

Potential Antiviral Xanthones from a Coastal Saline Soil Fungus *Aspergillus iizukae*

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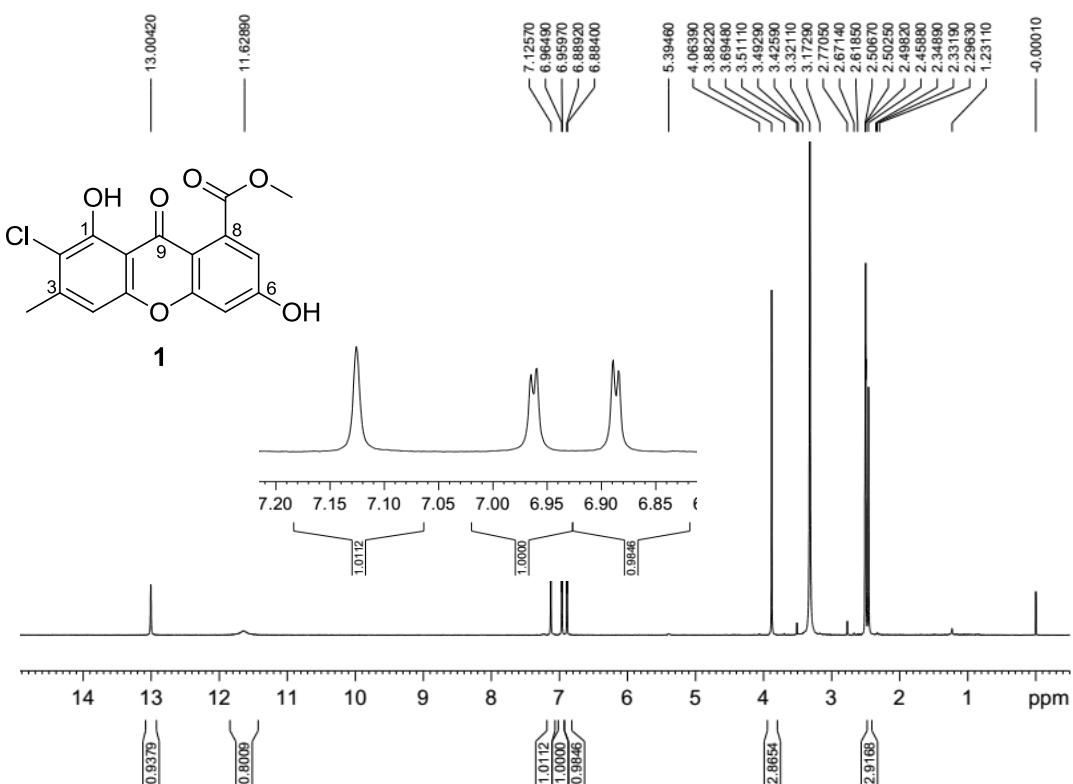


Figure S1. ^1H NMR spectrum (400 MHz) of compound **1** in $\text{DMSO}-d_6$

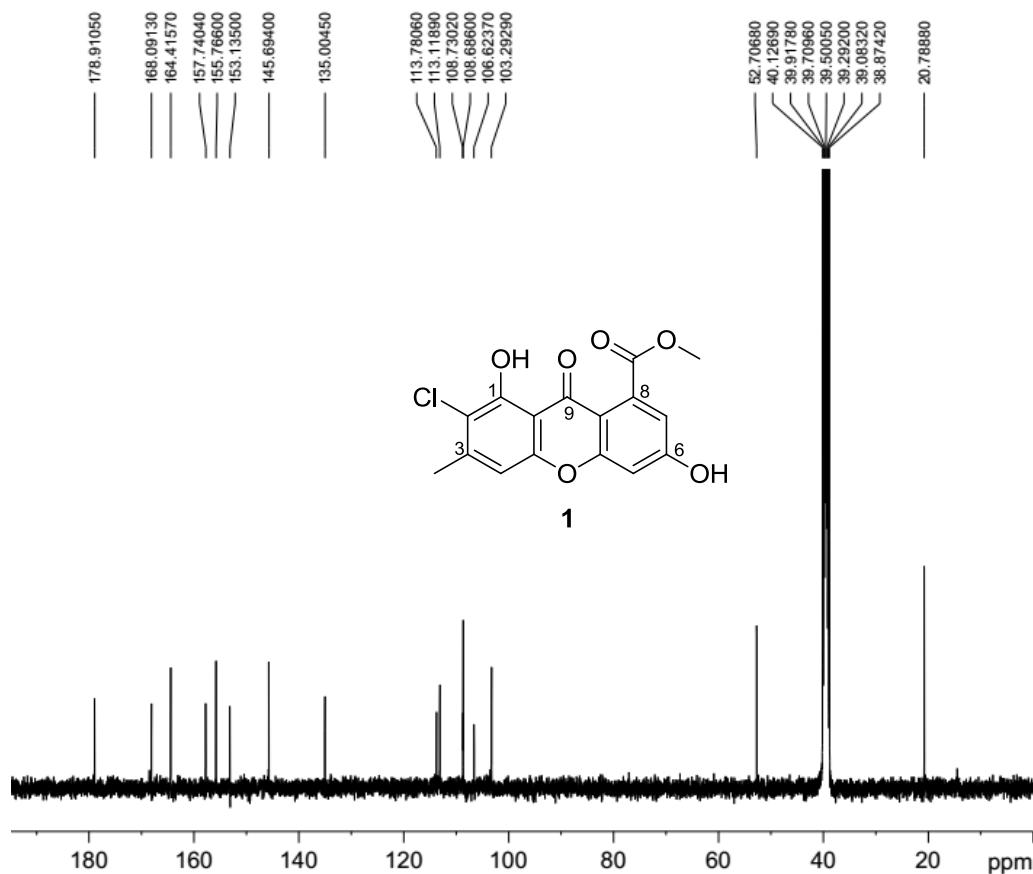


Figure S2. ^{13}C NMR spectrum (100 MHz) of compound **1** in $\text{DMSO}-d_6$

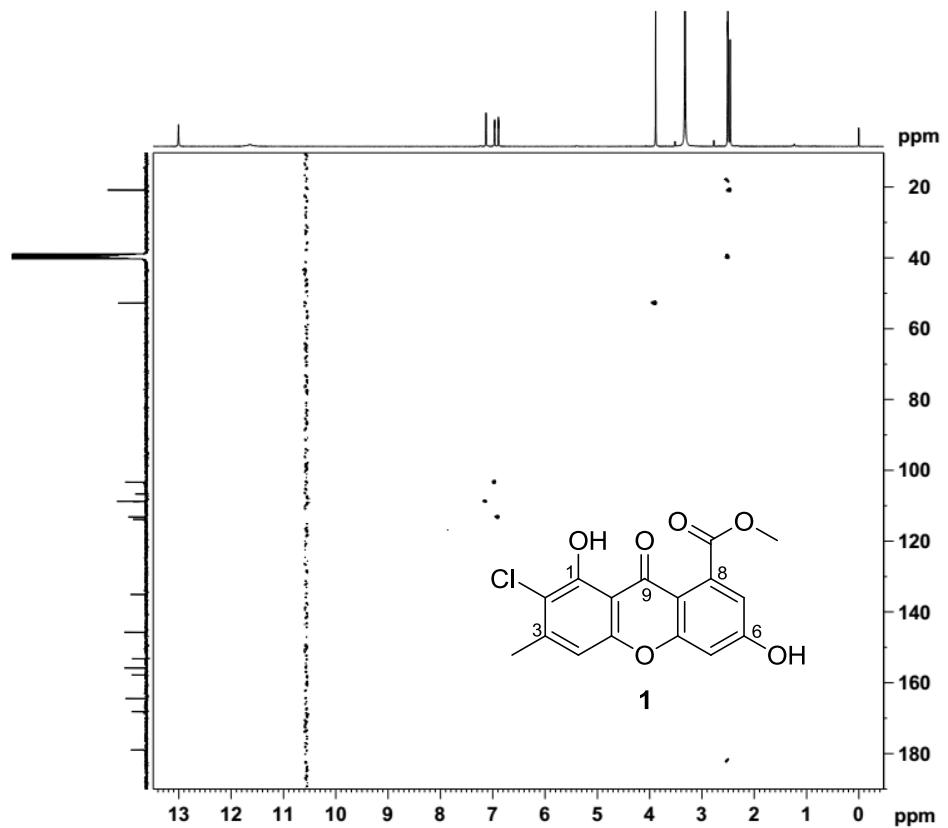


Figure S3. HSQC spectrum of compound **1** in $\text{DMSO}-d_6$

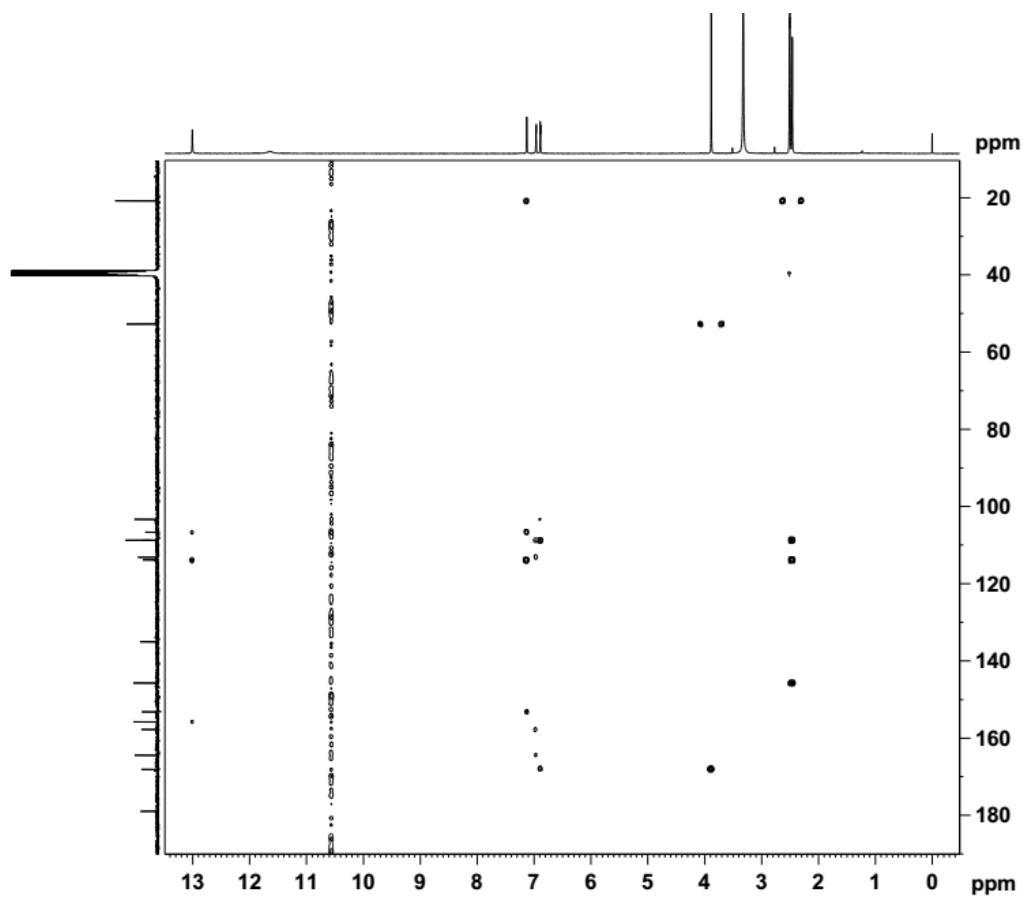
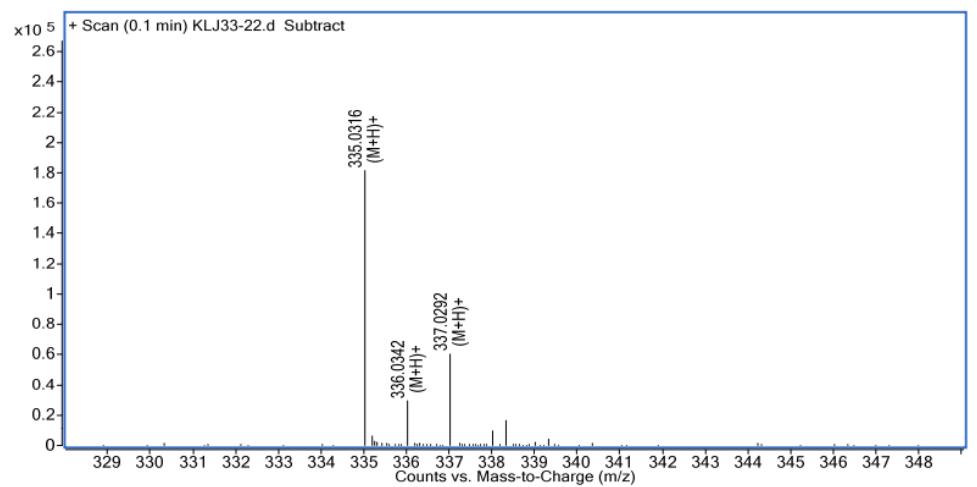


Figure S4. HMBC spectrum of compound **1** in $\text{DMSO}-d_6$



Name	Formula	Score	Mass	Mass (MFG)	Diff (ppm)	Diff (abs. ppm)	Diff (mDa)
C16 H11 Cl O6	98.84	334.02429	334.02442	0.39	0.39	0.13	

Species	Ion Formula	m/z	Height	Score (MFG)	Score (MFG, MS)	Score (MFG, mass)	Score (MFG, abund)	Score (MFG, iso. spacing)
(M+H) ⁺	C16 H12 Cl O6	335.0317	181116	98.84	98.84	99.89	98.65	96.99

m/z	m/z (Calc)	Diff (ppm)	Diff (mDa)	Height	Height (Calc)	Height %	Height % (Calc)	Height Sum %	Height Sum% (Calc)
335.0316	335.0317	0.36	0.1	181116	177545.8	100	100	64	62.8
336.0342	336.0351	2.6	0.9	29449.3	31375.4	16.3	17.7	10.4	11.1
337.0292	337.0294	0.76	0.3	60265	61602.3	33.3	34.7	21.3	21.8
338.0314	338.0325	3.41	1.2	9820.9	10560	5.4	5.9	3.5	3.7
339.0334	339.0346	3.44	1.2	1741.7	1582.4	1	0.9	0.6	0.6
340.0417	340.0372	-13.23	-4.5	240.7	170.5	0.1	0.1	0.1	0.1
341.0395	341.0396	0.25	0.1	218.3	15.7	0.1	0	0.1	0

Figure S5. HRESIMS spectrum of compound 1

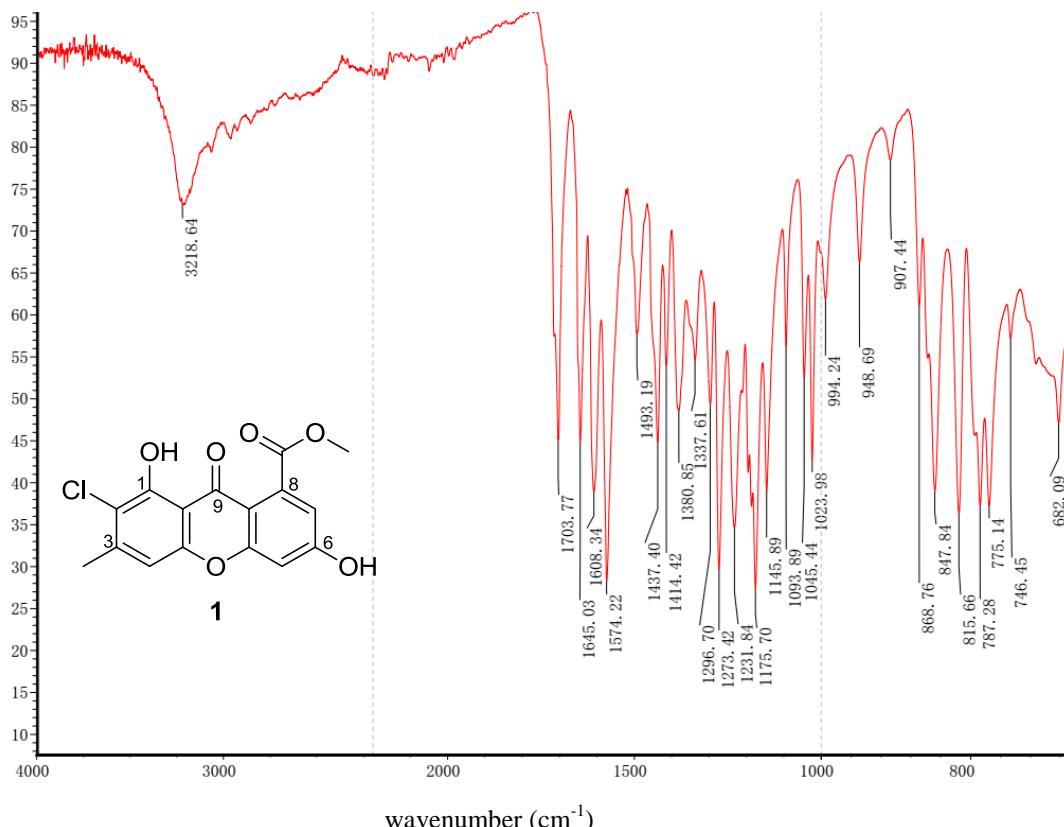


Figure S6. IR spectrum of compound 1

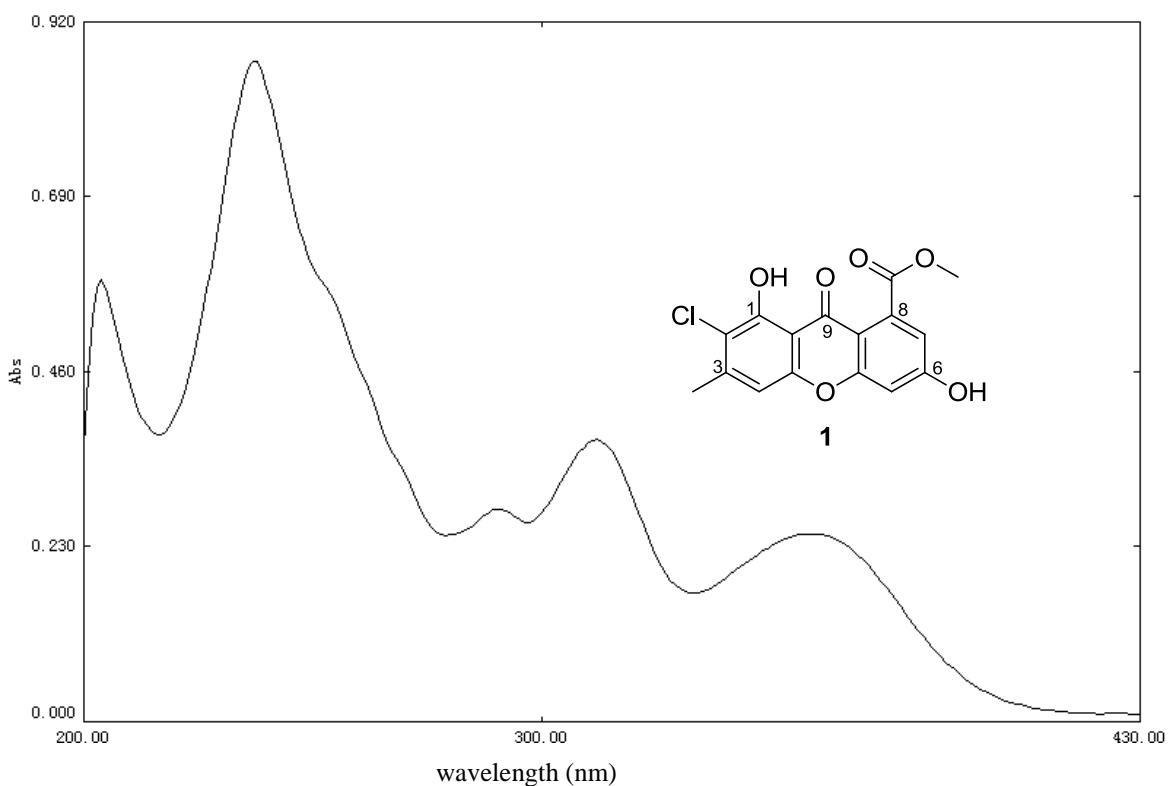


Figure S7. UV spectrum of compound **1** in MeOH

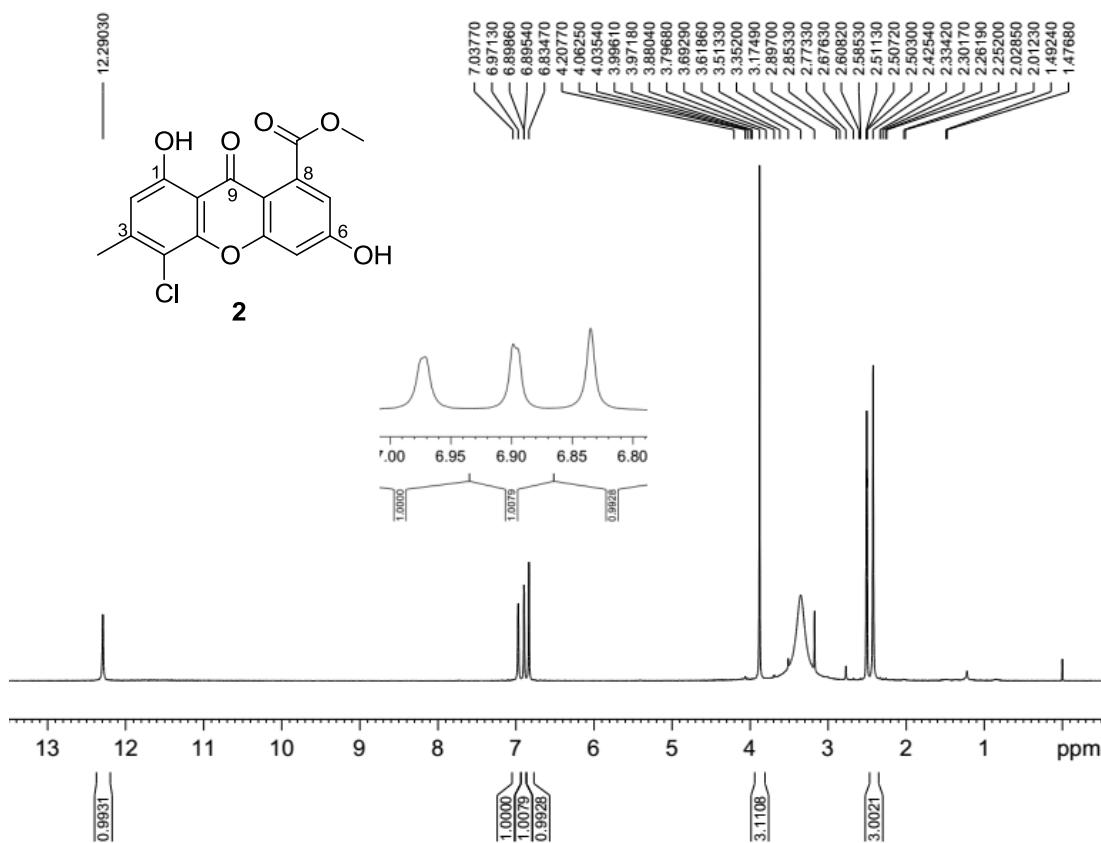


Figure S8. ^1H NMR spectrum (400 MHz) of compound **2** in $\text{DMSO}-d_6$

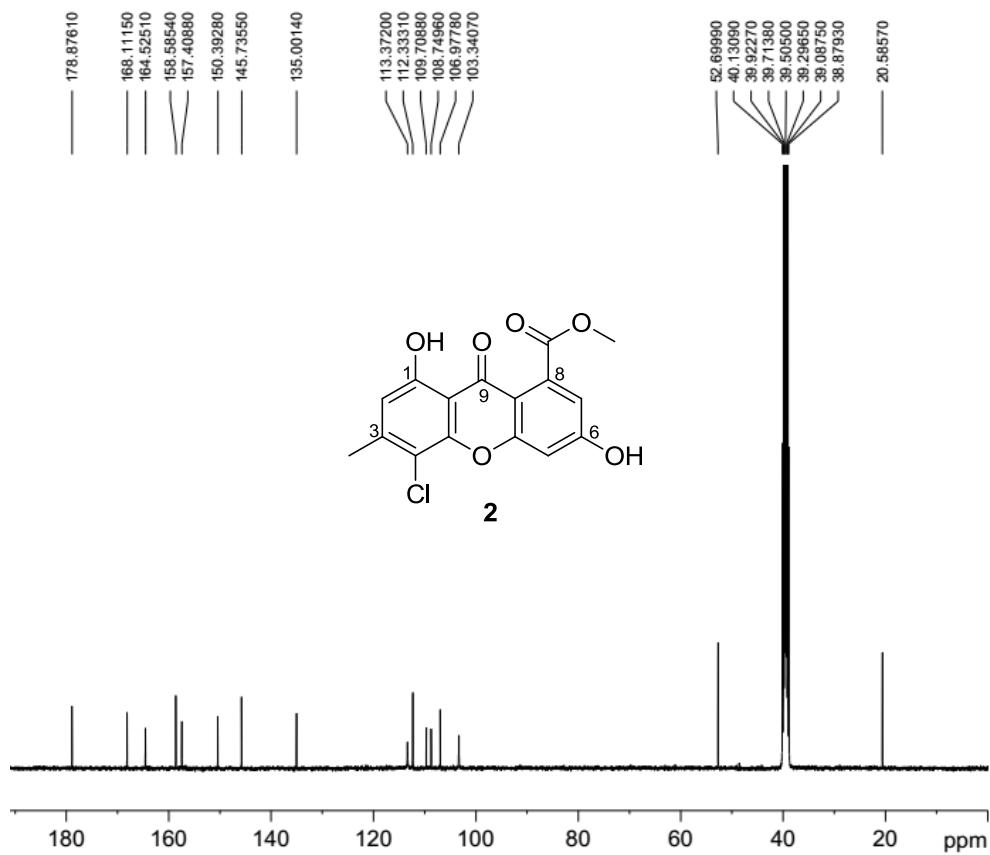


Figure S9. ^{13}C NMR spectrum (100 MHz) of compound **2** in $\text{DMSO}-d_6$

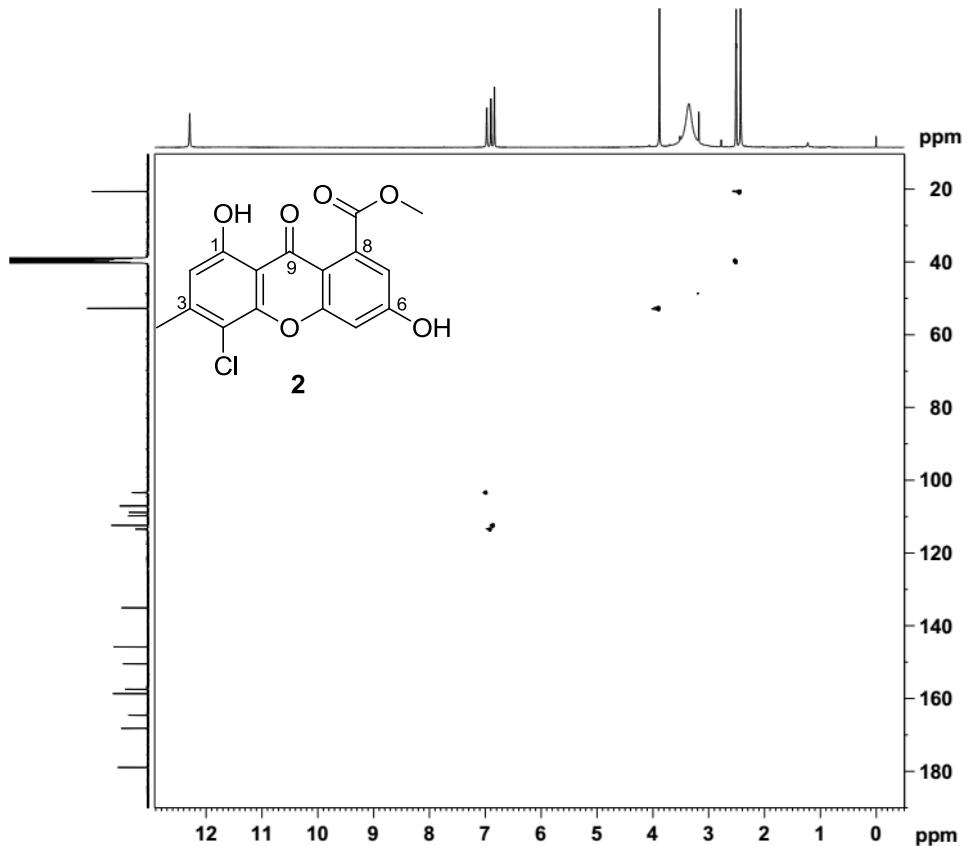


Figure S10. HSQC spectrum of compound **2** in $\text{DMSO}-d_6$

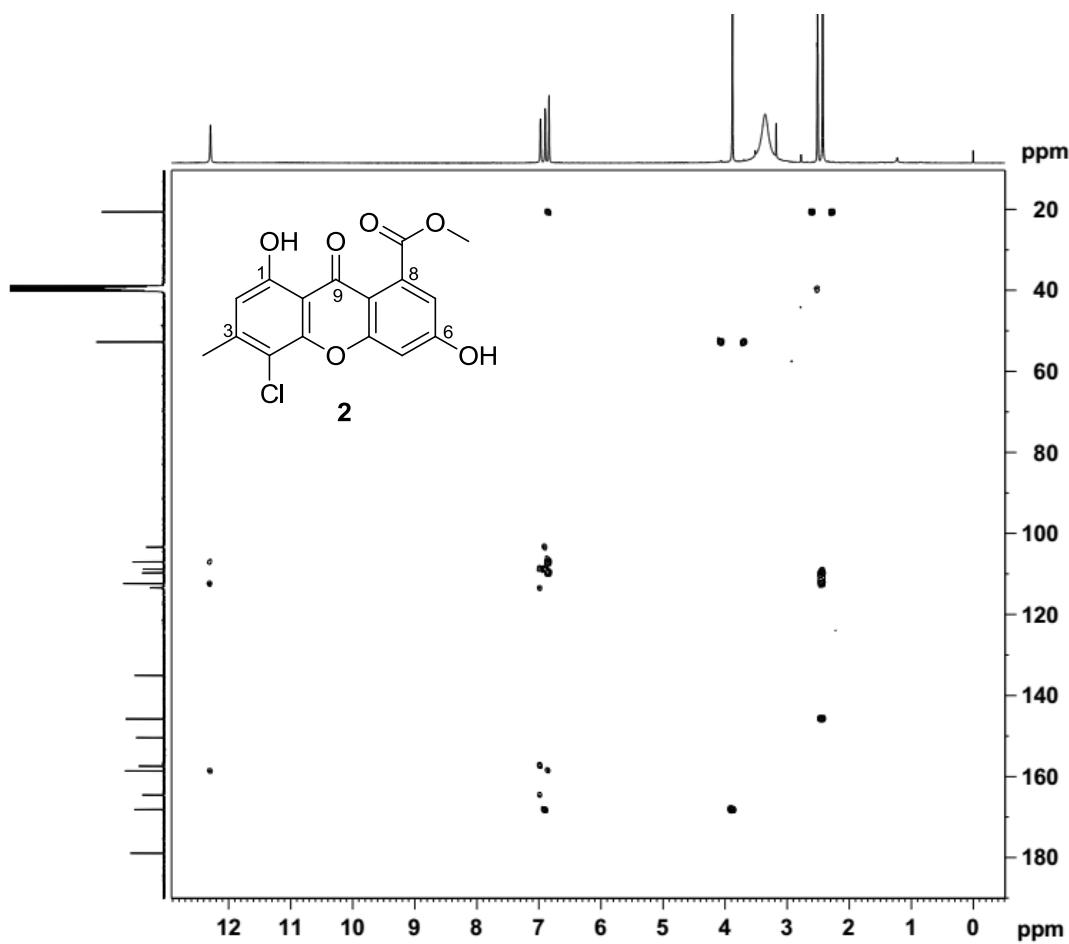
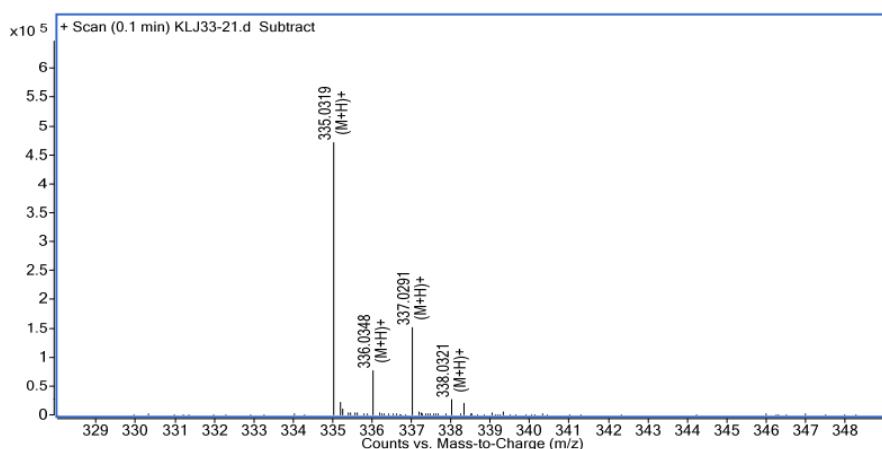


Figure S11. HMBC spectrum of compound **2** in $\text{DMSO}-d_6$



Name	Formula	Score	Mass	Mass (MFG)	Diff (ppm)	Diff (abs. ppm)	Diff (mDa)
C16 H11 Cl O6	98.68	334.02459	334.02442	-0.51	0.51	-0.17	

Species	Ion Formula	m/z	Height	Score (MFG)	Score (MFG, MS)	Score (MFG, mass)	Score (MFG, abund)	Score (MFG, iso. spacing)
(M+H) ⁺	C16 H12 Cl O6	335.0317	471504	98.68	98.68	99.81	97.14	98.26

m/z	m/z (Calc)	Diff (ppm)	Diff (mDa)	Height	Height (Calc)	Height %	Height % (Calc)	Height Sum %	Height Sum% (Calc)
335.0319	335.0317	-0.56	-0.2	471504	457787.1	100	100	64.7	62.8
336.0348	336.0351	0.74	0.2	76686.8	80898.9	16.3	17.7	10.5	11.1
337.0291	337.0294	1.06	0.4	150598.5	158836.5	31.9	34.7	20.7	21.8
338.0321	338.0325	1.24	0.4	26115.1	27228	5.5	5.9	3.6	3.7
339.036	339.0346	-4.09	-1.4	3890.8	4080	0.8	0.9	0.5	0.6
340.0331	340.0372	11.96	4.1	474.8	439.6	0.1	0.1	0.1	0.1

Figure S12. HRESIMS spectrum of compound **2**

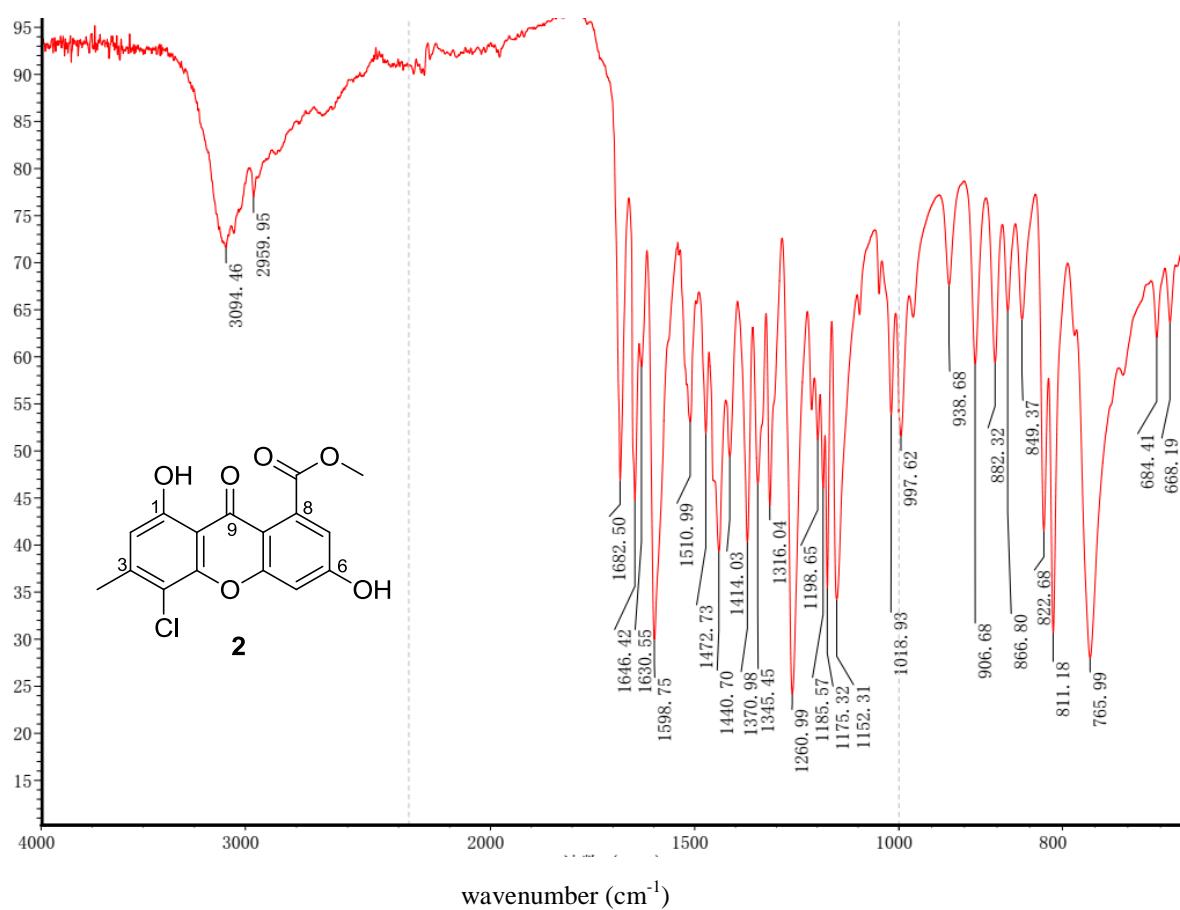


Figure S13. IR spectrum of compound **2**

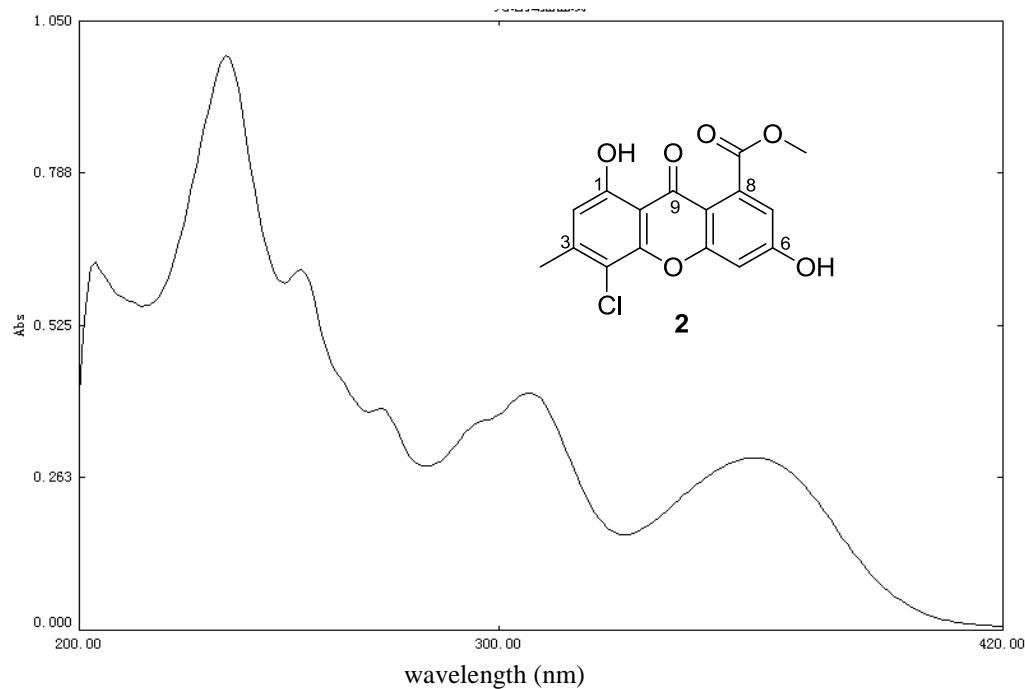


Figure S14. UV spectrum of compound **2** in MeOH

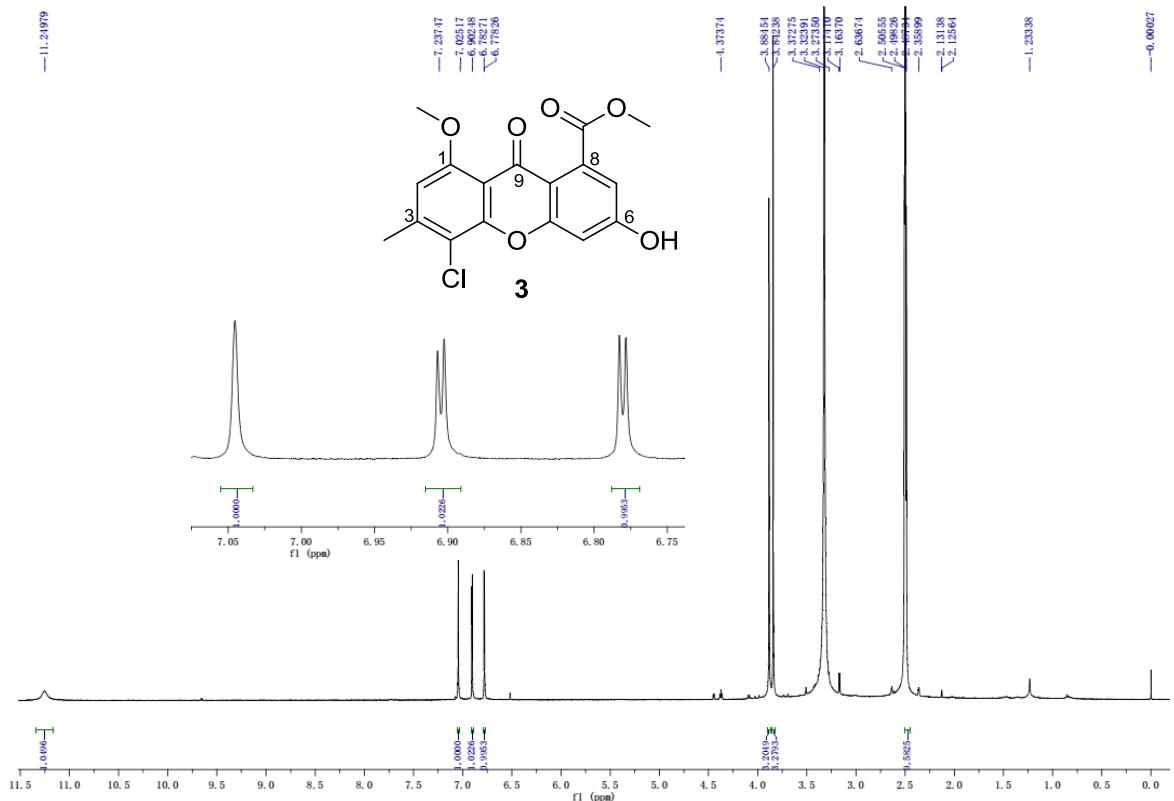


Figure S15. ^1H NMR spectrum (500 MHz) of compound **3** in $\text{DMSO}-d_6$

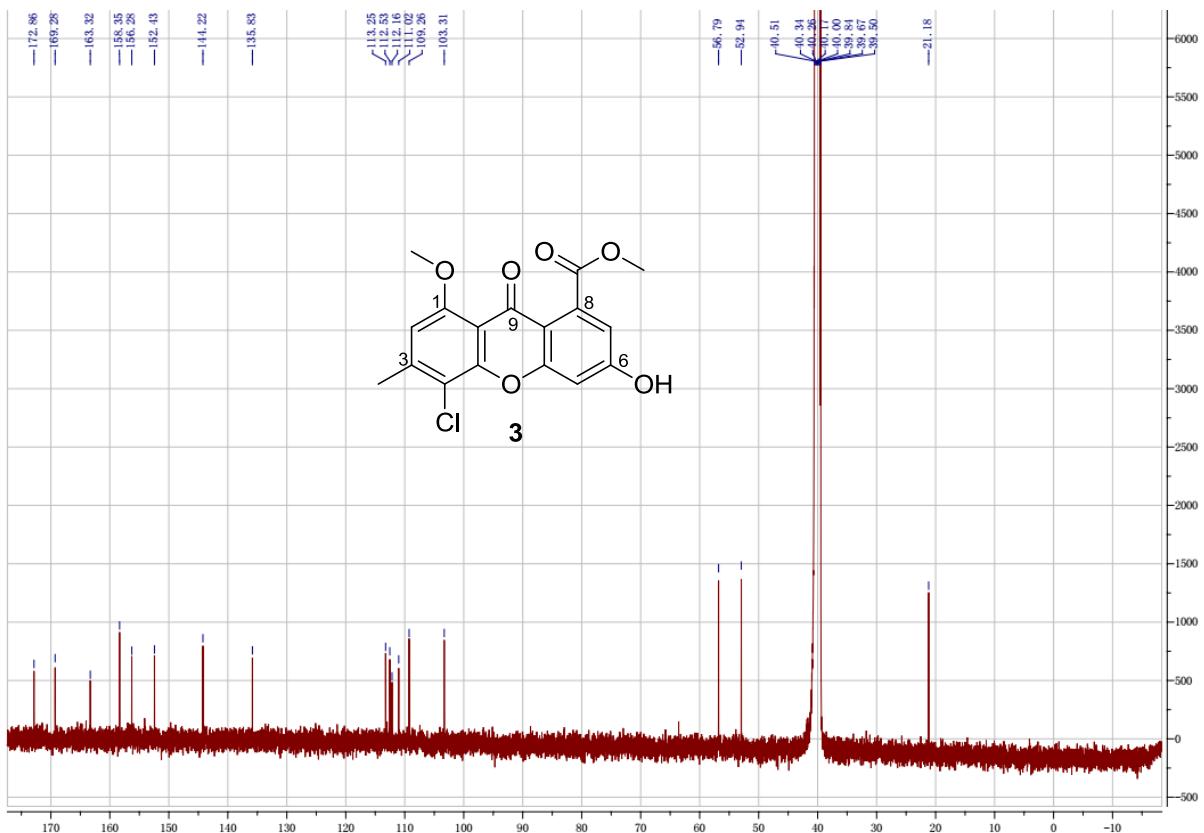


Figure S16. ^{13}C NMR spectrum (125 MHz) of compound **3** in $\text{DMSO}-d_6$

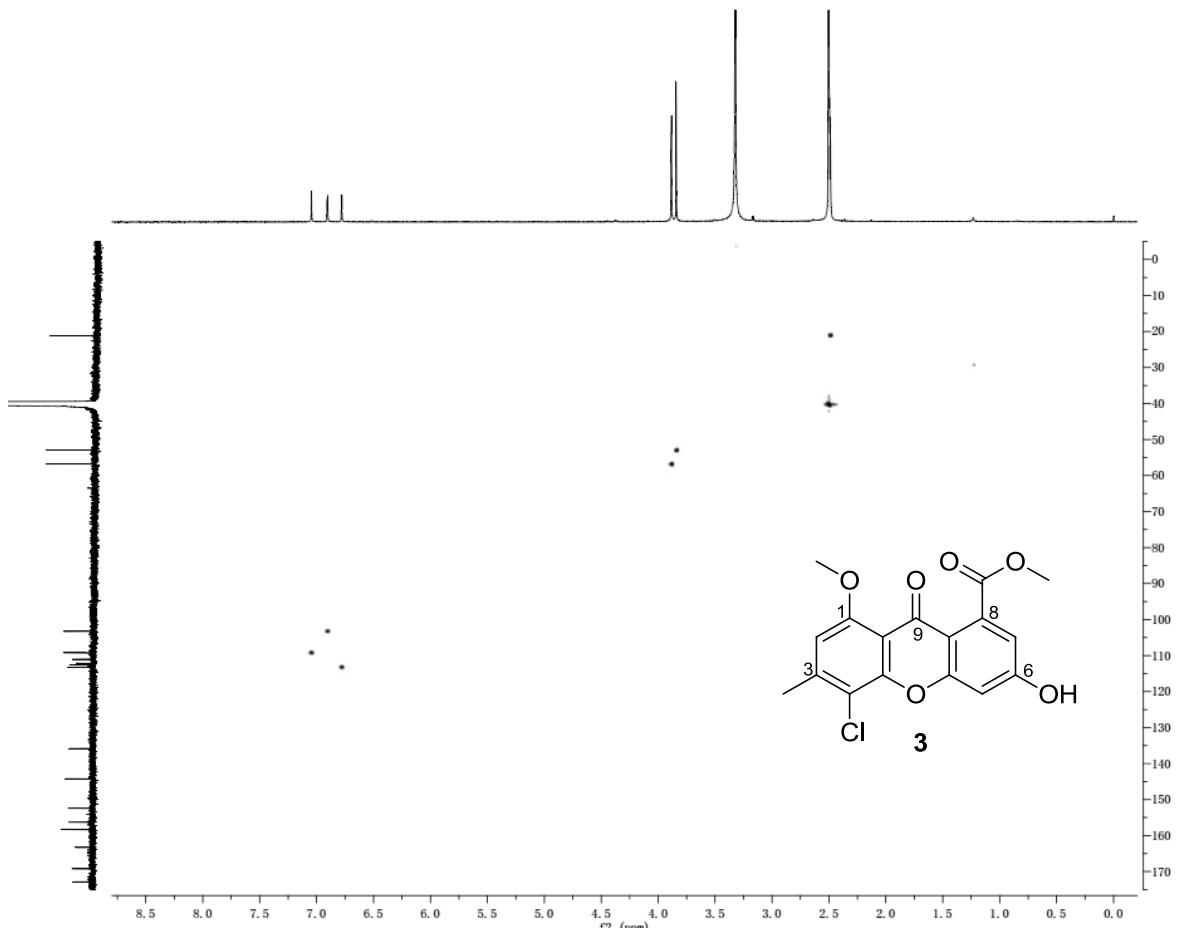


Figure S17. HSQC spectrum of compound **3** in $\text{DMSO}-d_6$

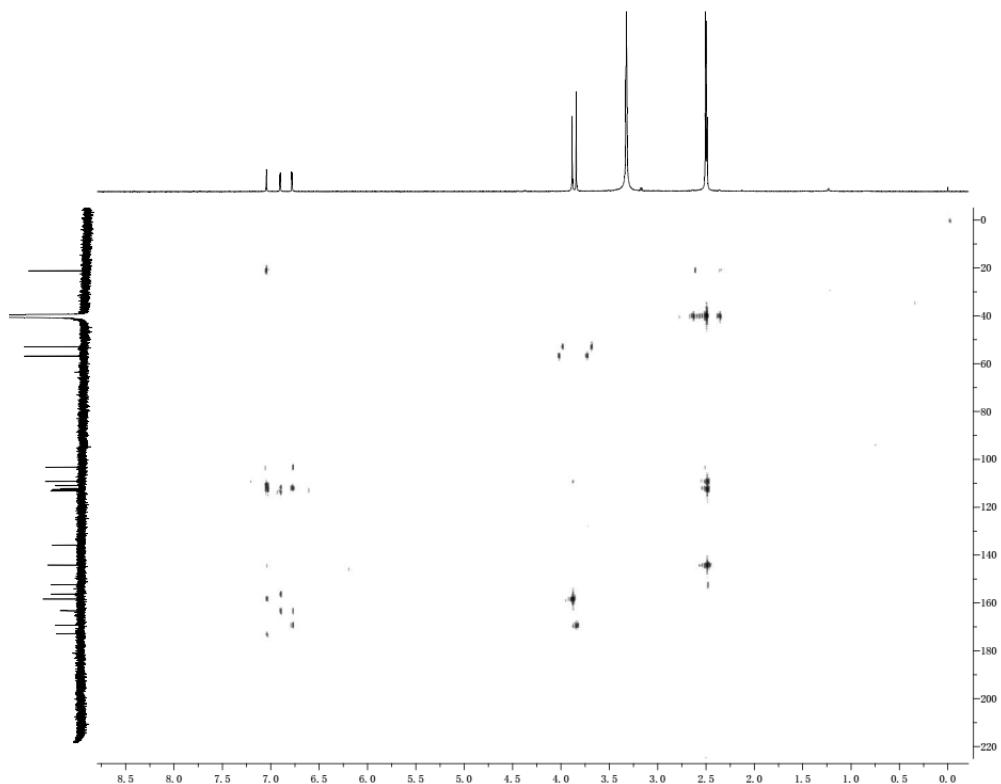
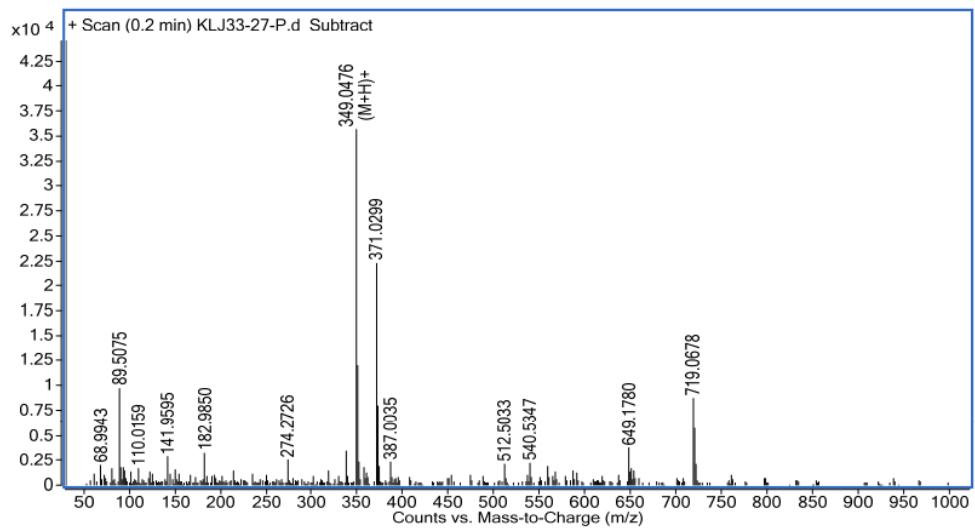


Figure S18. HMBC spectrum of compound **3** in $\text{DMSO}-d_6$



Formula	Score	Mass	Mass (MFG)	Diff (ppm)	Diff (abs. ppm)	Diff (mDa)	ID Source	Score (MFG)	DBE
C ₁₇ H ₁₃ ClO ₆	98.75	348.04035	348.04007	-0.82	0.82	-0.29	MFG	98.75	11
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Species	Ion Formula	m/z	Height	Score (MFG)	Score (MFG, MS)	Score (MFG, mass)	Score (MFG, abund)	Score (MFG, iso. spacing)	
(M+H) ⁺	C ₁₇ H ₁₄ ClO ₆	349.0473	35665.6	98.75	98.75	99.48	97.73	98.5	
<hr/>									
m/z	m/z (Calc)	Diff (ppm)	Diff (mDa)	Height	Height (Calc)	Height %	Height % (Calc)	Height Sum %	Height Sum% (Calc)
349.0476	349.0473	-0.74	-0.3	35665.6	35584.1	100	100	62.3	62.1
350.0512	350.0507	-1.38	-0.5	7129.5	6681.4	20	18.8	12.4	11.7
351.0461	351.0451	-2.83	-1	11947.6	12416	33.5	34.9	20.9	21.7
352.0461	352.0482	5.85	2.1	2260.3	2252.8	6.3	6.3	3.9	3.9
353.0494	353.0504	2.77	1	271.9	340.6	0.8	1	0.5	0.6

Figure S19. HRESIMS spectrum of compound 3

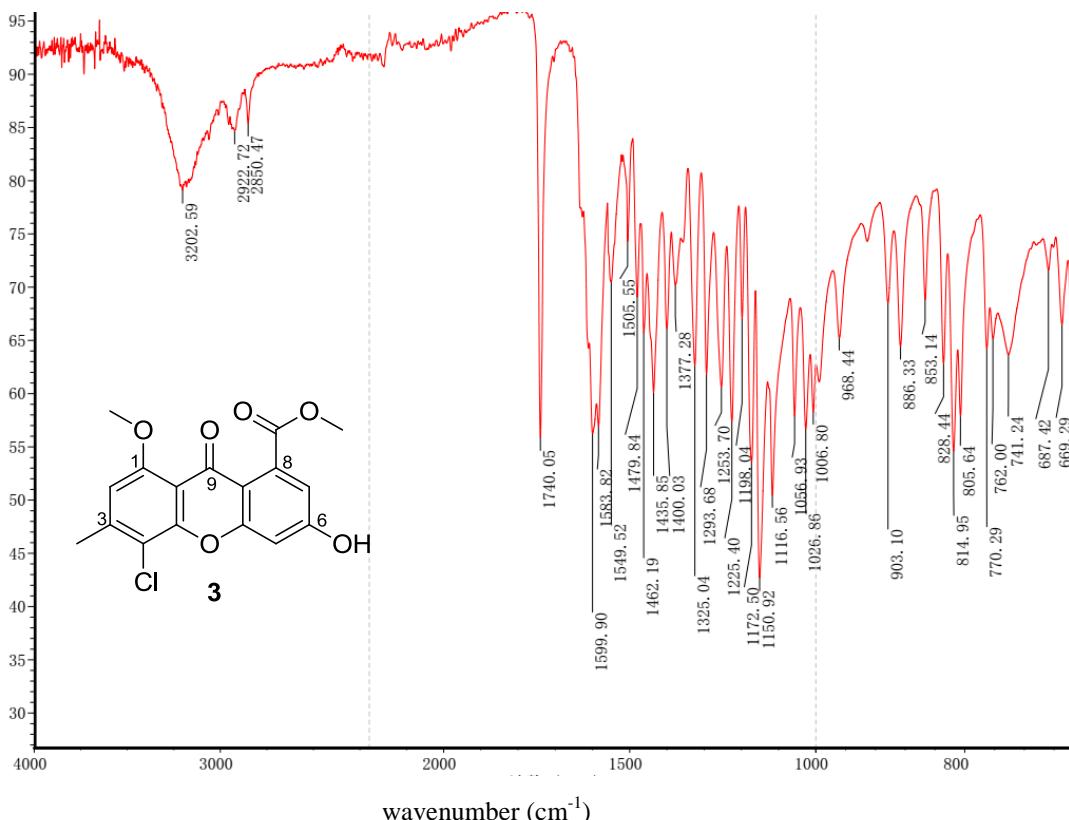


Figure S20. IR spectrum of compound 3

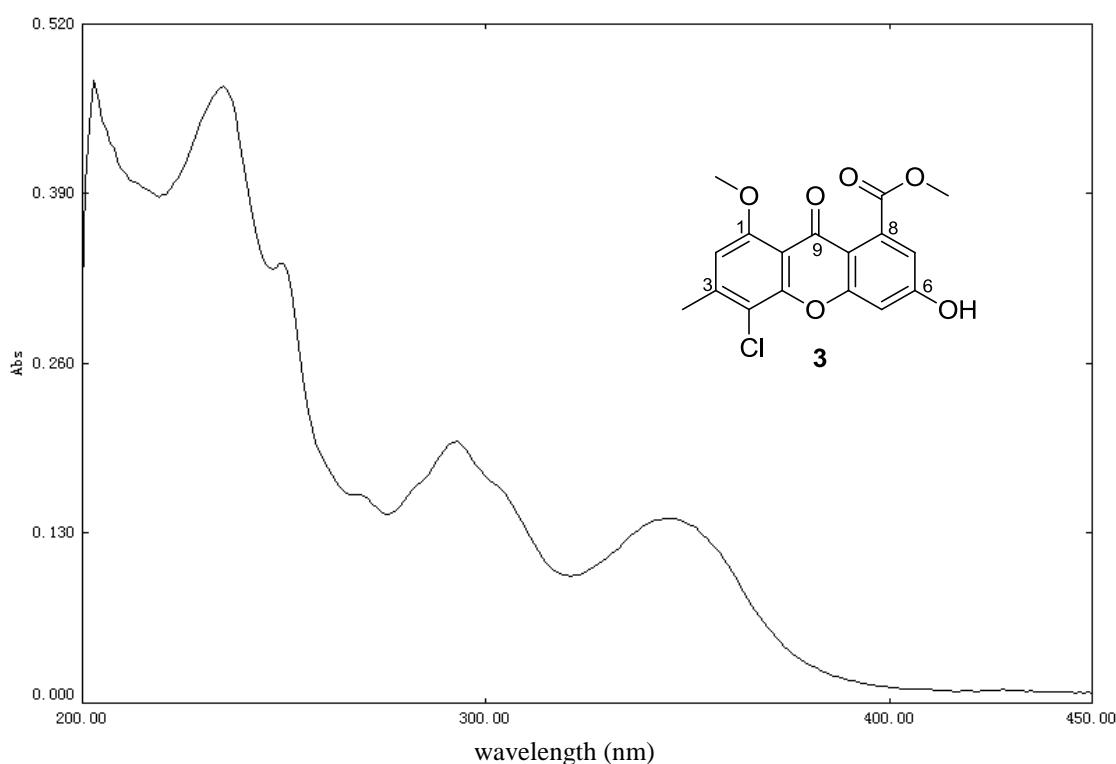


Figure S21. UV spectrum of compound **3** in MeOH

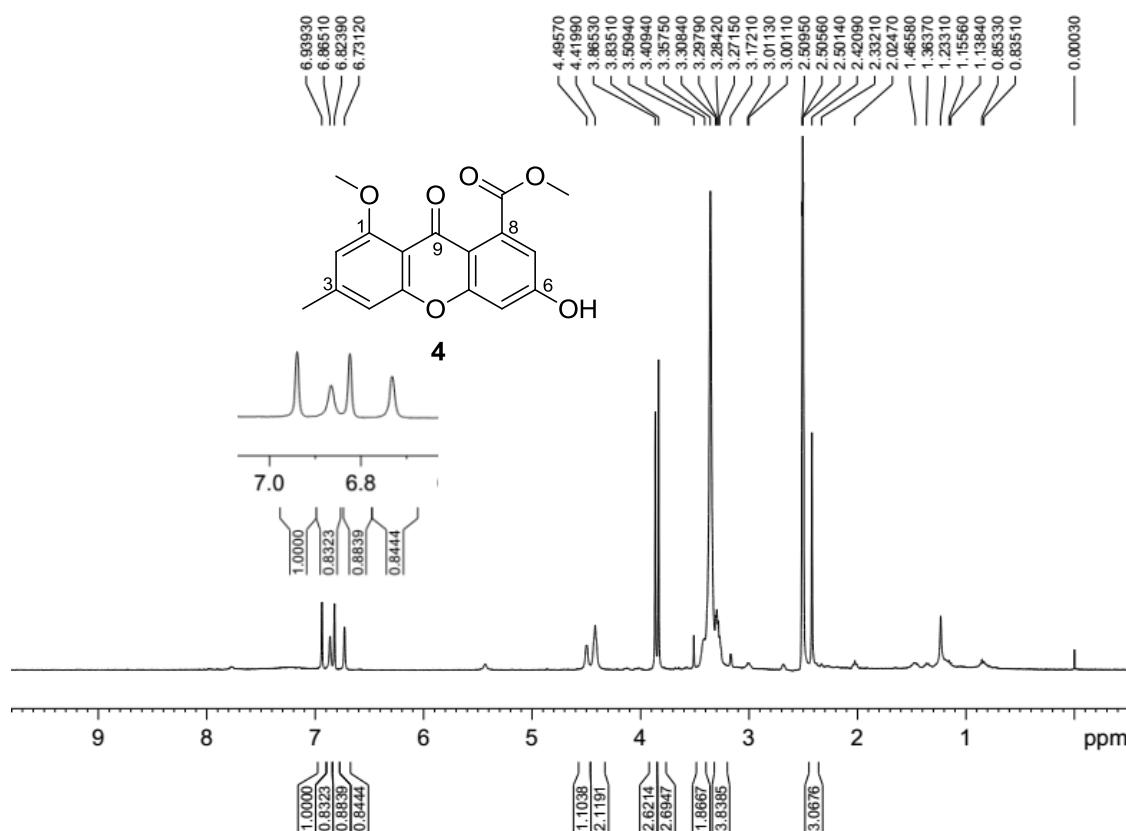


Figure S22. ^1H NMR spectrum (400 MHz) of compound **4** in $\text{DMSO}-d_6$

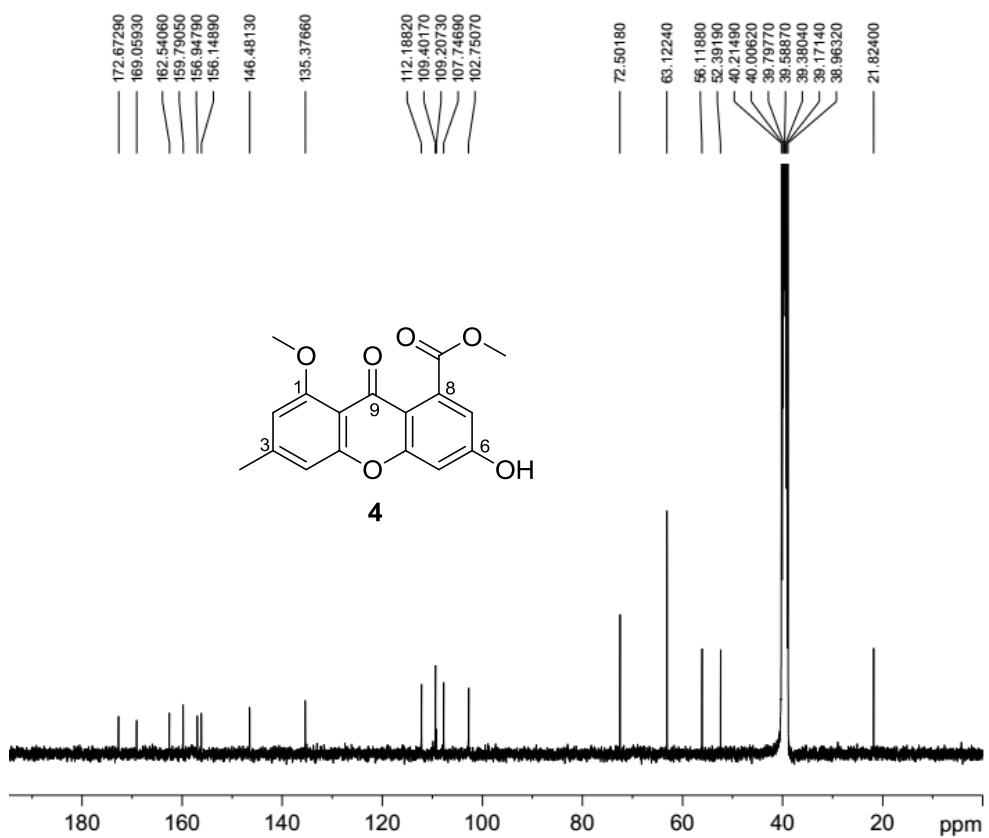


Figure S23. ^{13}C NMR spectrum (100 MHz) of compound **4** in $\text{DMSO}-d_6$

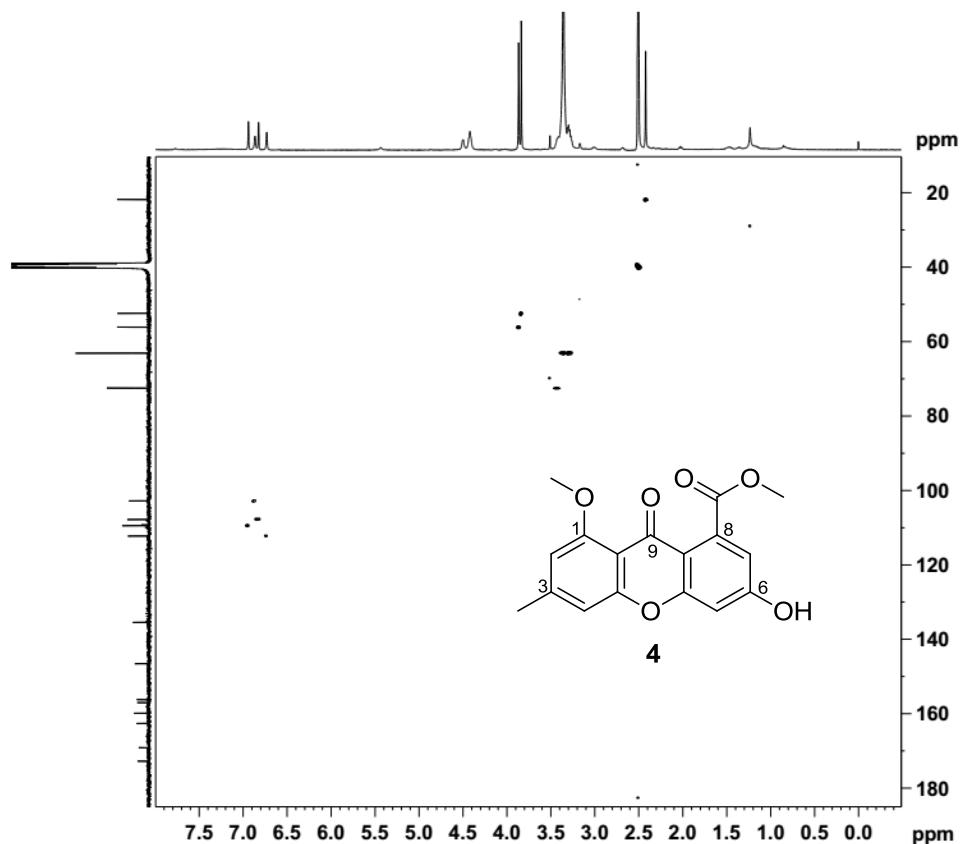


Figure S24. HSQC spectrum of compound **4** in $\text{DMSO}-d_6$

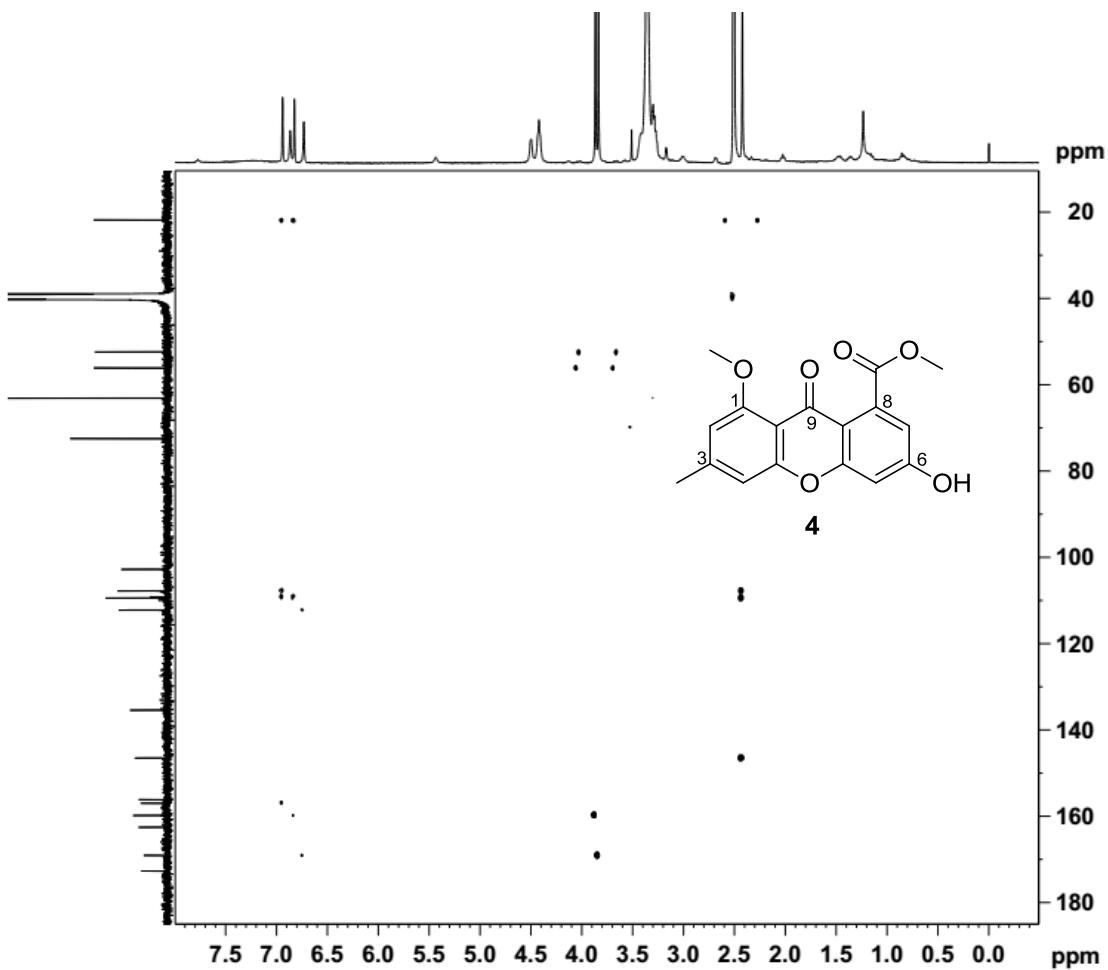
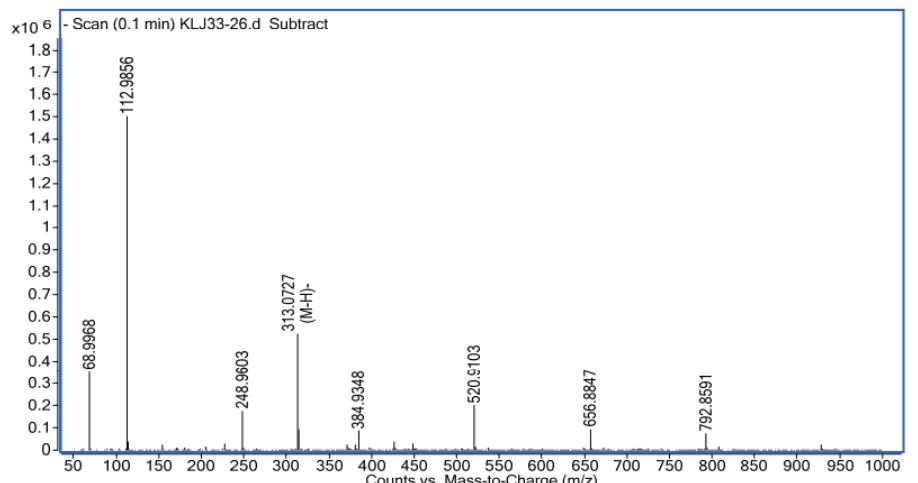


Figure S25. HMBC spectrum of compound **4** in $\text{DMSO}-d_6$



Formula	Score	Mass	Mass (MFG)	Diff (ppm)	Diff (abs. ppm)	Diff (mDa)	ID Source	Score (MFG)	DBE
C ₁₇ H ₁₄ O ₆	95.75	314.07996	314.07904	-2.93	2.93	-0.92	MFG	95.75	11
<hr/>									
Species	Ion Formula	m/z	Height	Score (MFG)	Score (MFG, MS)	Score (MFG, mass)	Score (MFG, abund)	Score (MFG, iso. spacing)	
(M-H) ⁻	C ₁₇ H ₁₃ O ₆	313.0718	519700.7	95.75	95.75	94.17	99.21	94.75	
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m/z	m/z (Calc)	Diff (ppm)	Diff (mDa)	Height	Height (Calc)	Height %	Height % (Calc)	Height Sum %	Height Sum% (Calc)
313.0727	313.0718	-2.96	-0.9	519700.7	514412.8	100	100	83	82.2
314.0751	314.0752	0.07	0	92719.3	96528.6	17.8	18.8	14.8	15.4
315.0769	315.0775	1.81	0.6	13409	14887.6	2.6	2.9	2.1	2.4

Figure S26. HRESIMS spectrum of compound **4**

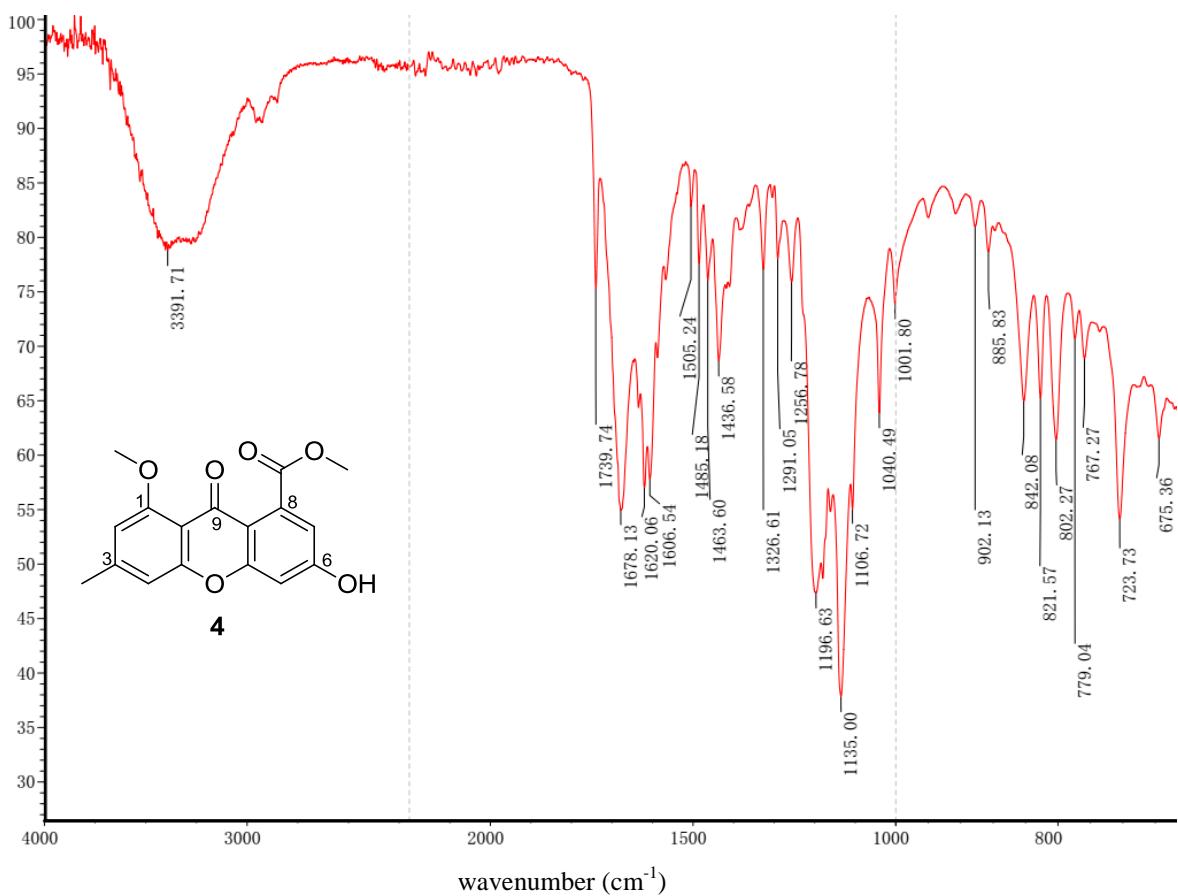


Figure S27. IR spectrum of compound 4

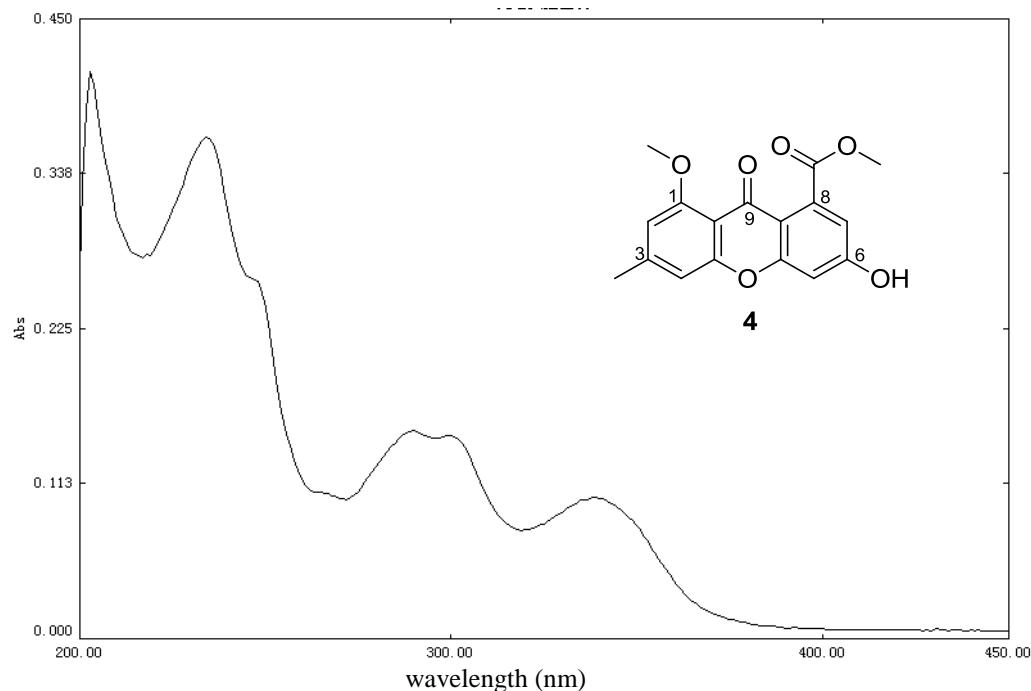


Figure S28. UV spectrum of compound 4 in MeOH

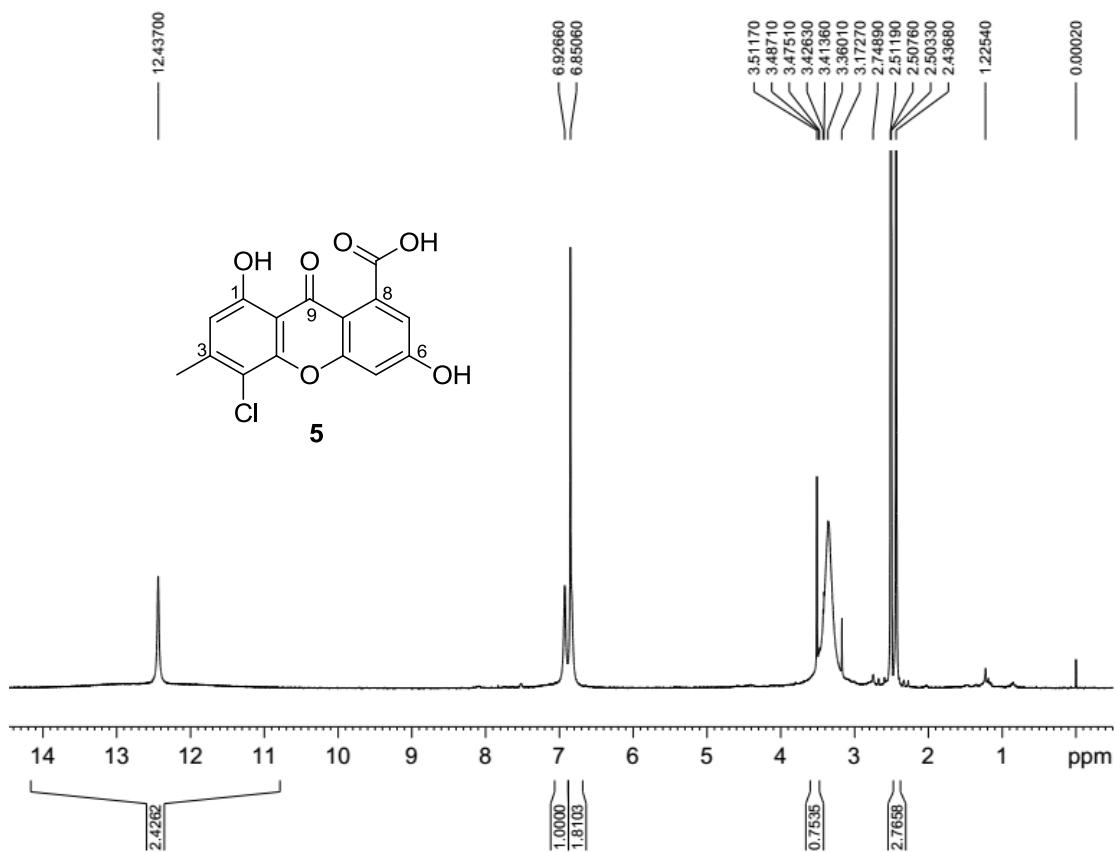


Figure S29. ^1H NMR spectrum (400 MHz) of compound **5** in $\text{DMSO}-d_6$

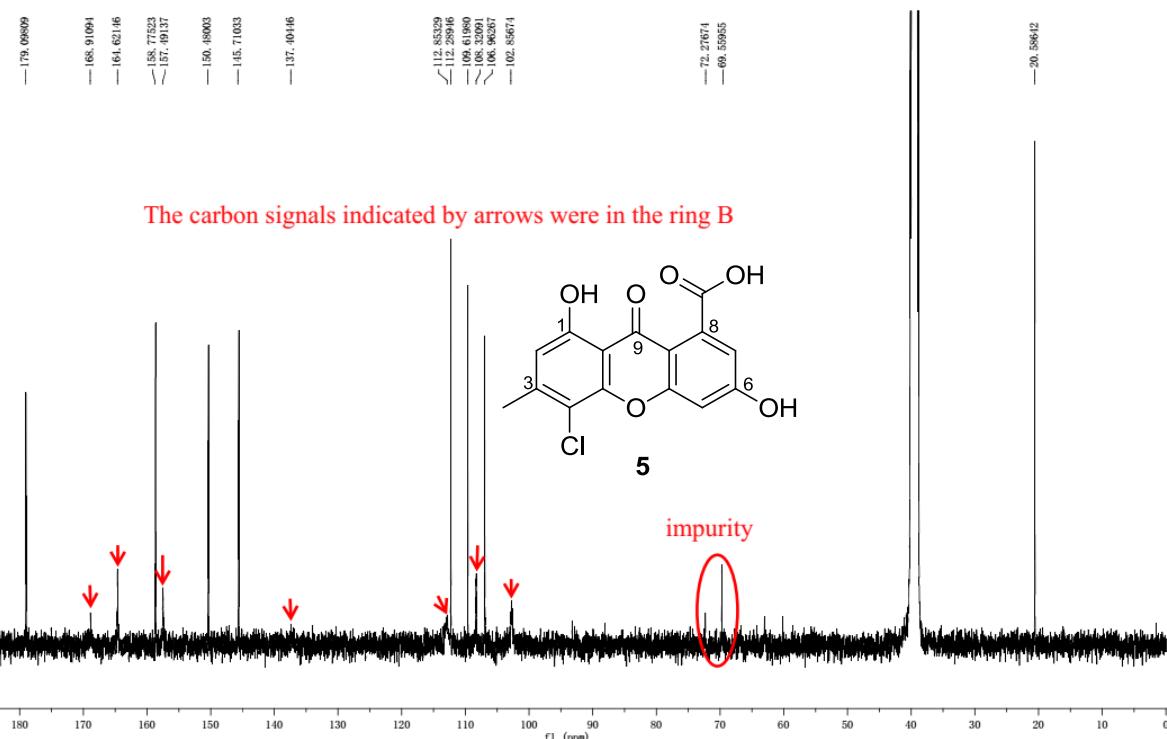


Figure S30. ^{13}C NMR spectrum (100 MHz) of compound **5** in $\text{DMSO}-d_6$

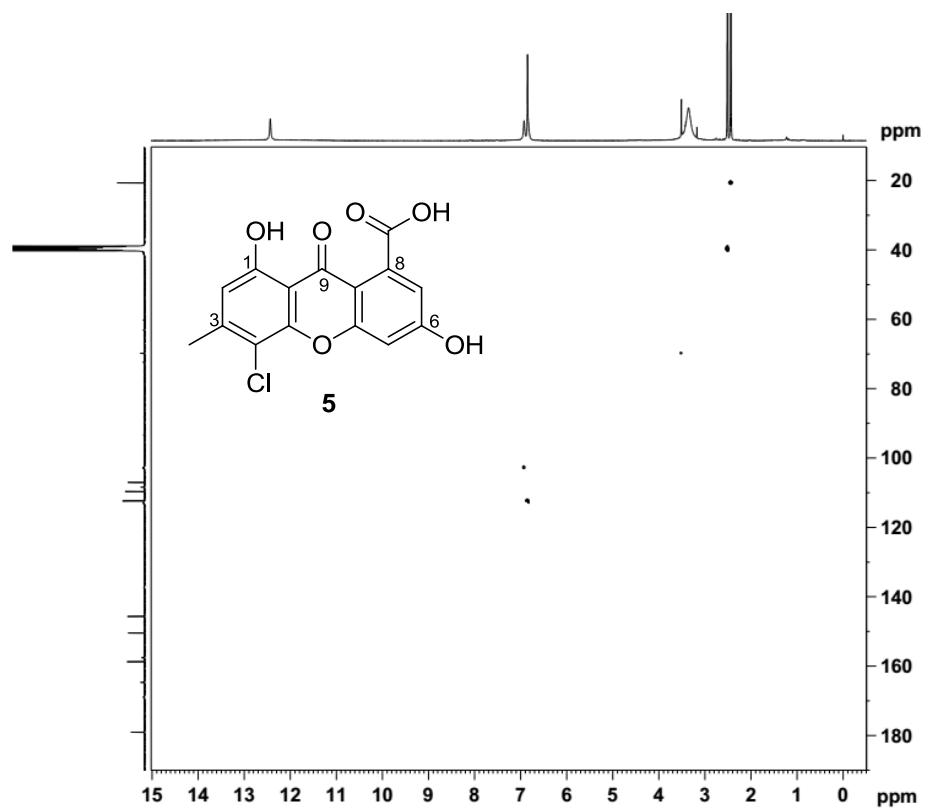


Figure S31. HSQC spectrum of compound 5 in $\text{DMSO}-d_6$

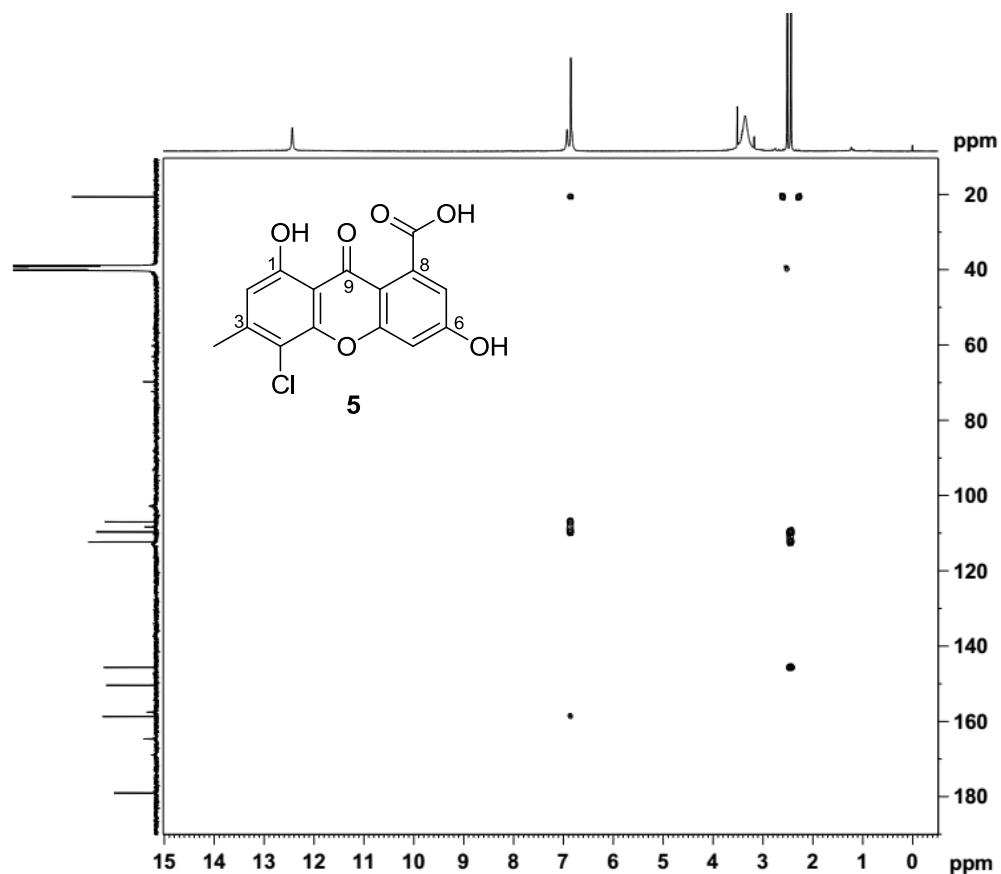
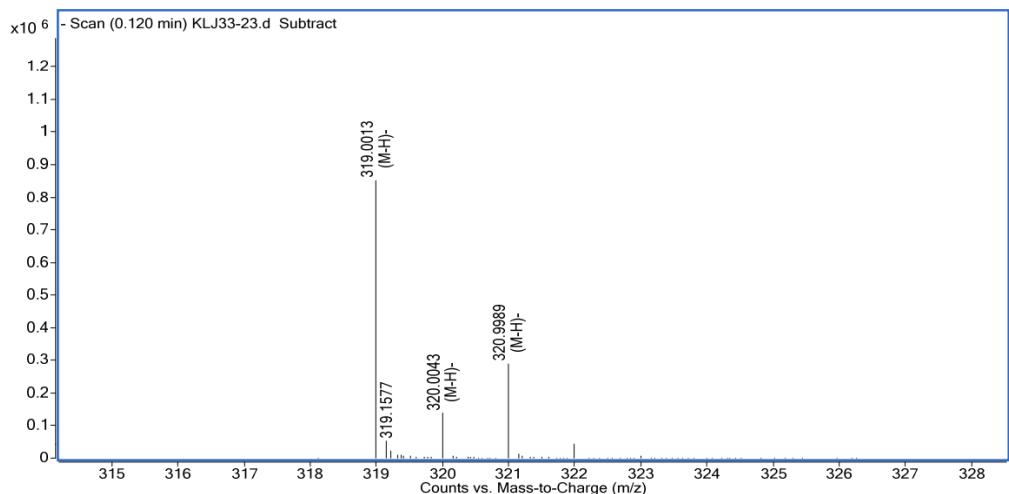


Figure S32. HMBC spectrum of compound 5 in $\text{DMSO}-d_6$



Name	Formula	Score	Mass	Mass (MFG)	Diff (ppm)	Diff (abs. ppm)	Diff (mDa)
C15 H8 Cl O6	C15 H8 Cl O6	99.61	320.0086	320.0088	0.47	0.47	0.15

Species	Ion Formula	m/z	Height	Score (MFG)	Score (MFG, MS)	Score (MFG, mass)	Score (MFG, abund)	Score (MFG, iso. spacing)
(M-H) ⁻	C15 H8 Cl O6	319.0015	852349.3	99.61	99.61	99.84	99.78	98.93

m/z	m/z (Calc)	Diff (ppm)	Diff (mDa)	Height	Height (Calc)	Height %	Height % (Calc)	Height Sum %	Height Sum% (Calc)
319.0013	319.0015	0.45	0.1	852349.3	844113.5	100	100	64.1	63.5
320.0043	320.0049	1.79	0.6	136953	139651.5	16.1	16.5	10.3	10.5
320.9989	320.9992	0.83	0.3	289426.4	291299.7	34	34.5	21.8	21.9
322.0008	322.0023	4.73	1.5	43583.8	46920.3	5.1	5.6	3.3	3.5
323.0032	323.0043	3.36	1.1	6468	6992.7	0.8	0.8	0.5	0.5
324.005	324.0069	6.01	1.9	928.6	731.6	0.1	0.1	0.1	0.1

Figure S33. HRESIMS spectrum of compound **5**

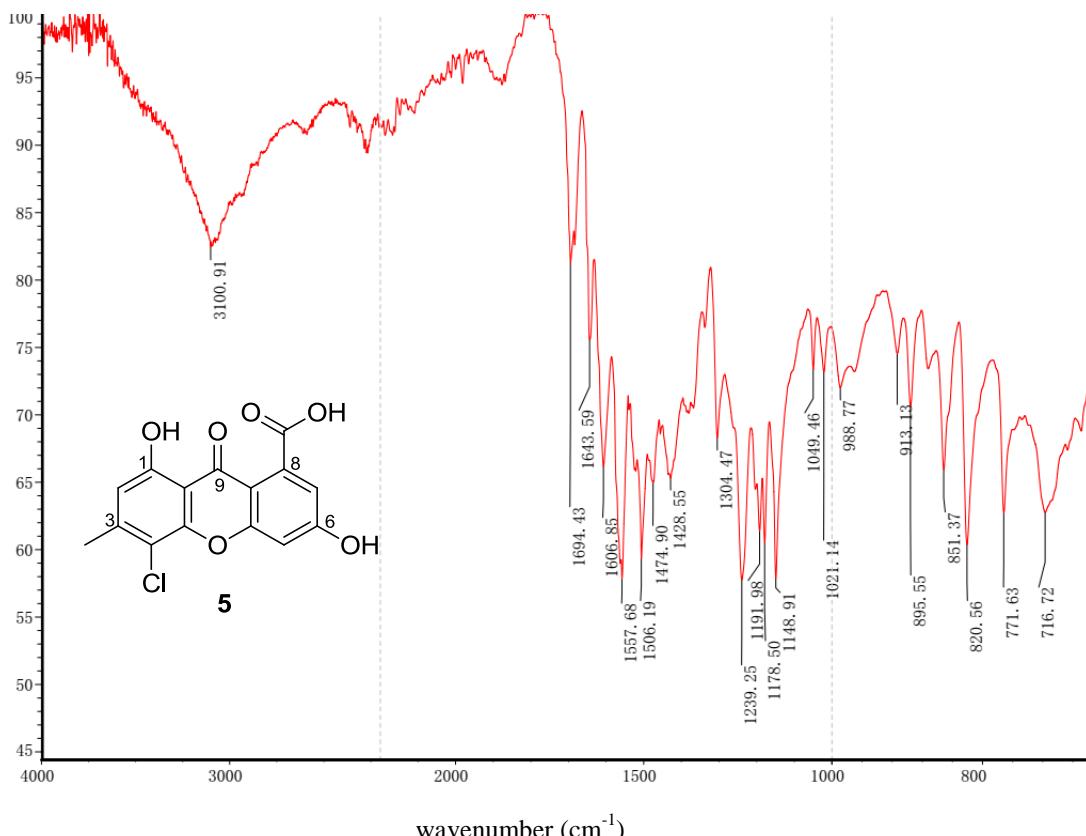


Figure S34. IR spectrum of compound **5**

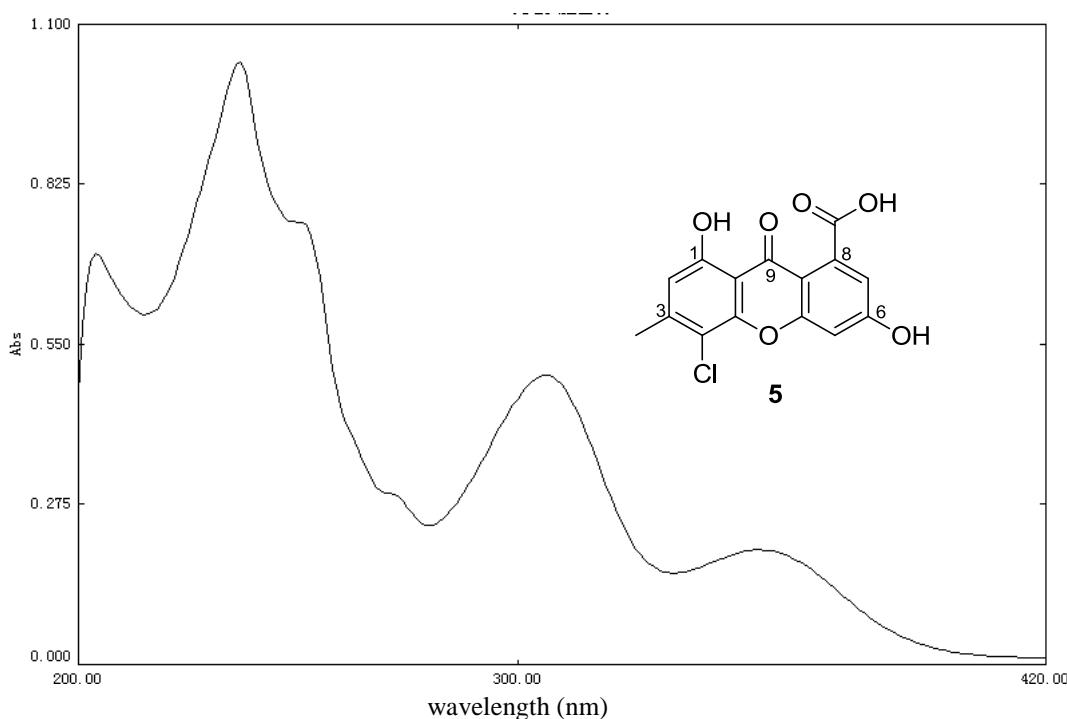


Figure S35. UV spectrum of compound **5** in MeOH

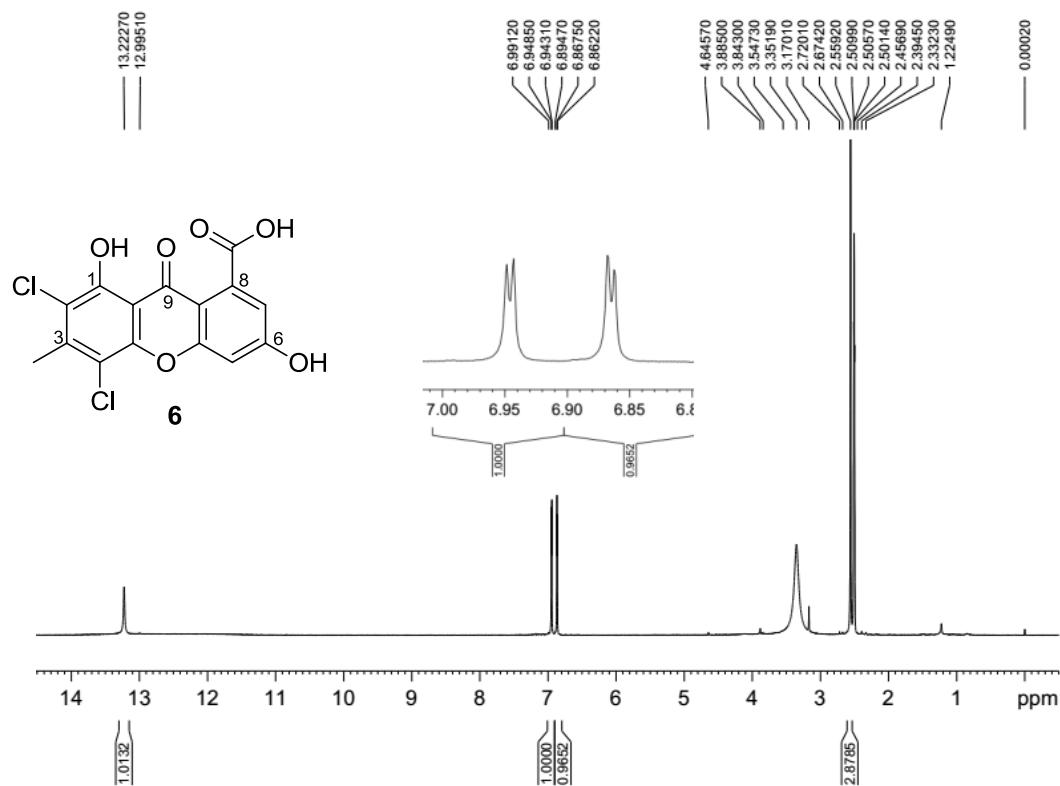


Figure S36. ^1H NMR spectrum (400 MHz) of compound **6** in $\text{DMSO}-d_6$

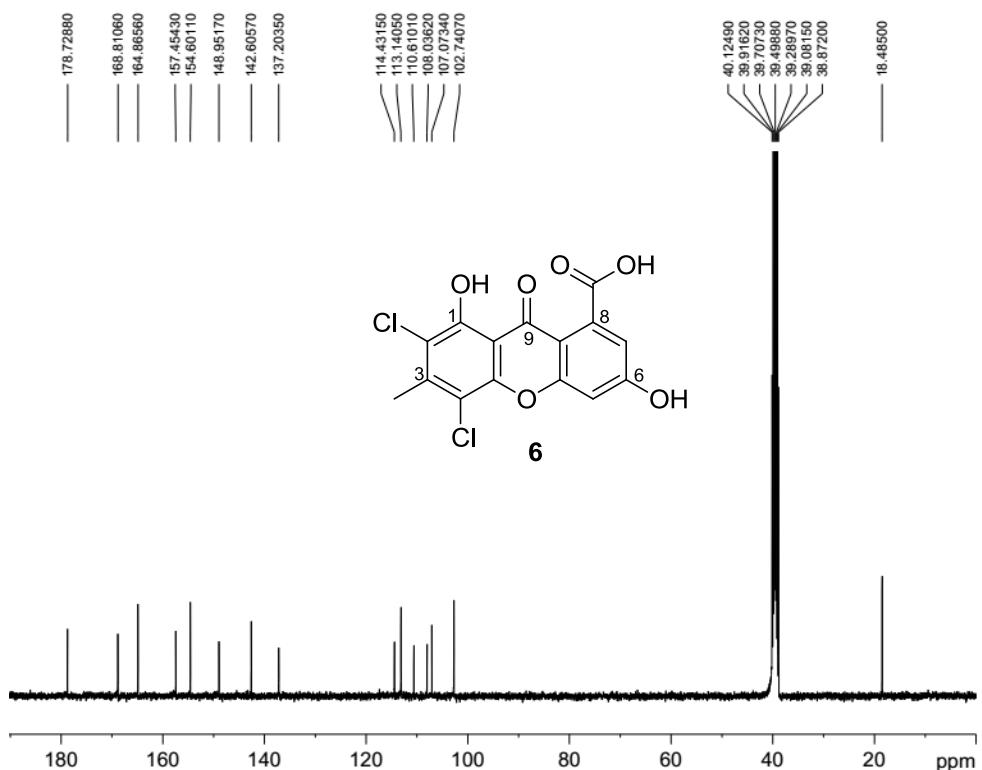


Figure S37. ^{13}C NMR spectrum (100 MHz) of compound **6** in $\text{DMSO}-d_6$

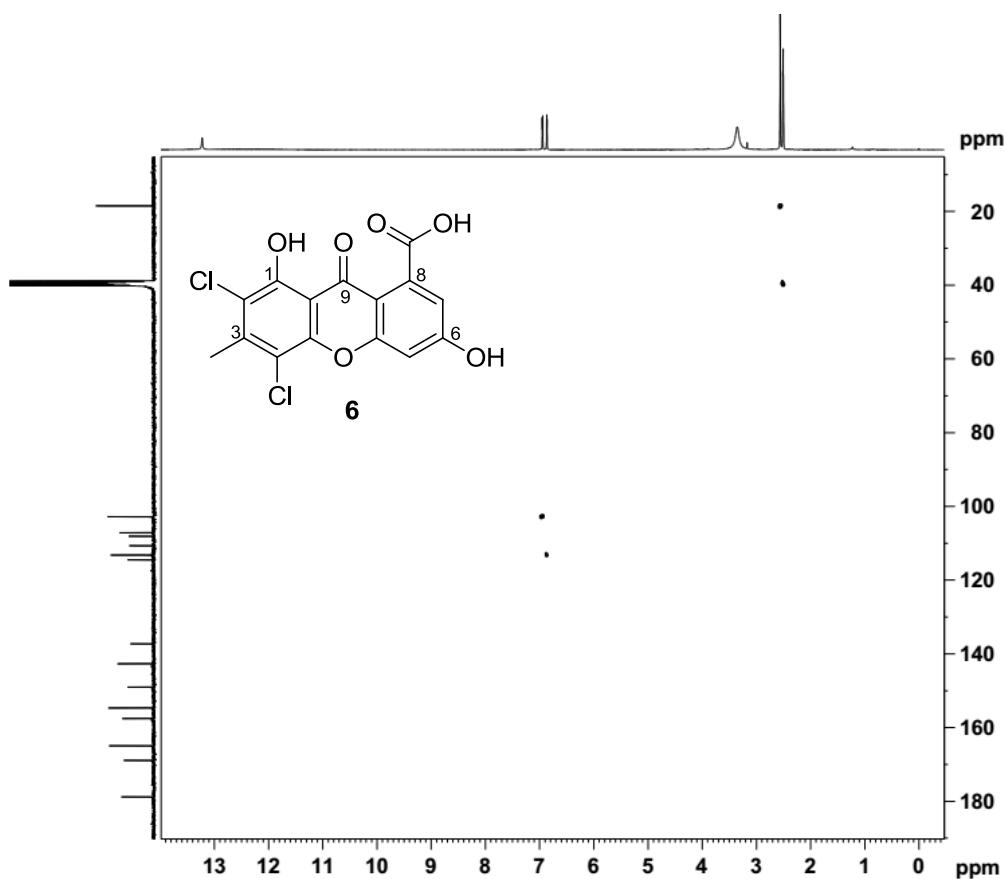


Figure S38. HSQC spectrum of compound **6** in $\text{DMSO}-d_6$

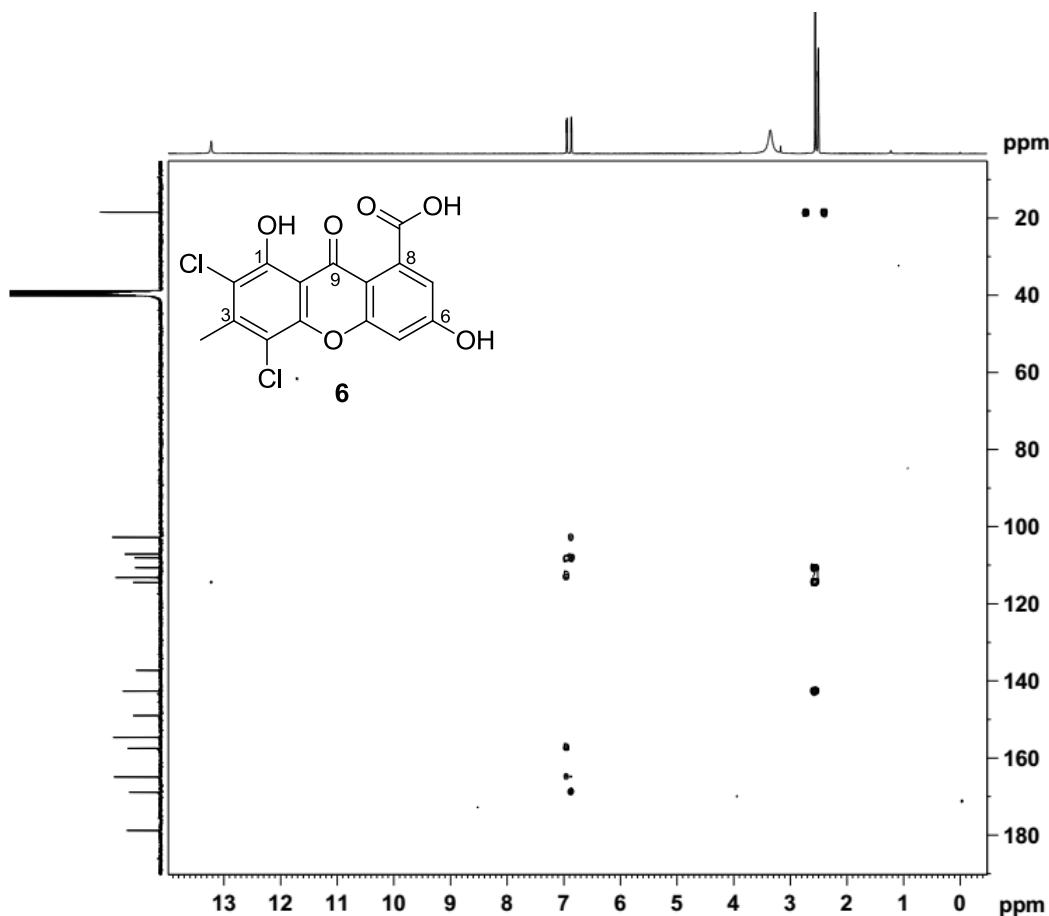


Figure S39. HMBC spectrum of compound **6** in $\text{DMSO}-d_6$

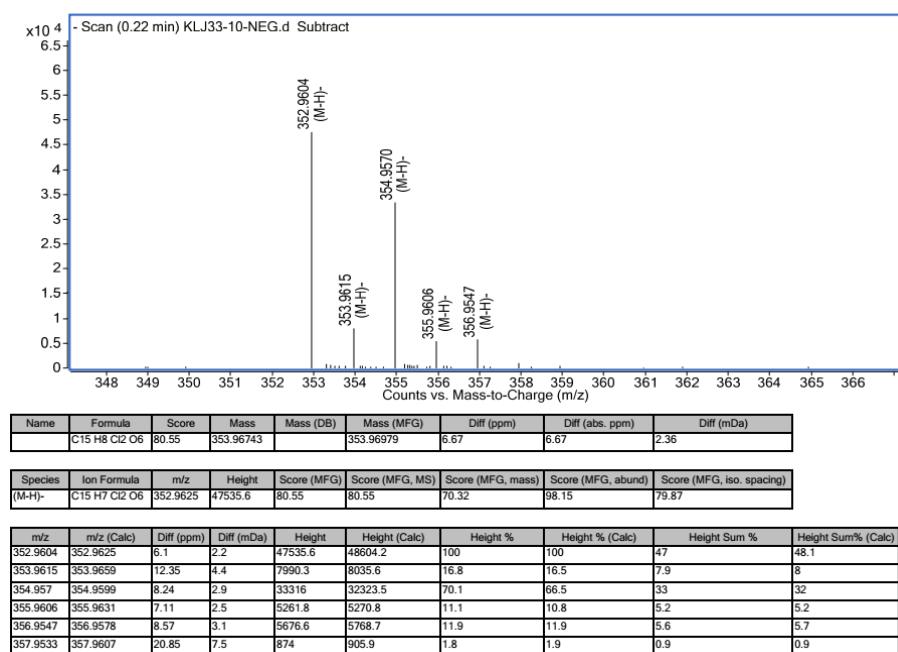


Figure S40. HRESIMS spectrum of compound **6**

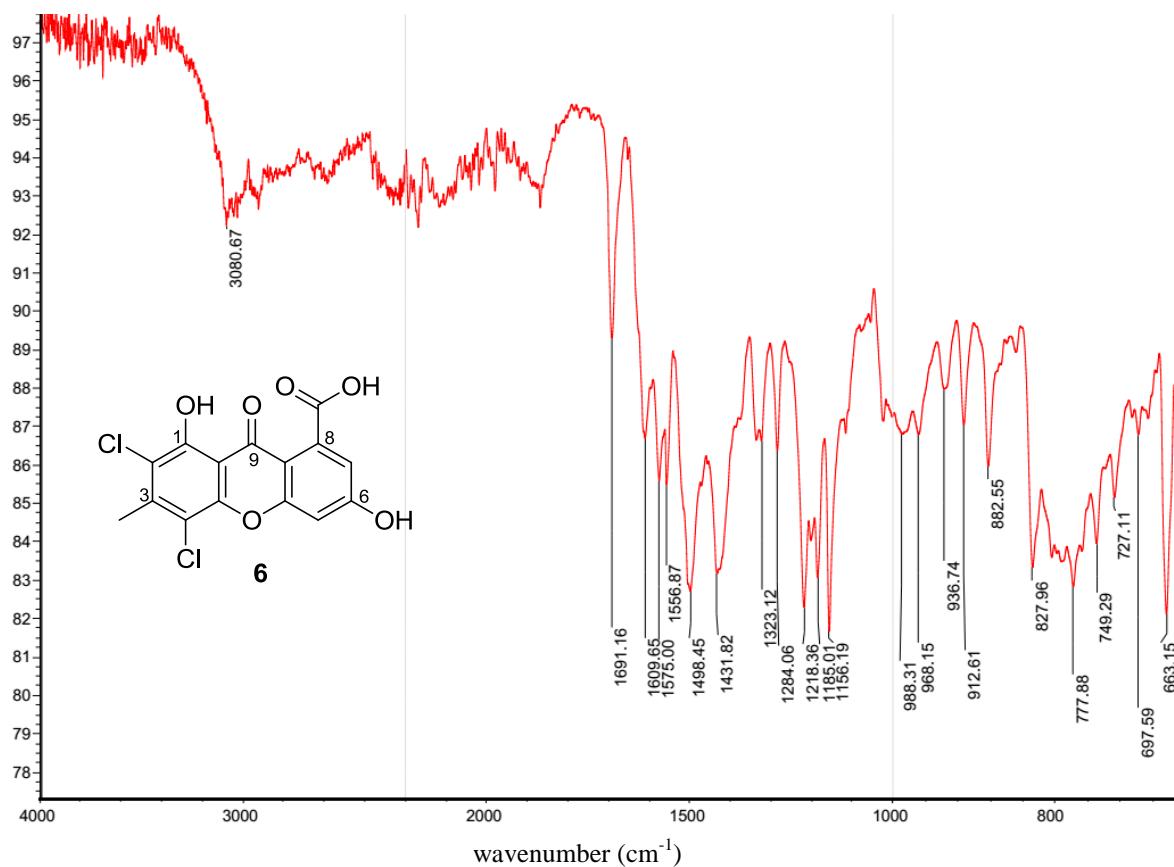


Figure S41. IR spectrum of compound **6**

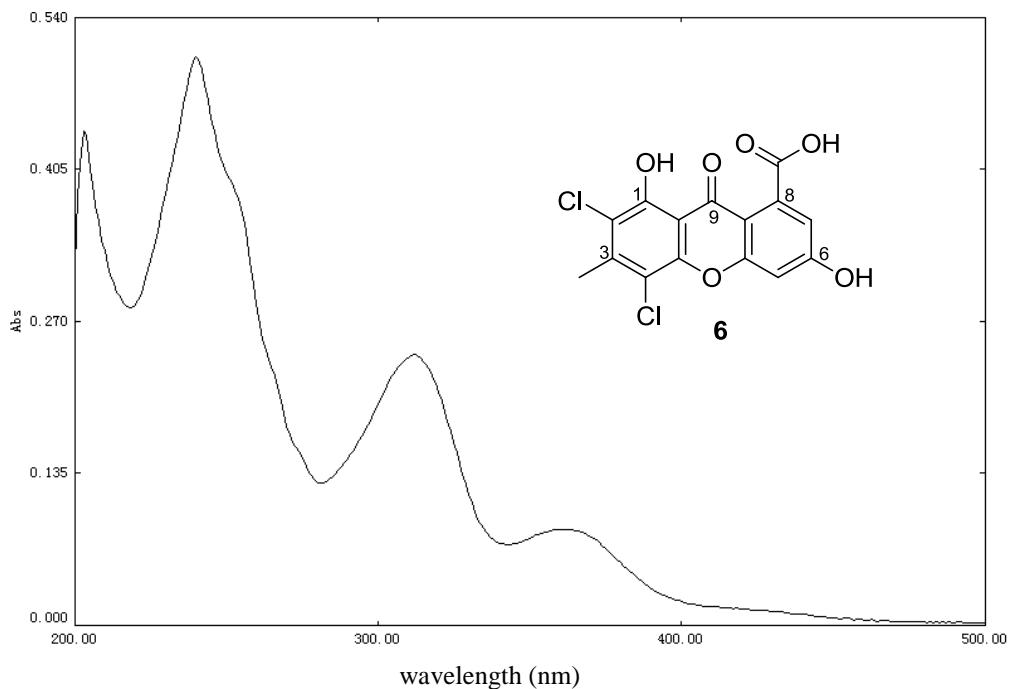


Figure S42. UV spectrum of compound **6** in MeOH