Supplementary methods for: (Suppl S1)

Plumbagin structure

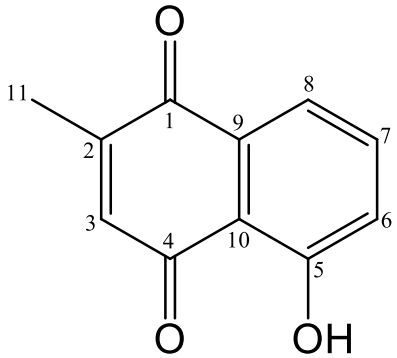

Figure S1: Plumbagin structure

NMR Spectroscopy

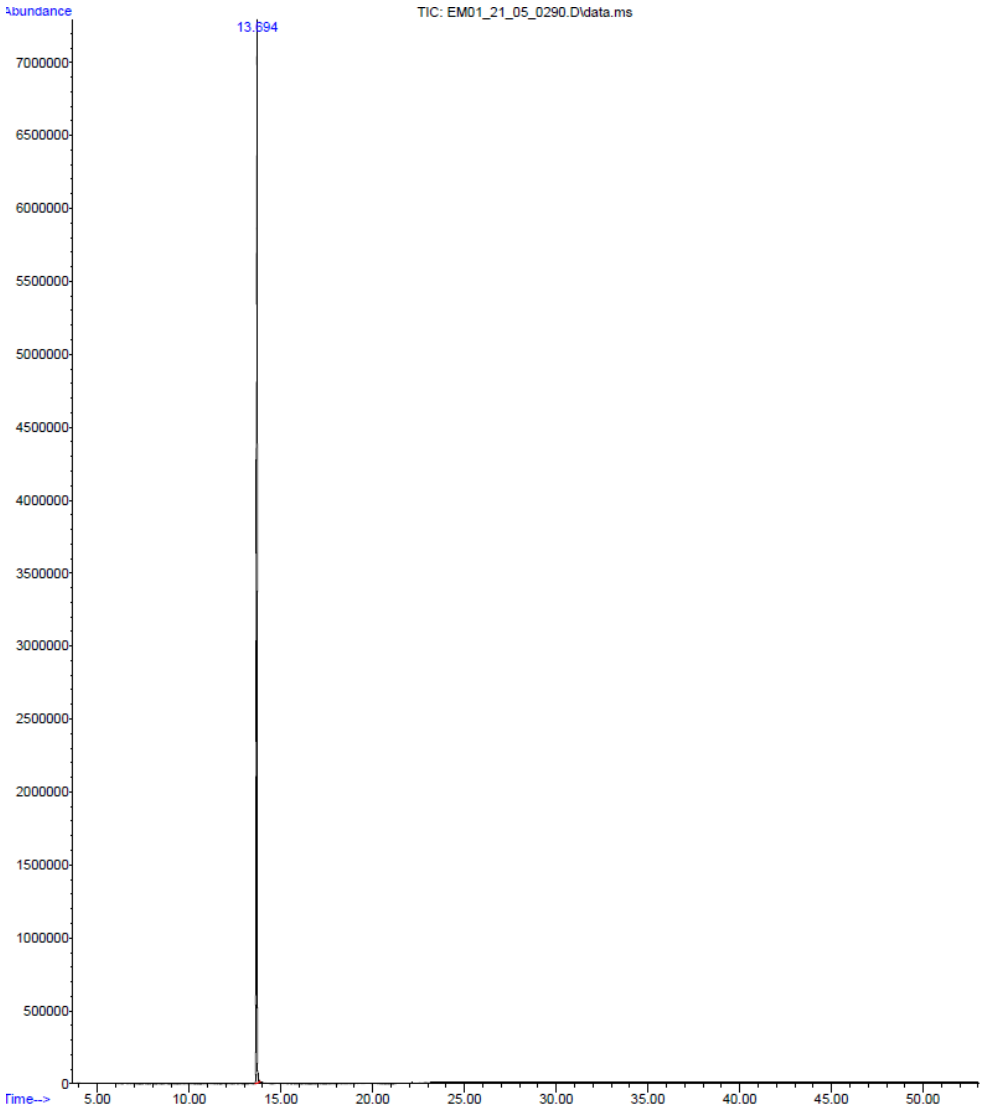

Figure S2: GC-MS for Plumbagin

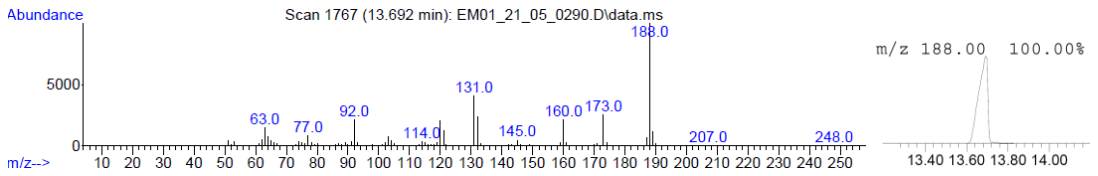

Figure S3: GC-MS for Plumbagin (CG-EM *m/z* 188 [M]+ (100), 131 (41), 173 [M - CH_3] (25), 132 (24), 160 (21)).

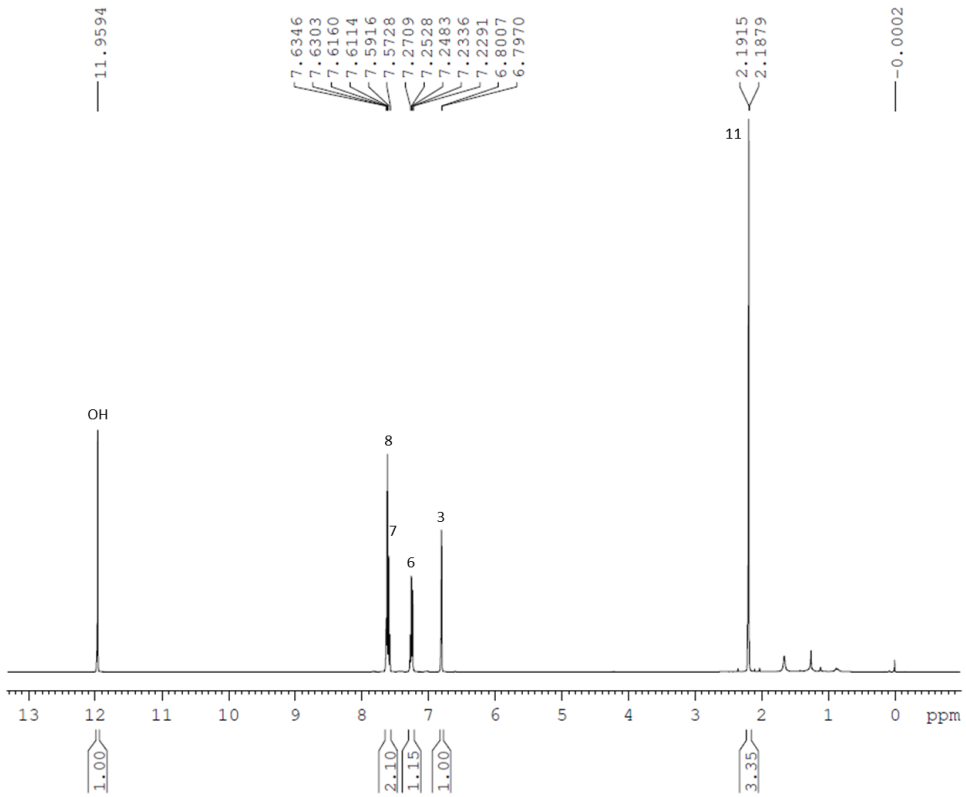

Figure S4: ^{1}H NMR spectrum for Plumbagin

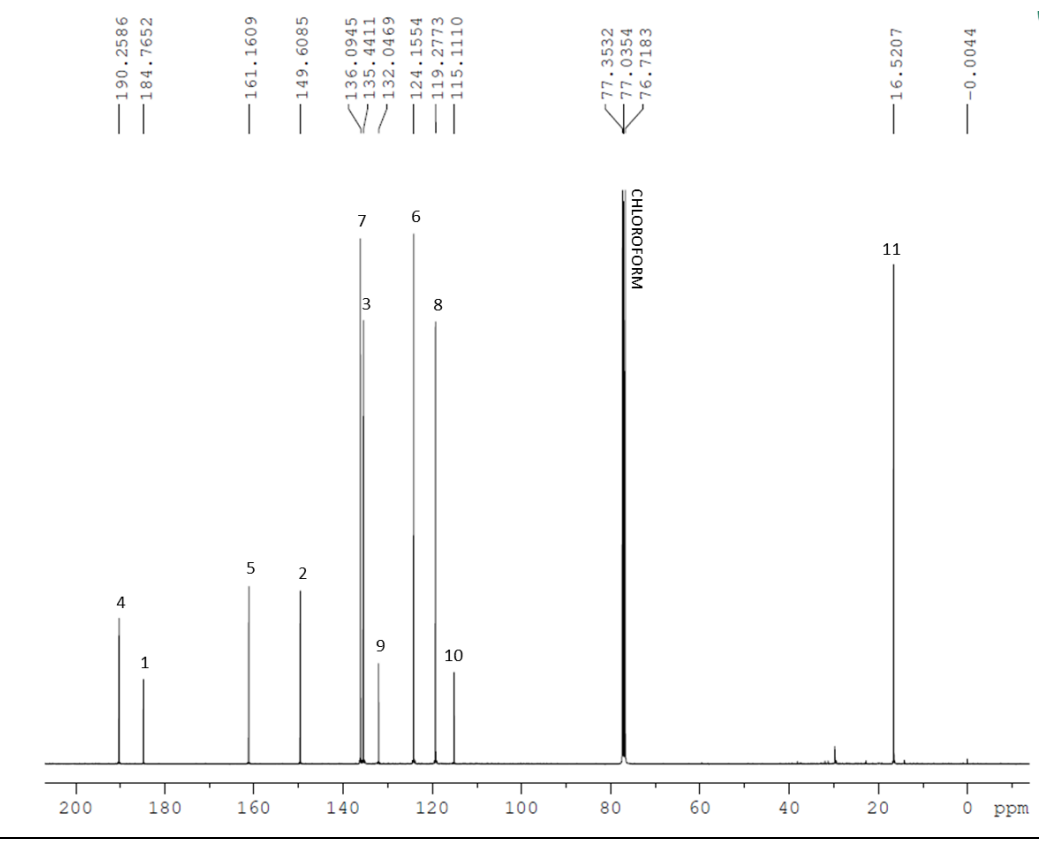

Figure S5: ^{13}C NMR spectrum for Plumbagin

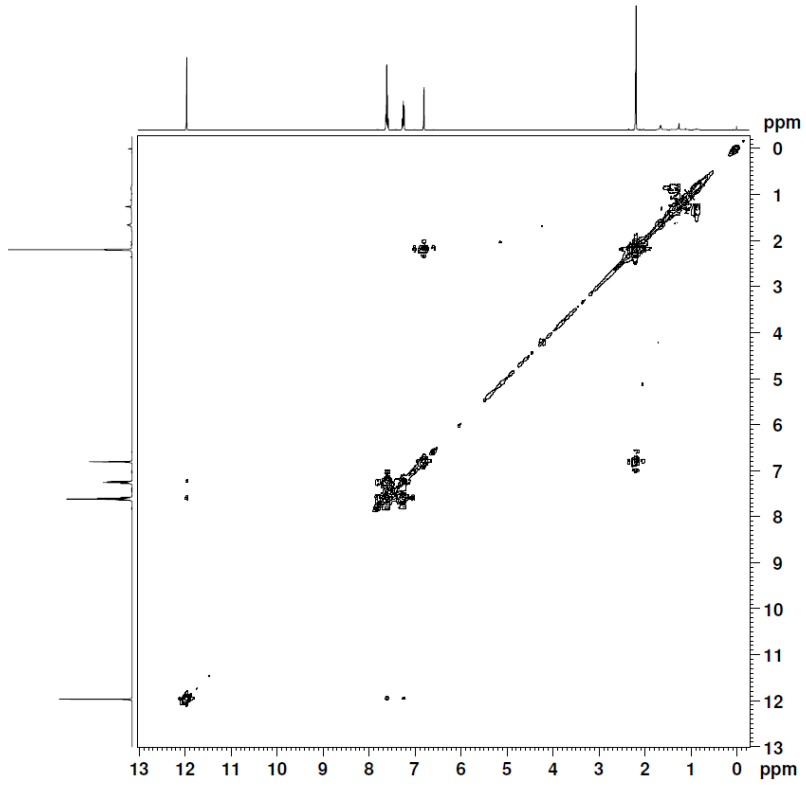

Figure S6: COSY ^{1}H x ^{1}H spectrum for Plumbagin

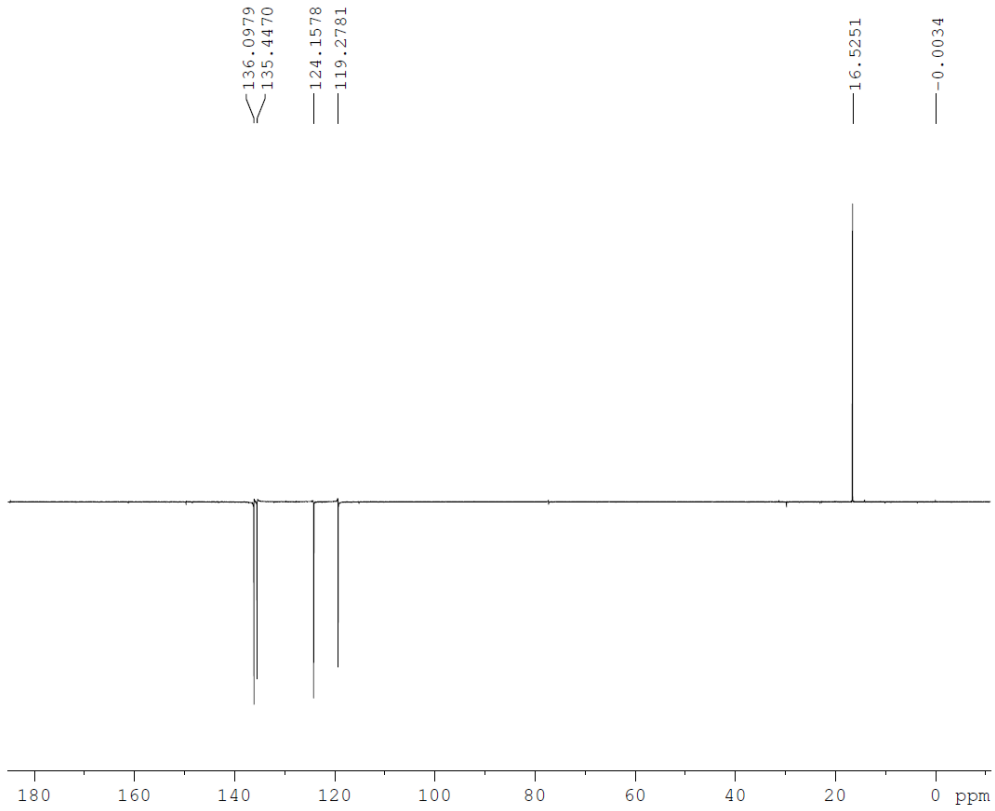

Figure S7: ^{13}C DEPT-135 NMR spectrum for Plumbagin

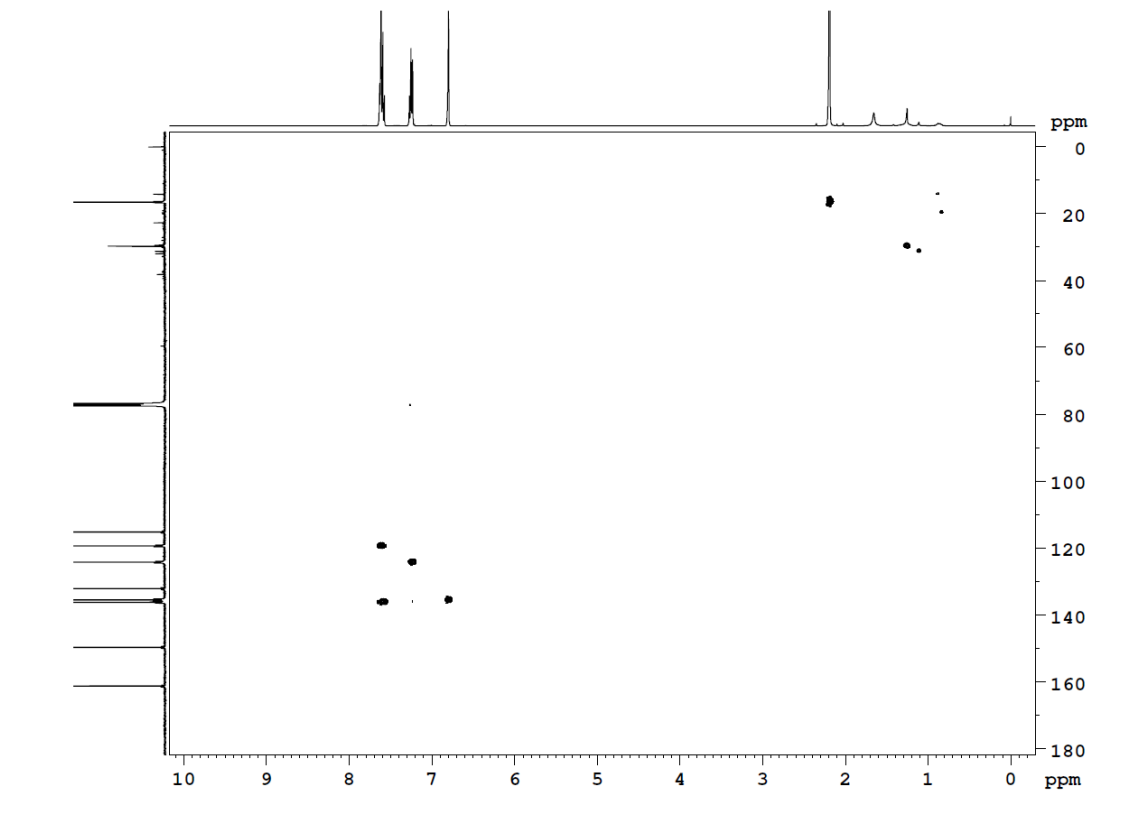

Figure S8: HSQC ^{1}H x ^{13}C spectrum for Plumbagin

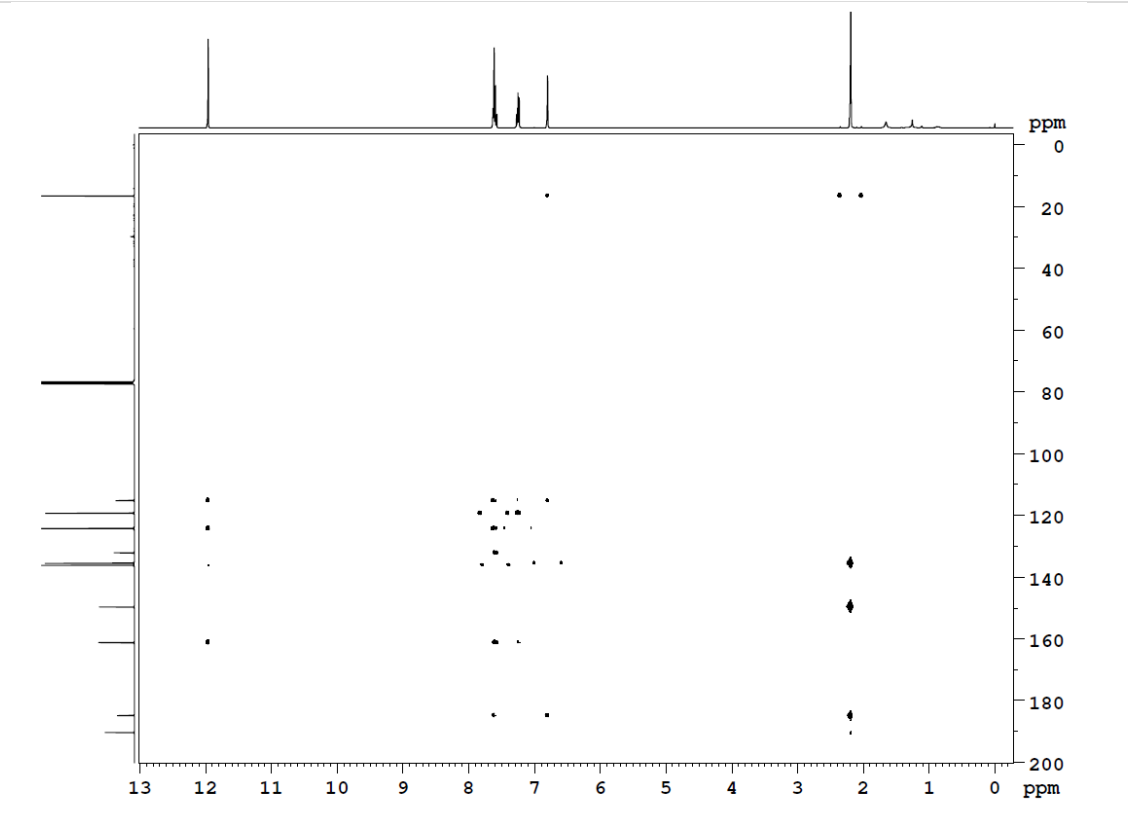

Figure S9: ^{1}H x ^{13}C-HMBC spectrum for Plumbagin

Table S1: NMR data of the isolated plumbagin

Position	The isolated plumbagin[a]		The reported plumbagin[a]		The reported plumbagin[a]	
	^{1}H NMR	^{13}C NMR	^{1}H NMR	^{13}C NMR	^{1}H NMR	^{13}C NMR
1		184.4		184.7		184.7
2		149.6		149.5		149.6
3	6.80 (*d*, H3; *J*=1.48)	135.4	6.8 (*d*, H3)	135.4	6.7 (*s*, H-3)	136.0
4		190.2		190.2		190.2
5		161.1		161.1		161.1
6	7.24 (*dd*, H6; J_1=7.68, J_2=1.80)	124.1	7.23 (*m*, H6)	124.1	7.22 – 7.20 (*m*, H-6)	124.1
7	7,59 (*t*, H7; *J*=7.52)	136.0	7.60 (*m*, H7)	136.0	7.59 (*m*, H7)	135.4
8	7.62 (*dd*, H8; J_1=7.56, J_2=1.72)	119.2	7.60 (*m*, H8)	119.0	7.55 (*m*, H8)	119.2
9		132.0		132.0		132.0
10		115.1		115.0		115.2
11	2.19 (*d*, CH_3; *J*= 1.44)	16.5	2.18 (*d*, H11)	16.5	2.16 (*s*, -CH_3)	16.1
-OH	11.96 (*s*, OH)		11.95		11.94 (*brs*, -OH)	

[a] Measured in $CDCl_3$