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
1	12.58	13.17	19.23	>100

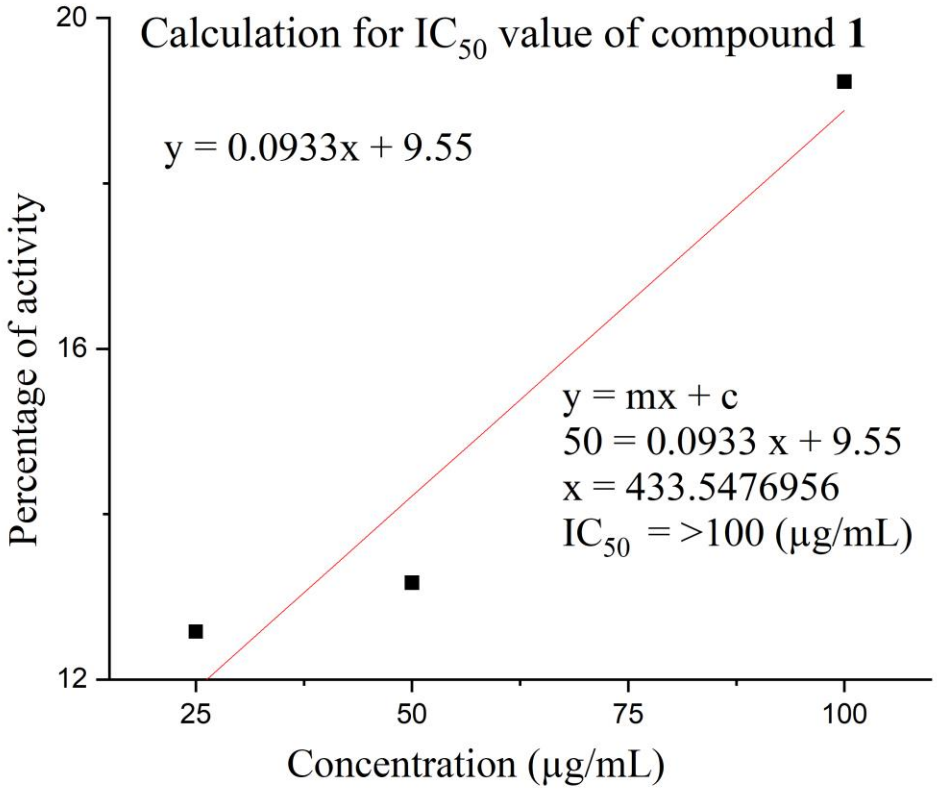


Table S14 Calculation for IC_{50} value of **compound 2**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
2	29.46	32.17	37.2	>100

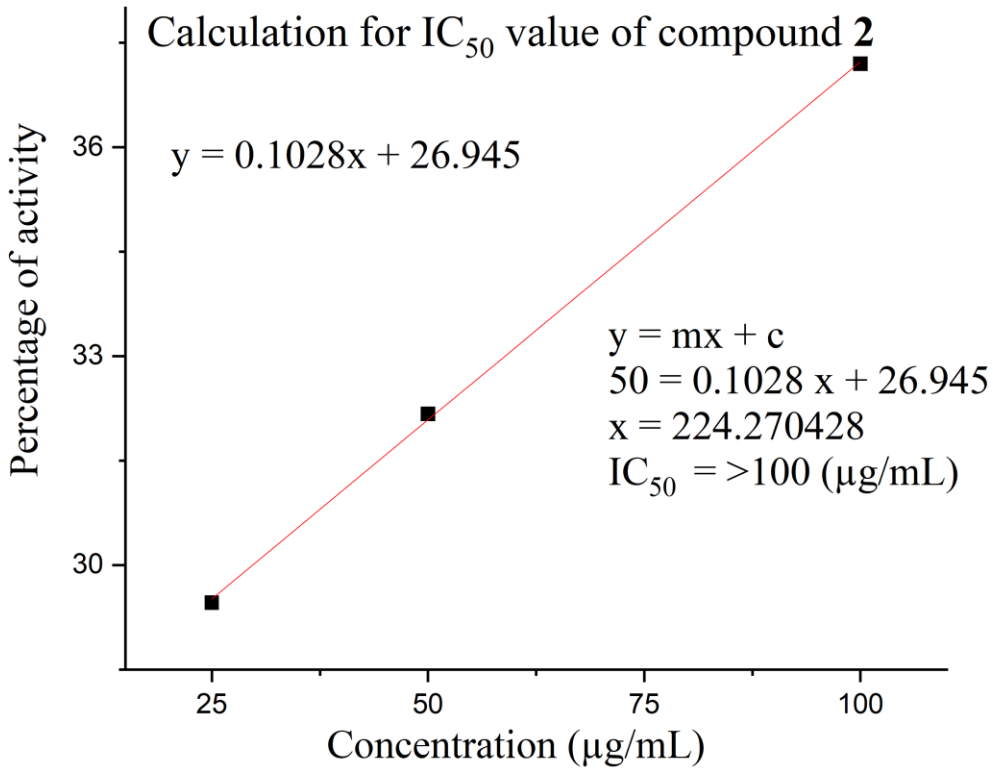
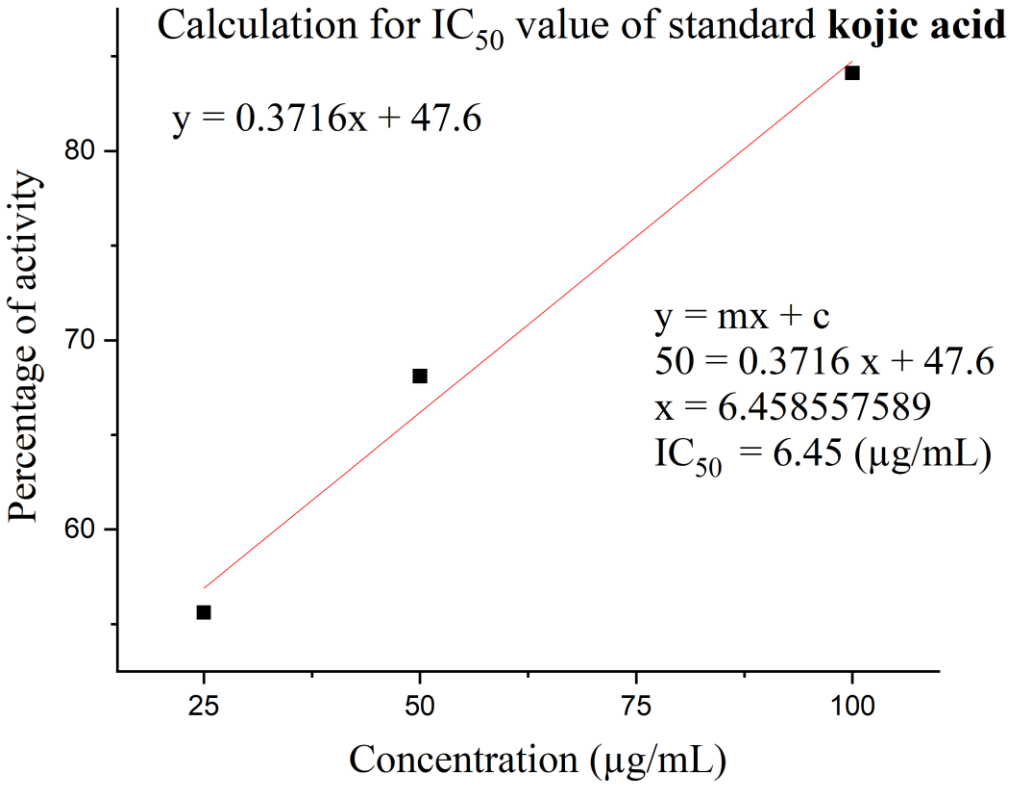


Table S15 Calculation for IC_{50} value of **kojic acid**

Compound	Concentration (µg/mL) [a]			IC_{50} (µg/mL)[a]
	25 µg/mL	50 µg/mL	100 µg/mL	
Kojic acid	55.61	68.10	84.12	6.45