Supporting Information

Lissoclibadin 1, a Polysulfur Aromatic Alkaloid from the Indonesian Ascidian *Lissoclinum* cf. *badium*, Induces Caspase-dependent Apoptosis in Human Colon Cancer Cells and Suppresses Tumor Growth in Nude Mice

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Contents

Figure S3. HCT-15 tumor-bearing nude mice administered solvent (vehicle control) (left), 25 mg/kg of lissoclibadin 1 (**1**) (middle), and 25 mg/kg of irinotecan (right). Pictures were taken on Day 20.

Figure S4. ^{1}H NMR spectrum of lissoclibadin 1 (**1**).

Figure S5. ^{1}H NMR spectrum of lissoclibadin 3 (**2**).

Figure S6. ^{1}H NMR spectrum of lissoclibadin 4 (**3**).

Figure S7. ^{1}H NMR spectrum of lissoclibadin 7 (**4**).

Figure S8. ^{1}H NMR spectrum of lissoclibadin 8 (**5**).

Figure S9. ^{1}H NMR spectrum of lissoclibadin 14 (**6**).

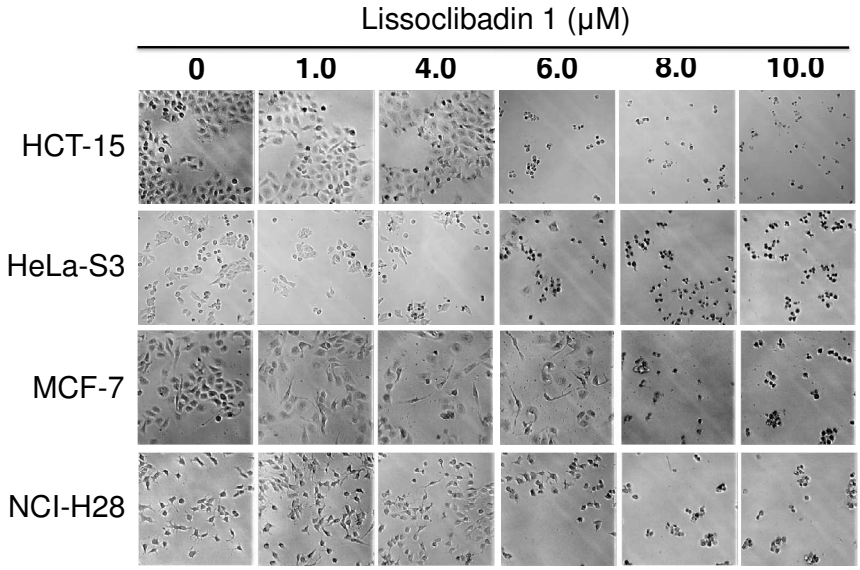

Figure S1

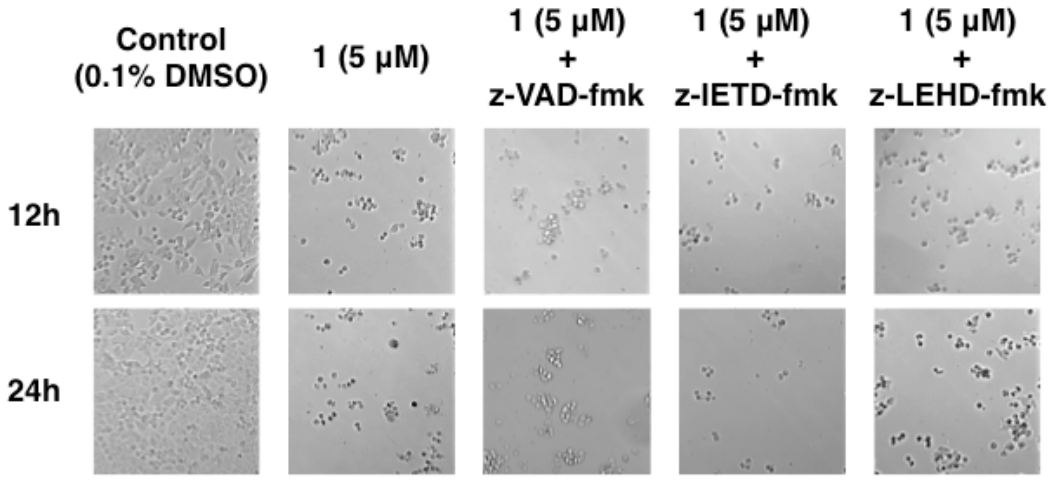

Figure S2

Vehicle | Lissoclibadin 1 (25 mg/kg) | Irinotecan (25 mg/kg)

Figure S3

Table S1. Average Tumor Volume For Each Treatment Group At Day 0, 24, and 28

Day	Tumor volume (mm^3)			
	Vehicle	Irinotecan (25mg/kg)	Lissoclibadin 1 (5mg/kg)	Lissoclibadin 1 (25mg/kg)
0	58.51 ± 12.18	56.06 ± 8.937	56.63 ± 5.387	56.54 ± 14.07
14	713.4 ± 164.8	57.82 ± 15.64	719.2 ± 218.1	218.5 ± 89.45
28	1512 ± 299.3	141.1 ± 87.53	1780 ± 516.8	638.7 ± 566.5

The tumor-bearing mice were injected intratumorally with one dose of irinotecan and two doses of lissoclibadin 1. Tumor volume was calculated as following formula: length (mm) × width (mm) × depth (mm) × π/6. Each value indicates the mean ± SD (n = 6).

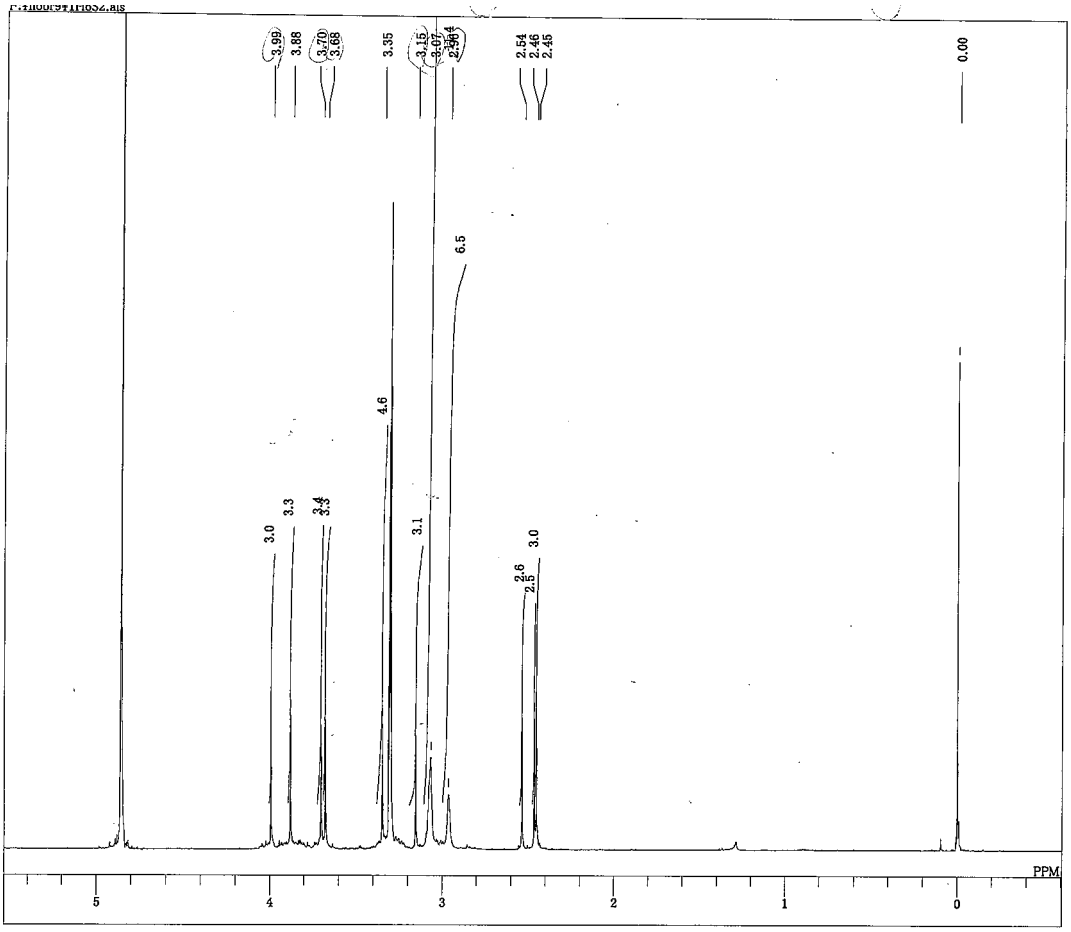
3.99
3.88
3.70
3.68
3.35
3.15
2.54
2.46
2.45
0.00
6.5
4.6
3.0
3.3
3.4
3.3
3.1
2.6
2.5
3.0
PPM
5
4
3
2
1
0

Figure S4

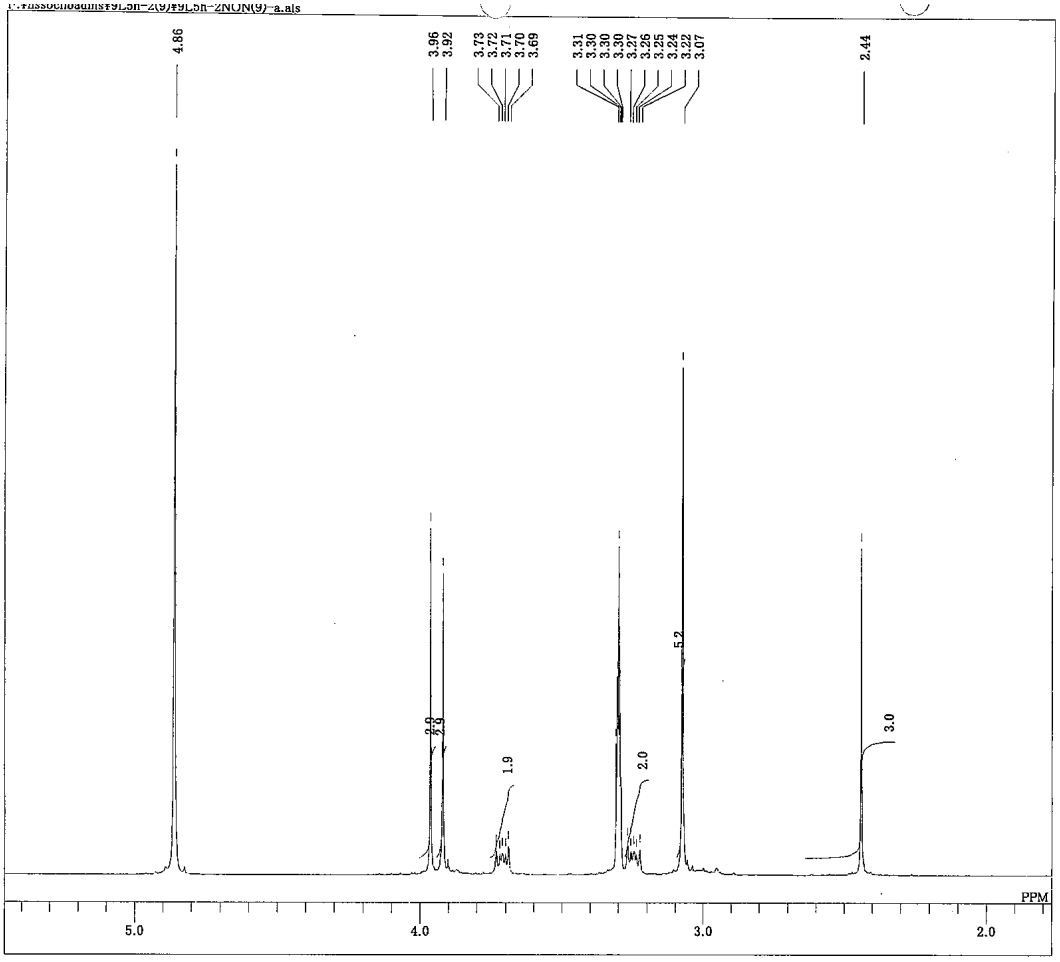
4.86
3.96
3.92
3.73
3.72
3.71
3.70
3.69
3.31
3.30
3.30
3.30
3.27
3.26
3.25
3.24
3.22
3.07
2.44
5.2
3.0
2.0
1.9
PPM
5.0
4.0
3.0
2.0

Figure S5

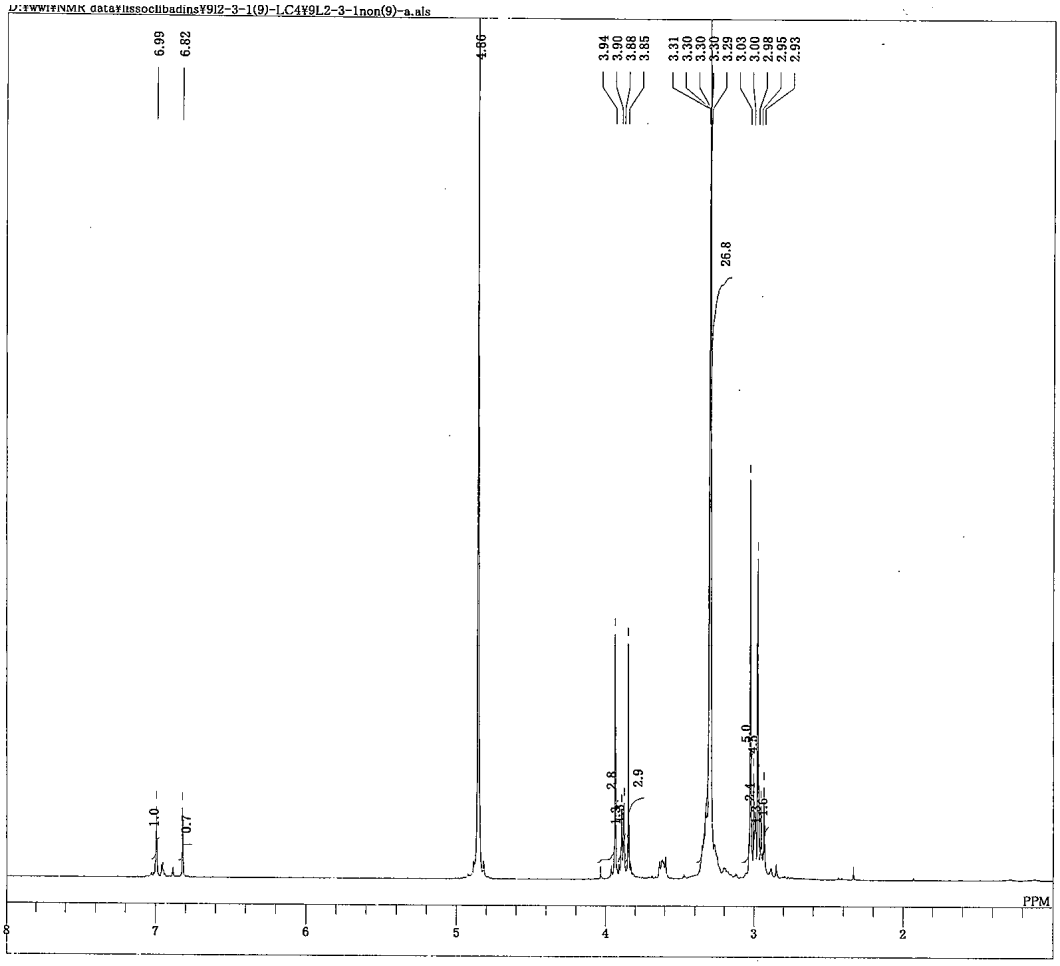
6.99
6.82
4.66
3.94
3.90
3.88
3.85
3.31
3.30
3.30
3.30
3.29
3.03
3.00
2.98
2.95
2.93
26.8
5.0
4.8
2.8
2.9
2.4
1.0
0.7
PPM
8
7
6
5
4
3
2

Figure S6

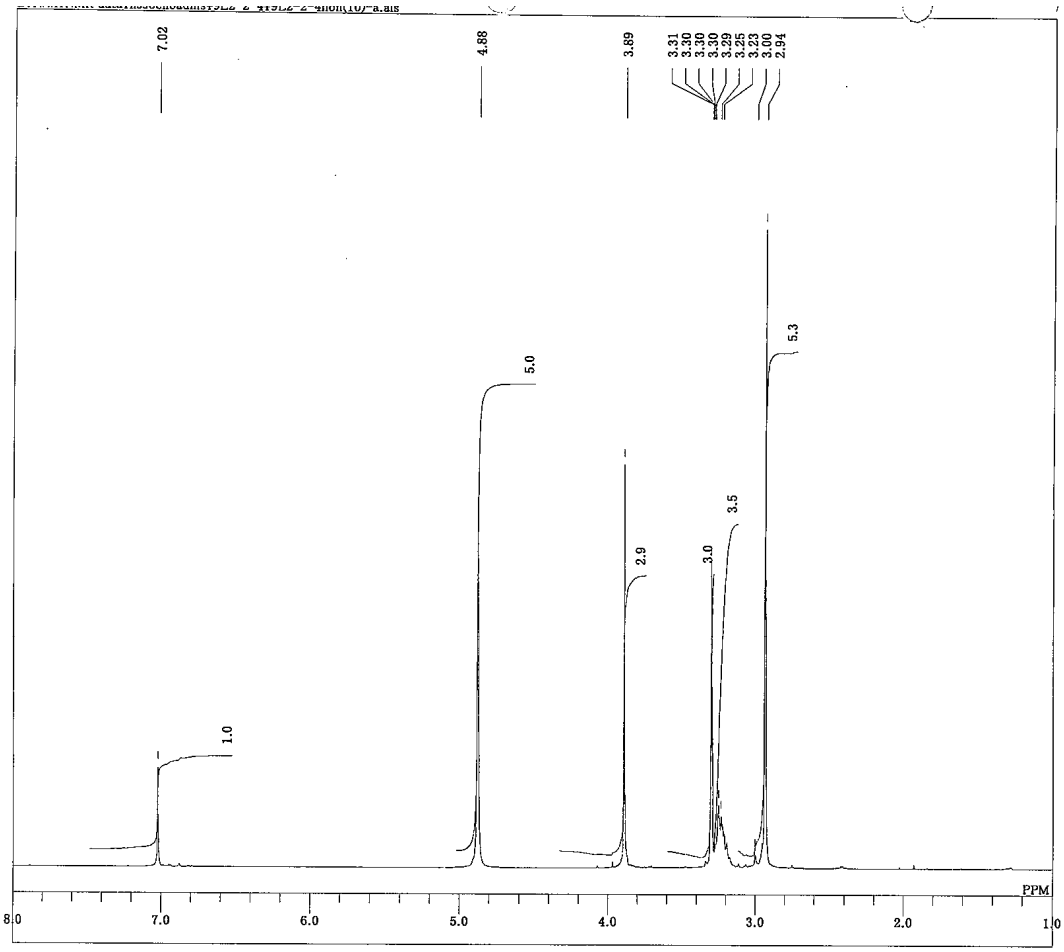
7.02
4.88
3.89
3.31
3.30
3.30
3.30
3.29
3.25
3.23
3.00
2.94
5.3
5.0
3.5
2.9
3.0
1.0
PPM
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0

Figure S7

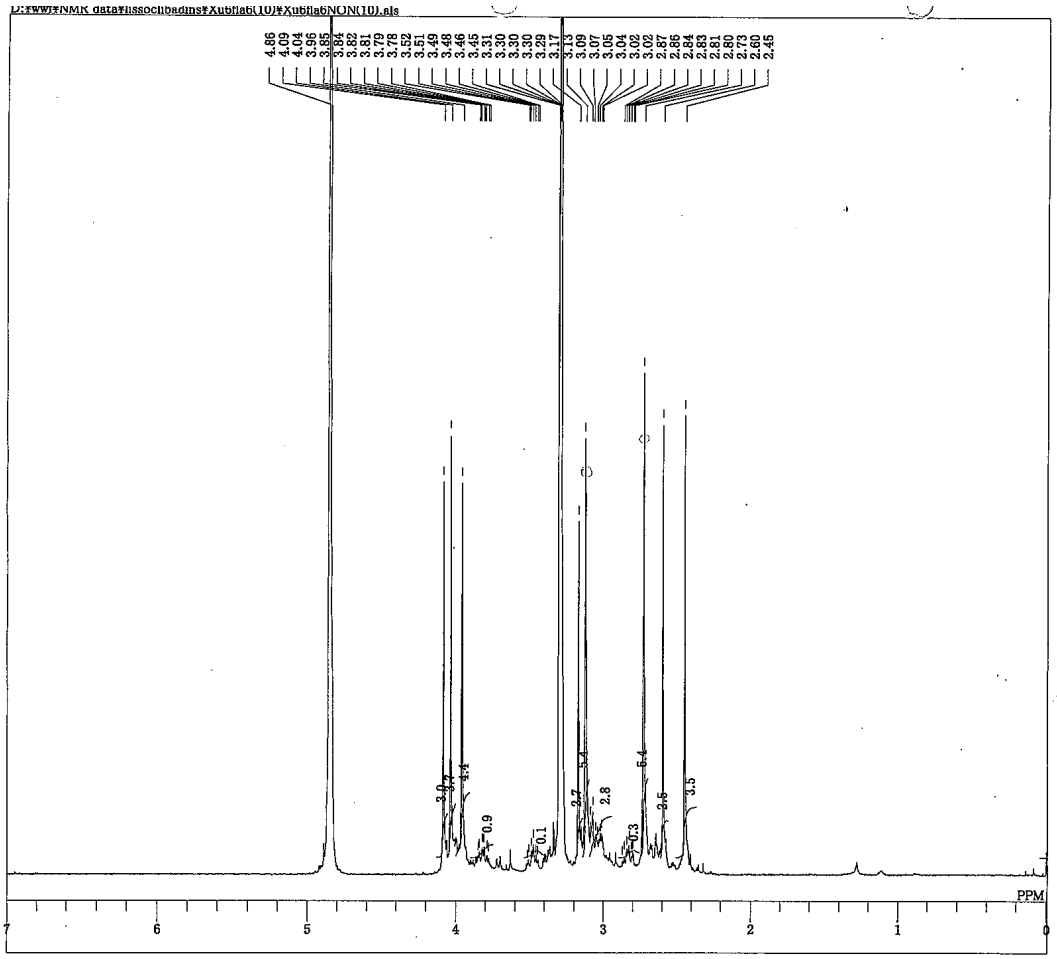
4.86
4.09
4.04
3.96
3.85
3.84
3.82
3.81
3.79
3.78
3.52
3.51
3.49
3.48
3.46
3.45
3.31
3.30
3.30
3.30
3.29
3.17
3.13
3.09
3.07
3.05
3.04
3.02
3.02
2.87
2.86
2.84
2.83
2.81
2.80
2.73
2.60
2.45
3.0
3.7
4.4
0.9
0.1
2.7
3.4
2.8
0.3
6.4
2.6
3.5
PPM
7
6
5
4
3
2
1
0

Figure S8

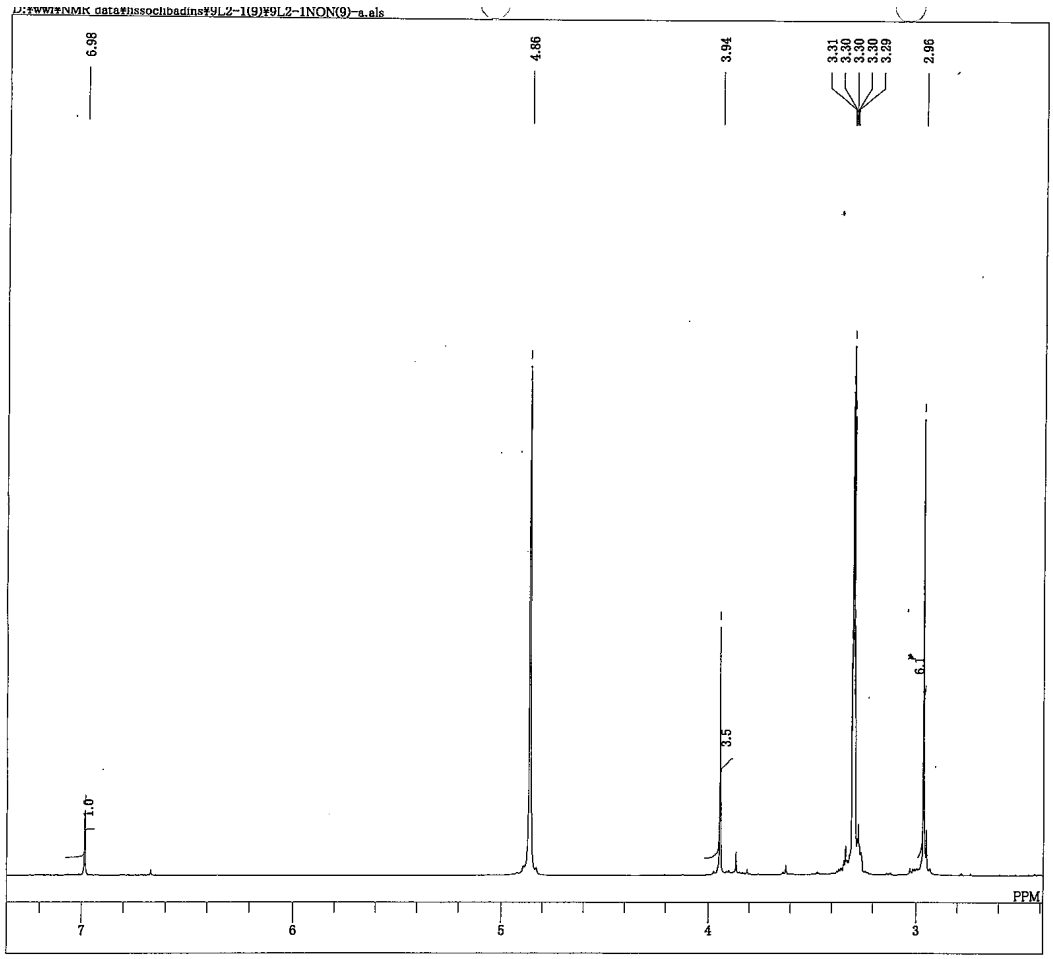

Figure S9