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Inhibitory activity of amyloid β aggregation of triterpene saponins from cactus, *Stenocereus pruinosus*

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Extraction and isolation

Aerial parts of *S. pruinosus* were dried, and the dry powder (639.1 g) was extracted three times with $CHCl_3$ and then extracted three times with MeOH. The MeOH extract (144.2 g) was applied to a Diaion HP-20 column, which was successively eluted with H_2O, 30% MeOH (MeOH-H_2O 30:70, v/v), 70% MeOH, and 100% MeOH to give 4 fractions [H_2O-eluted fraction (disposal), 30% MeOH-eluted fraction (15.0 g), 70% MeOH-eluted fraction (60.3 g), and 100% MeOH-eluted fraction (106.5 g)], respectively.

The 70% MeOH-eluted fraction (60.3 g) was subjected to silica gel column chromatography (Si. C. C.) using a stepwise gradient ($CHCl_3$-MeOH-H_2O 60:14:1 → 150:50:4 → 150:60:4 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 10 fractions (Fr. A: 0.1 mg, Fr. B: 2.3 mg, Fr. C: 1.0 mg, Fr. D: 620.1 mg, Fr. E: 409.0 mg, Fr. F: 2.6 g, Fr. G: 4.6 g, Fr. H: 10.3 g, Fr. I: 26.0 g, Fr. J: 10.9 g). Fr. H (10.3 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 3 fractions (Fr. Ha: 0.1 mg, Fr. Hb: 7.5 g, Fr. Hc: 1.0 g). Fr. Hb (7.5 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 5 fractions (Fr. Hb1: 29.2 mg, Fr. Hb2: 853.5 mg, Fr. Hb3: 886.0 mg, Fr. Hb4: 5.0 g, Fr. Hb5: 315.7 mg). Fr. Hb4 (5.00 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O

75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 3 fractions (Fr. Hb4-1: 770.2 mg, Fr. Hb4-2: 4.1 g, Fr. Hb4-3: 21.6 mg). Fr. Hb4-2 (4.1 g) was subjected to octadecyl silylated silica gel column chromatography (ODS C. C.) using a stepwise gradient (MeOH-H_2O 30:70 → 50:50 → 60:40 → 70:30 → 80:20 → 90:10 → MeOH) to give 5 fractions (Fr. Hb4-2a: 213.1 mg, Fr. Hb4-2b: 93.6 mg, Fr. Hb4-2c: 1.8 g, Fr. Hb4-2d: 1.0 g, Fr. Hb4-2e: 644.5 mg). Fr. Hb4-2b (93.6 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 40:60 → 50:50 → 60:40 → 70:30 → MeOH) to give 3 fractions (Fr. Hb4-2b-1: 2.4 mg, Fr. Hb4-2b-2: 48.3 mg, Fr. Hb4-2b-3: 48.3 mg). Fr. Hb4-2b-2 (48.3 mg) was further separated by Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to afford chichipenoside D (**1**, 16.7 mg, 0.003%, Fr. Hb4-2b-2d).

Fr. Hb4-2d (1.0 g) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 30:70 → 50:50 → 60:40 → 70:30 → 80:20 → 90:10 → MeOH) to give 3 fractions (Fr. Hb4-2d-1: 10.8 mg, Fr. Hb4-2d-2: 905.5 mg, Fr. Hb4-2d-3: 118.9 mg). Fr. Hb4-2d-2 (905.5 mg) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 3 fractions (Fr. Hb4-2d-2a: 247.3 mg, Fr. Hb4-2d-2b: 202.3 mg, Fr. Hb4-2d-2c: 195.8 mg). Fr. Hb4-2d-2b (202.3 mg) was further separated by ODS C. C. using a stepwise gradient (MeCN-

H_2O 20:80 → 30:70 → 40:60 → MeOH) to afford oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**, 72.0 mg, 0.011%, Fr. Hb4-2d-2b-9).

Fr. Hb2 (853.5 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 30:70 → 40:60 → 50:50 → 60:40 → 70:30 → 90:10 → MeOH) to afford 4 fractions (Fr. Hb2-1: 77.2 mg, Fr. Hb2-2: 86.5 mg, Fr. Hb2-3: 79.9 mg, Fr. Hb2-5: 86.6 mg) and oleanolic acid 3-*O*-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**8**, 440.3 mg, 0.069%, Fr. Hb2-4).

Fr. Hb2-2 (86.5 mg) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to afford cochalinoside C (**5**, 27.5 mg, 0.004%, Fr. Hb2-2e).

The 100% MeOH-eluted fraction (94.5 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 60:14:1 → 75:25:2 → 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to give 8 fractions (Fr. 1: 105.7 mg, Fr. 2: 199.3 mg, Fr. 3: 1.0 g, Fr. 4: 1.9 g, Fr. 5: 15.9 g, Fr. 6: 11.5 g, Fr. 7: 1.1 g, Fr. 8: 6.1 g). Fr. 4 (1.9 g) was subjected to ODS C. C. using a stepwise gradient (MeCN-H_2O 20:80 → 30:70 → 40:60 → 50:50 → 60:40 → MeOH) to give 3 fractions (Fr. 4A: 690.1 mg, Fr. 4B: 1.2 g, Fr. 4C: 501.6 mg). Fr. 4B (1.2 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-

MeOH-H_2O 75:30:2 → 30:15:1 → 30:18:1 → 30:20:1 → 6:4:1 → MeOH) to afford oleanolic acid 3-*O*-α-L-rhamnopyranosyl-(1→3)-6'-*O*-methyl-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**9**, 40.5 mg, 0.006%, Fr. 4B-2).

Fr. 5 (15.9 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 30:12:1 → 20:10:1 → 20:15:1 → 6:4:1 → MeOH) to give 6 fractions (Fr. 5A: 49.1 mg, Fr. 5B: 186.1 mg, Fr. 5C: 211.0 mg, Fr. 5D: 391.3 mg, Fr. 5E: 300.8 mg, Fr. 5F: 604.5 mg). Fr. 5-E (300.8 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 70:30 → 80:20 → 90:10 → MeOH) to give 2 fractions (Fr. 5E-1: 235.2 mg, Fr. 5-E2: 336.4mg). Fr. 5E-1 (235.2 mg) was partially (46.0 mg) subjected to ODS C. C. using a stepwise gradient (MeCN-H_2O 30:70 → 40:60 → 50:50 → MeOH) to afford longispinoside A (**2**, 16.0 mg, 0.003%, Fr. 5E-1e).

Fr. 5B (186.1 mg) was subjected to ODS C. C. using a stepwise gradient (MeCN-H_2O 40:60 → 50:50 → 60:40 → 70:30 → MeOH) to give 3 fractions (Fr. 5B-1: 8.1 mg, Fr. 5B-2: 51.4 mg, Fr. 5-B-3: 26.5 mg). Fr. 5B-2 (51.4 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 60:40 → 70:30 → 80:20 → 90:10 → MeOH) to afford longispinoside A methyl ester (**3**, 24.2 mg, 0.004%, Fr. 5B-2c).

Fr. 5D (391.3 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 70:30 → 80:20 → 90:10 → MeOH) to give 3 fractions (Fr. 5D-1: 22.2 mg, Fr. 5D-2: 54.3

mg, Fr. 5D-3: 191.0 mg). Fr. 5D-2 (54.3 mg) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 80:20 → 90:10 → MeOH) to give 2 fractions (Fr. 5D-2a: 1.1 mg, Fr. 5D-2b: 40.3 mg). Fr. 5D-2b (40.3 mg) was subjected to ODS C. C. using a stepwise gradient (MeCN-H_2O 60:40 → MeOH) to afford erythronoside A methyl ester (**4**, 9.3 mg, 0.001%, Fr. 5D-2b-6).

Fr. 8 (6.1 g) was subjected to Si. C. C. using a stepwise gradient ($CHCl_3$-MeOH-H_2O 25:12:1 → 15:12:1 → 13:12:1 → MeOH) to give 2 fractions (Fr. 8A: 28.9 mg, Fr. 8B: 1.6 g). Fr. 8B (1.6 g) was subjected to ODS C. C. using a stepwise gradient (MeOH-H_2O 30:70 → 50:50 → MeOH) to afford stenoside A (**7**, 28.9 mg, 0.005%, Fr. 8B-3).

Table 1. ^{1}H- and ^{13}C-NMR spectroscopic data for compounds **6** (500 MHz for ^{1}H and 125 MHz for ^{13}C, in DMSO-d_6).

Position				6
1	38.1	CH_2	α	0.86 (o)
			β	1.47 (o)
2	25.6	CH_2	α	1.70 (brd, 10.6)
			β	1.52 (o)
3	88.9	CH		3.01 (dd, 10.6, 3.8)
4	38.8	C		
5	55.0	CH		0.67 (o)
6	17.8	CH_2	α	1.43 (o)
			β	1.27 (t, 12.0)
7	32.3	CH_2	α	1.35 (o)
			β	1.19 (o)
8	39.0	C		
9	47.1	CH		1.45 (o)
10	36.3	C		
11	23.0	CH_2		1.76 (brs)
12	121.7	CH		5.14 (brs)
13	143.5	C		
14	41.3	C		
15	27.2	CH_2	α	0.93 (o)
			β	1.70 (brt, 10.4)
16	22.5	CH_2	α	1.92 (brt, 10.4)
			β	1.57 (o)
17	46.0	C		
18	40.8	CH		2.72 (dd, 13.4, 3.0)
19	45.6	CH_2	α	1.60 (t, 13.4)
			β	1.05 (o)
20	30.3	C		
21	33.3	CH_2	α	1.32 (o)
			β	1.13 (brd, 9.6)
22	31.6	CH_2	α	1.57 (o)
			β	1.47 (o)
23	27.3	CH_3		0.94 (s)
24	15.9	CH_3		0.72 (s)
25	15.2	CH_3		0.83 (s)
26	16.7	CH_3		0.66 (s)
27	25.4	CH_3		1.05 (s)
28	175.3	C		
29	32.8	CH_3		0.86 (s)
30	23.4	CH_3		0.85 (s)
	GlcA			GlcA
1'	103.4	CH		4.41 (d, 8.0)
2'	77.5	CH		3.47 (t, 8.0)
3'	82.3	CH		3.53 (t, 8.0)
4'	70.2	CH		3.44 (o)
5'	75.0	CH		3.69 (d, 9.7)
6'	170.3	C		
	Xyl			Xyl
1"	102.8	CH		4.35 (d, 7.7)
2"	74.0	CH		2.93 (o)
3"	76.6	CH		3.07 (o)
4"	69.7	CH		3.21 (o)
5"	65.8	CH_2	α	2.96 (t, 11.9)
			β	3.61 (o)
	Rha			Rha
1"'	101.0	CH		4.93 (d, brs)
2"'	70.6	CH		3.77 (o)
3"'	70.6	CH		3.44 (o)
4"'	72.0	CH		3.19(o)
5"'	68.7	CH		3.79 (o)
6"'	17.8	CH_3		1.07 (d, 6.0)
	Glc			Glc
1""	94.1	CH		5.22 (d, 8.2)
2""	72.4	CH		3.08 (o)
3""	76.7	CH		3.19 (o)
4""	69.6	CH		3.11 (o)
5""	77.7	CH		3.12 (o)
6""	60.7	CH_2		3.42 (o)
				3.60 (o)

Figure 1. HMBC, COSY, and Key NOESY Correlations of **3**.

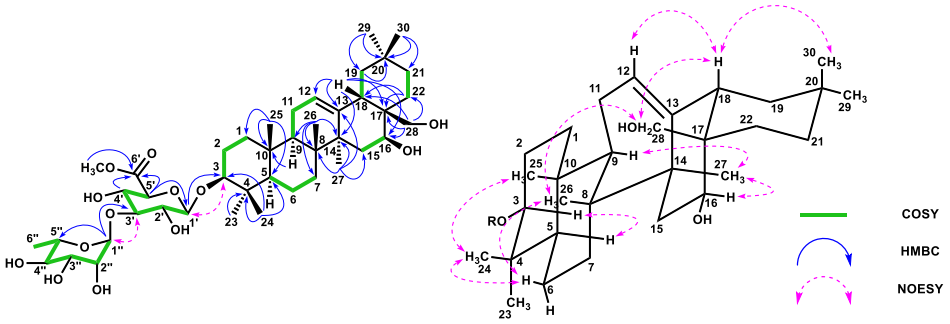

Figure 2. HMBC, COSY, and Key NOESY Correlations of **6**.

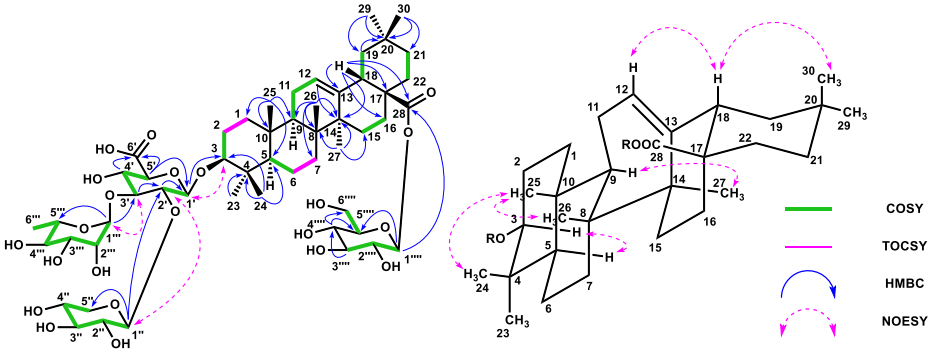

Figure 3. HMBC, COSY, and Key NOESY Correlations of **7**.

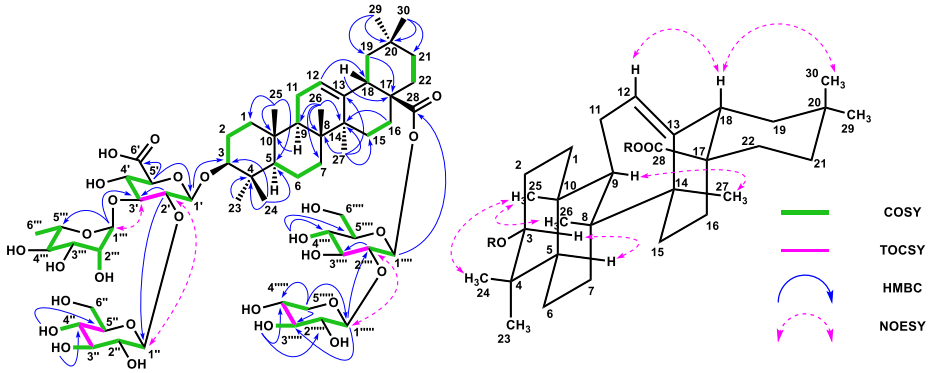

Figure 4. ^{1}H NMR spectrum (500 MHz) of chichipenoside D (**1**) in DMSO-d_6.

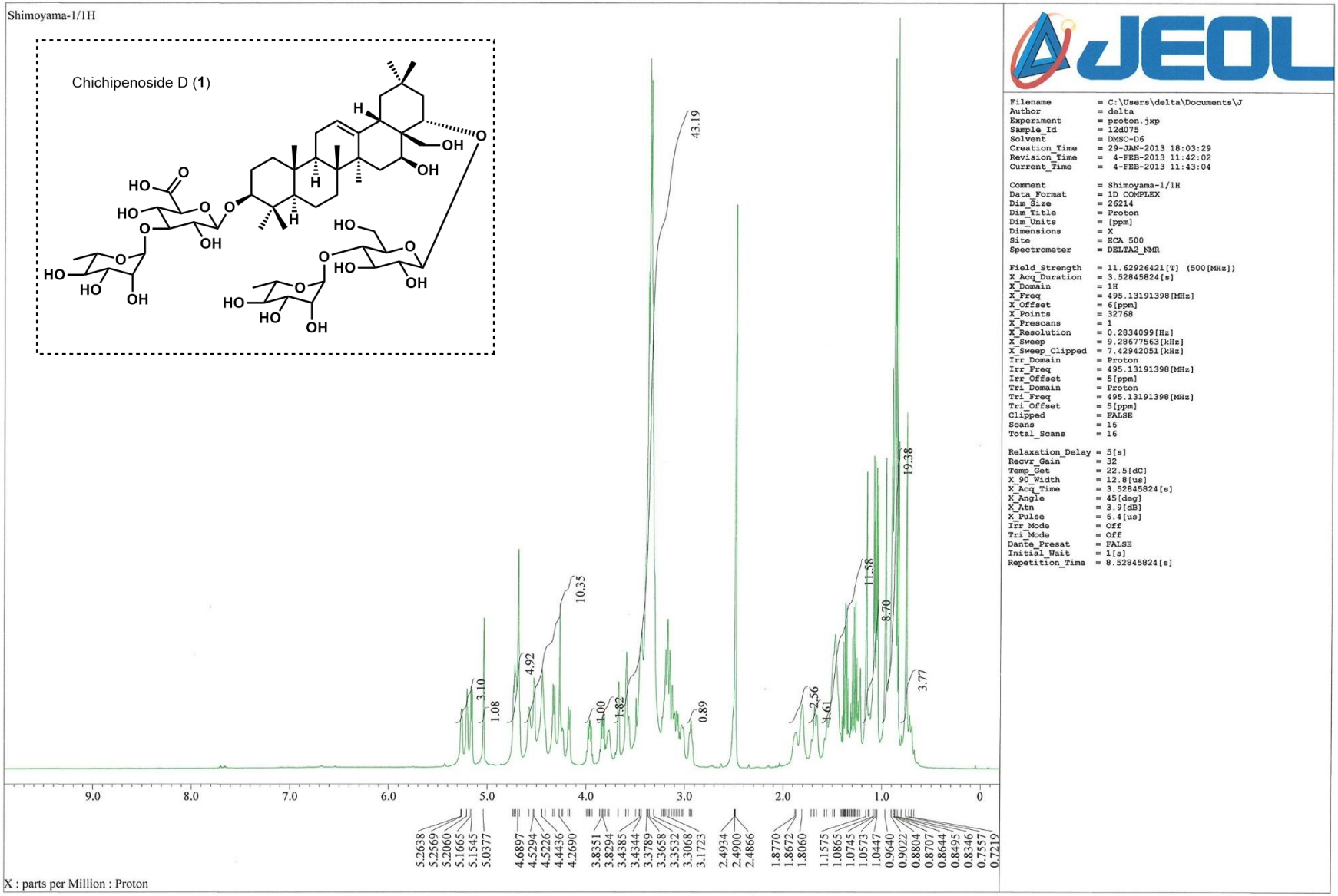

Figure 5. ^{13}C NMR spectrum (125 MHz) of chichipenoside D (**1**) in DMSO-d_6.

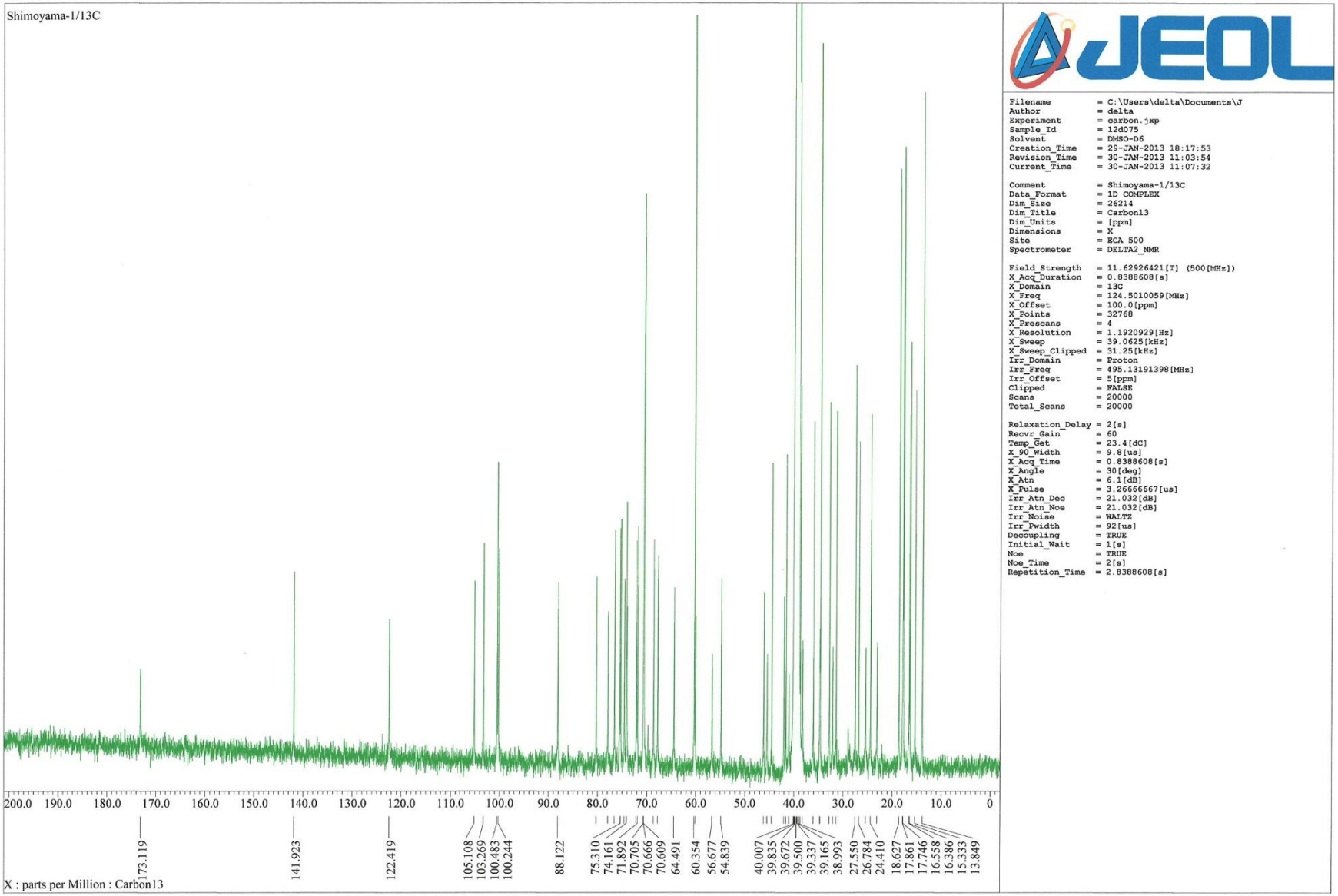

Figure 6. DEPT 90 and 135 pulse NMR spectra of chichipenoside D (**1**) in DMSO-d_6.

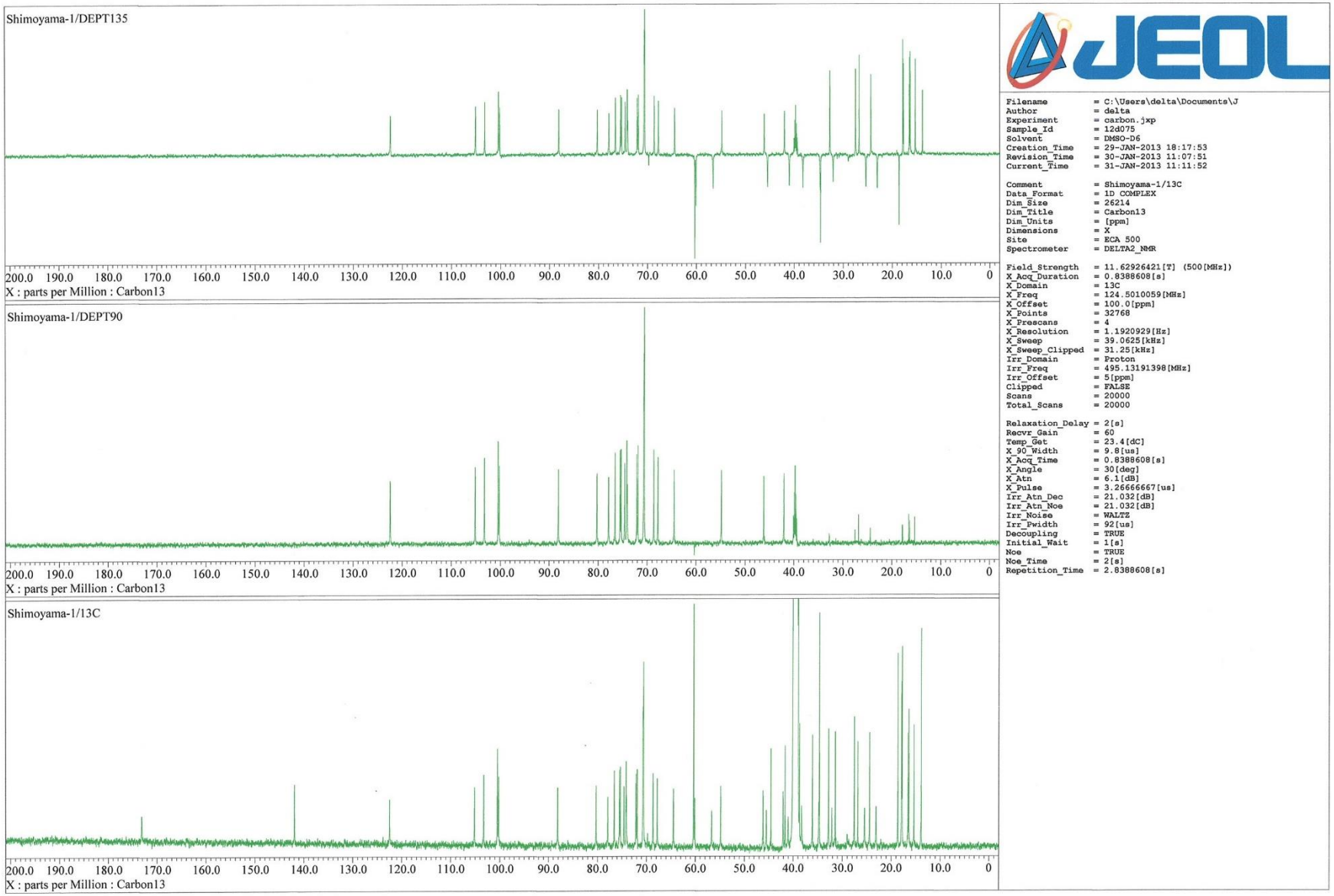

Figure 7. DQF-COSY spectrum of chichipenoside D (**1**) in DMSO-d_6.

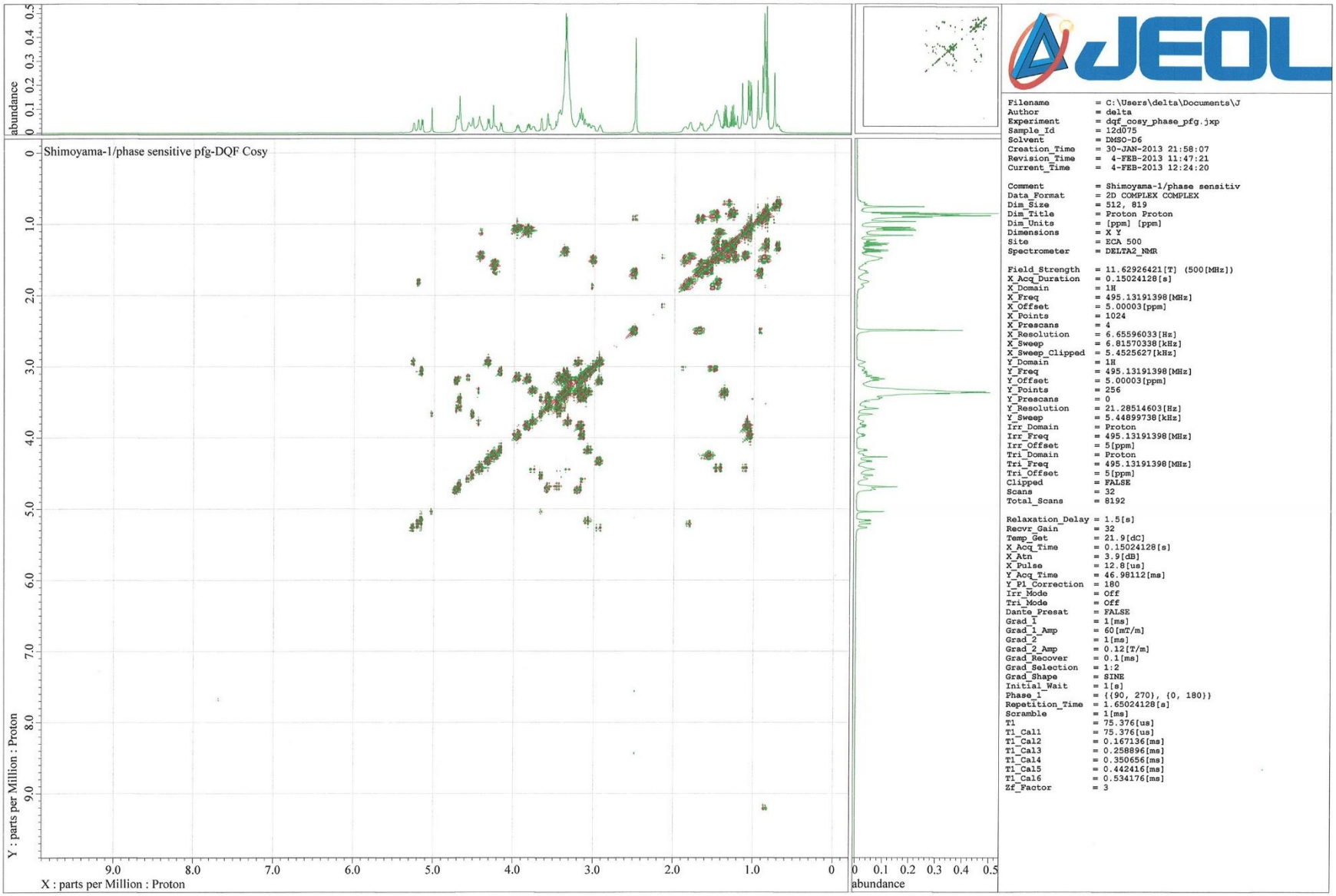

Figure 8. HMQC spectrum of chichipenoside D (**1**) in DMSO-d_6.

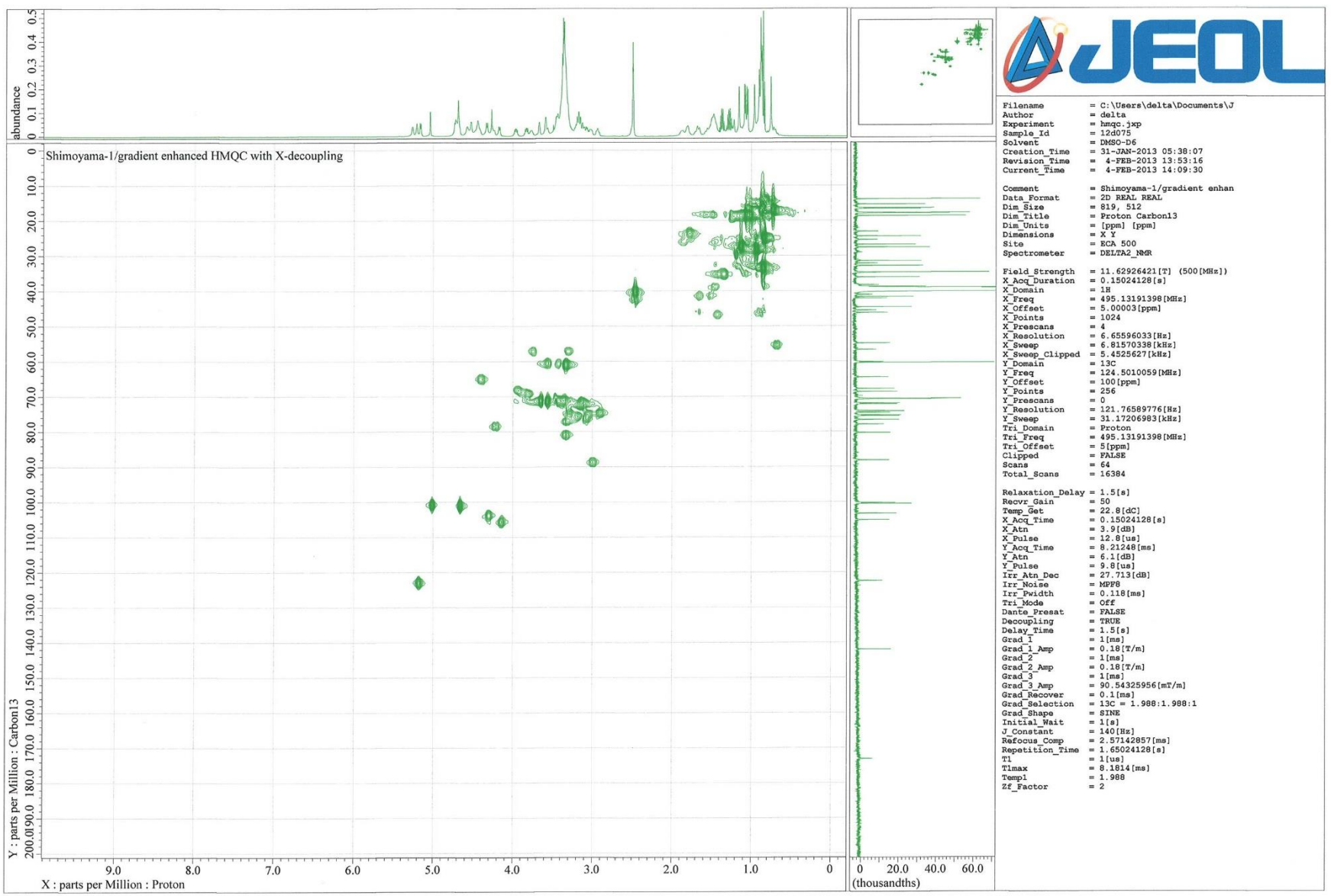

Figure 9. HMBC spectrum of chichipenoside D (**1**) in DMSO-d_6.

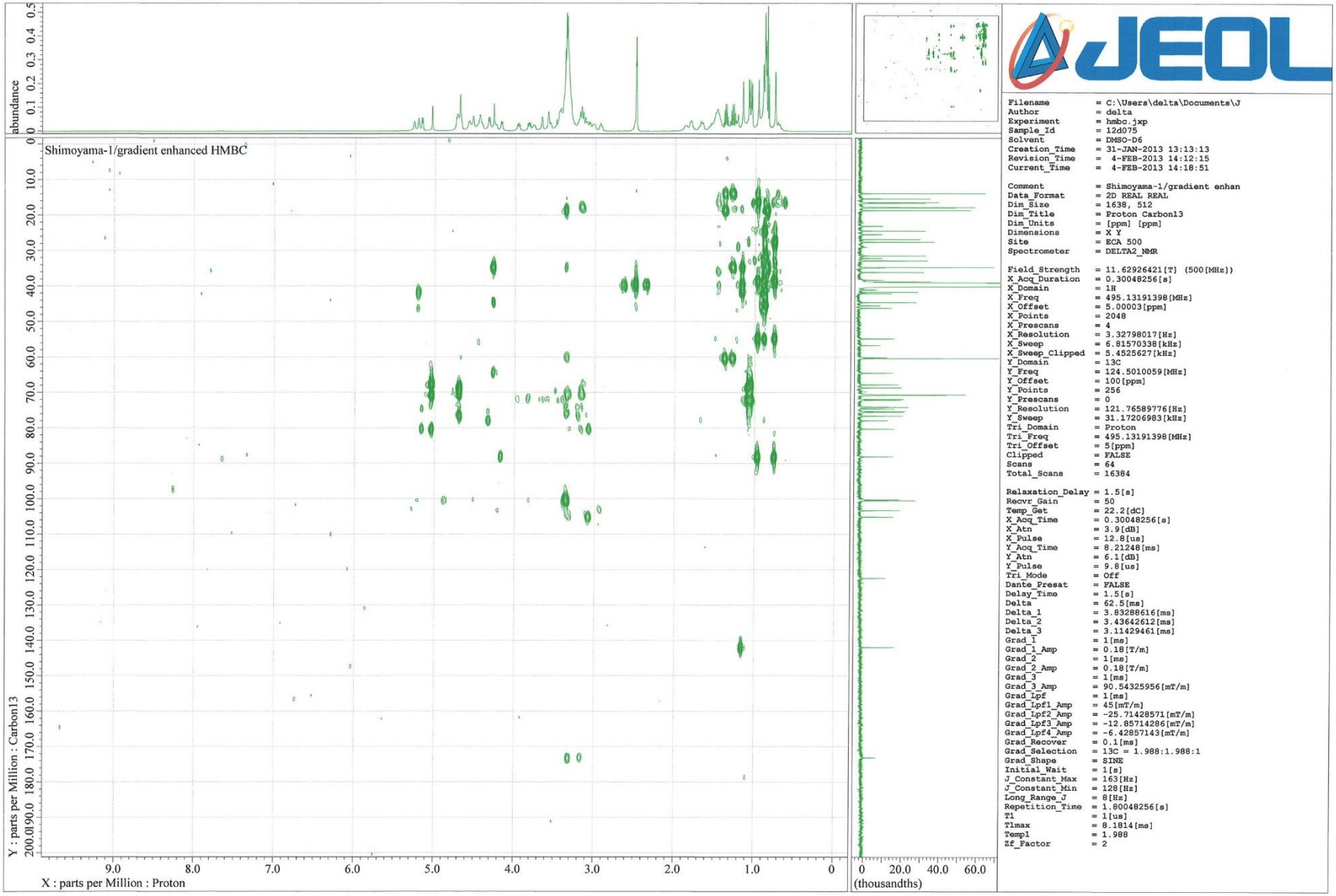

Figure 10. HSQC-TOCSY spectrum of chichipenoside D (**1**) in DMSO-d_6.

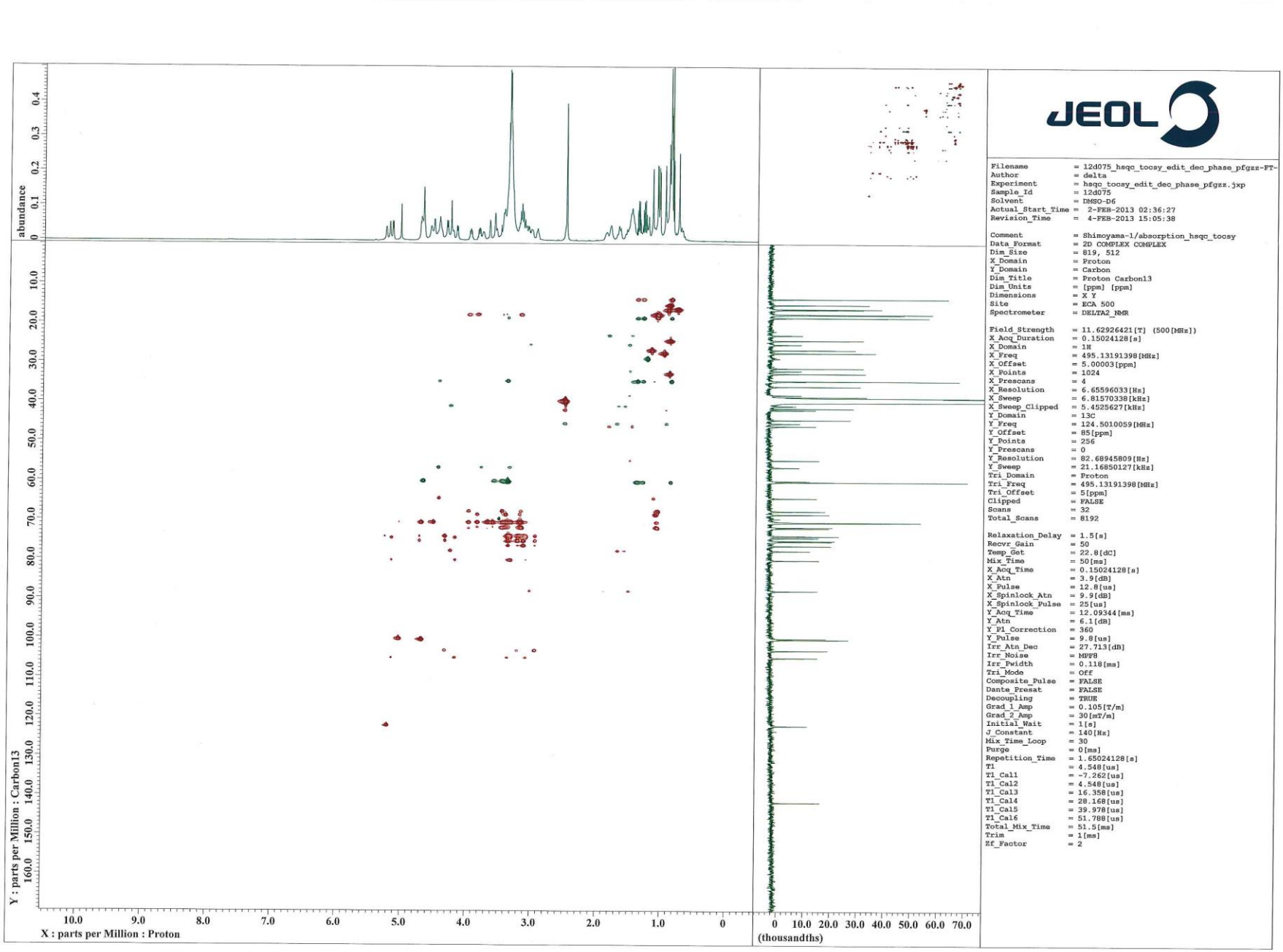

Figure 11. pfg-TOCSY spectrum of chichipenoside D (**1**) in DMSO-d_6.

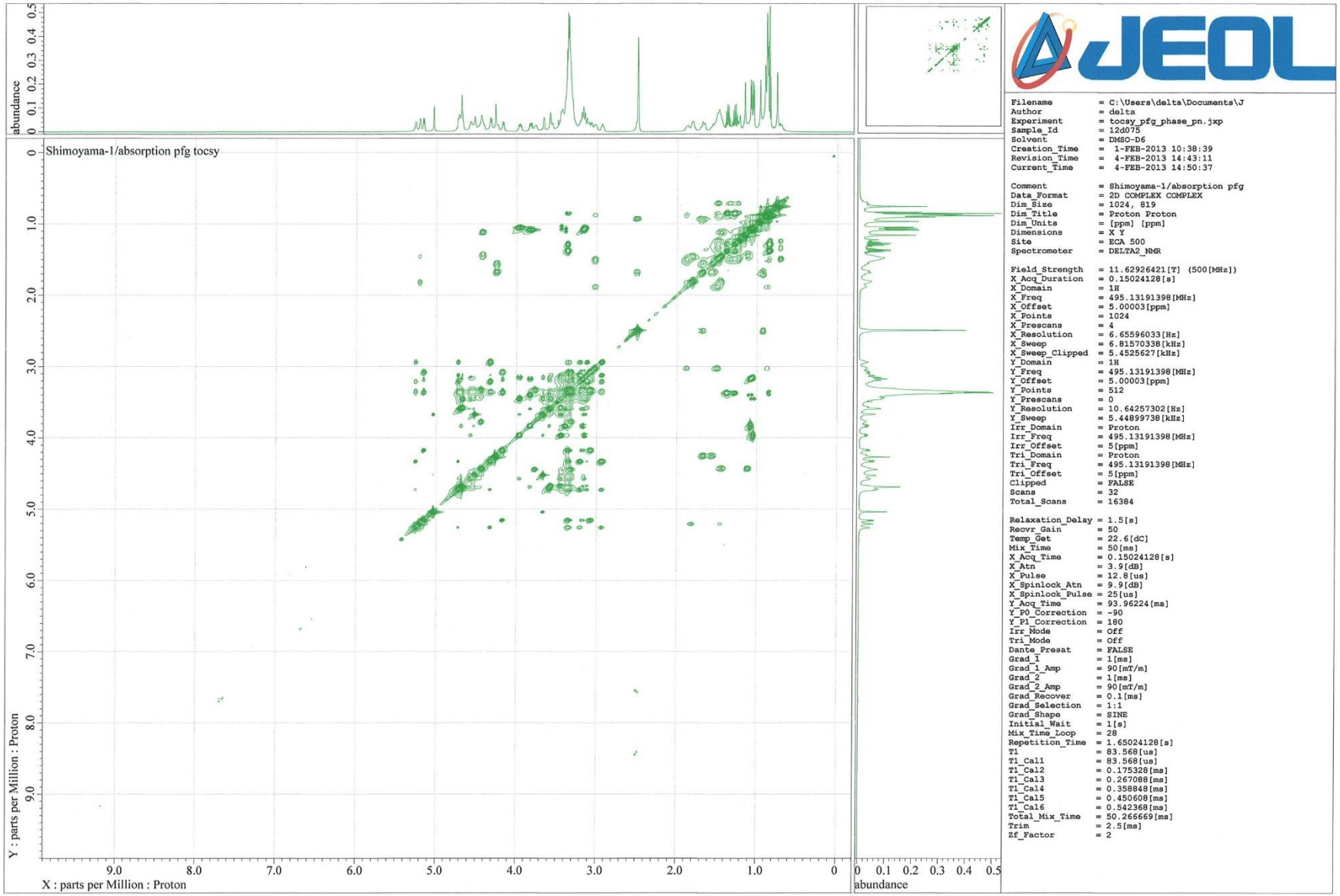

Figure 12. NOESY spectrum of chichipenoside D (**1**) in DMSO-d_6.

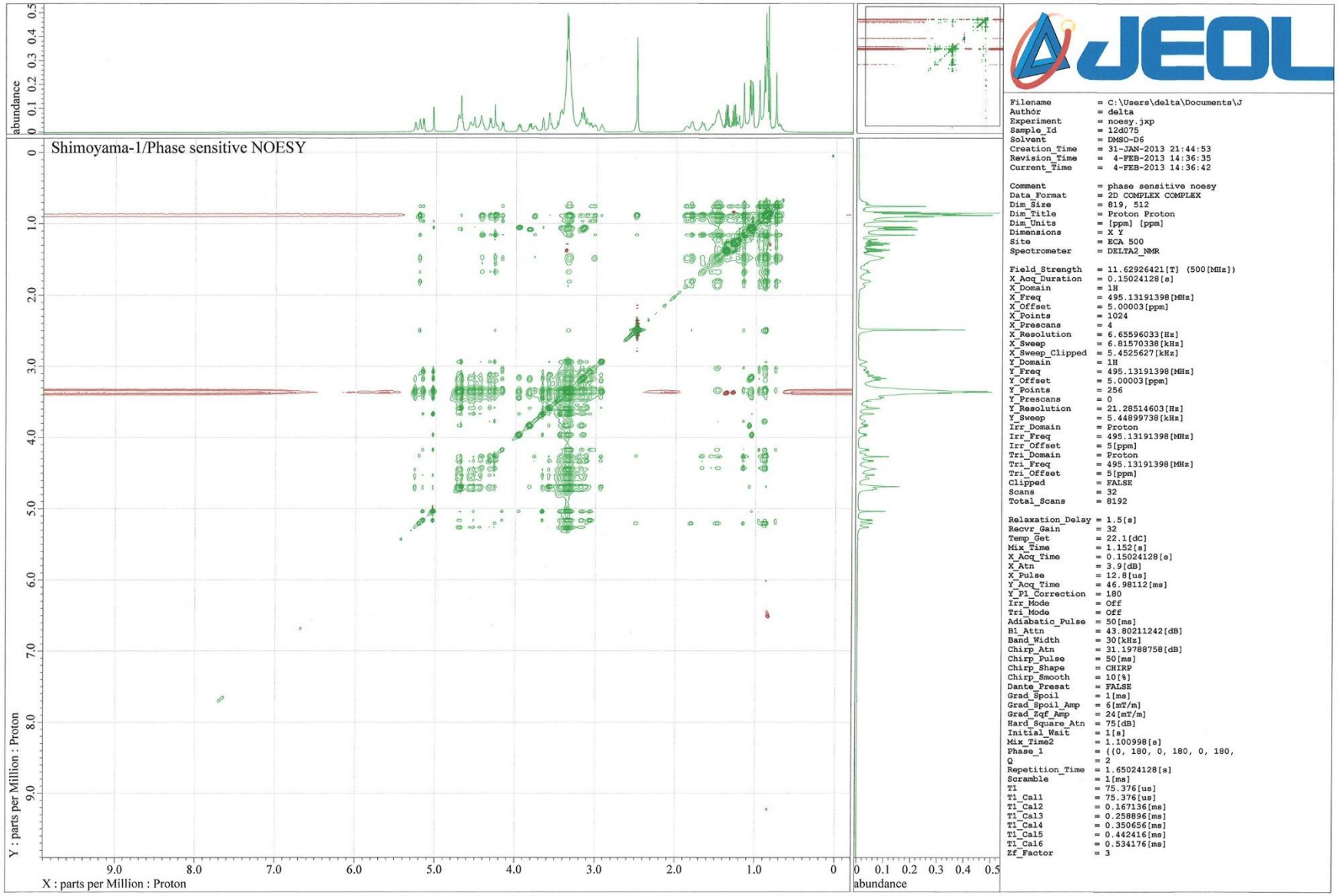

Figure 13. ^{1}H NMR spectrum (500 MHz) of longispinoside A (**2**) in DMSO-d_6.

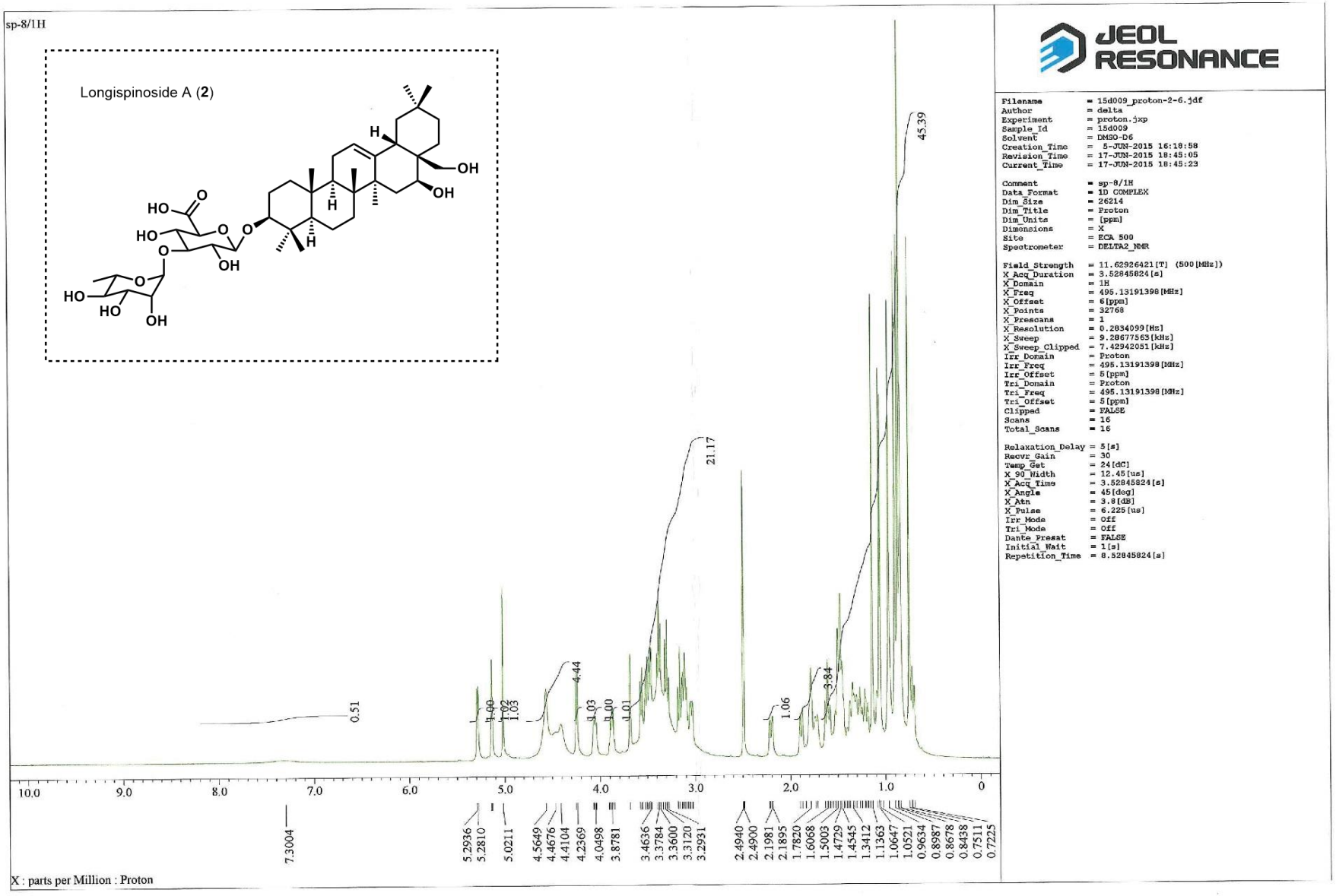

Figure 14. ^{13}C NMR spectrum (125 MHz) of longispinoside A (**2**) in DMSO-d_6.

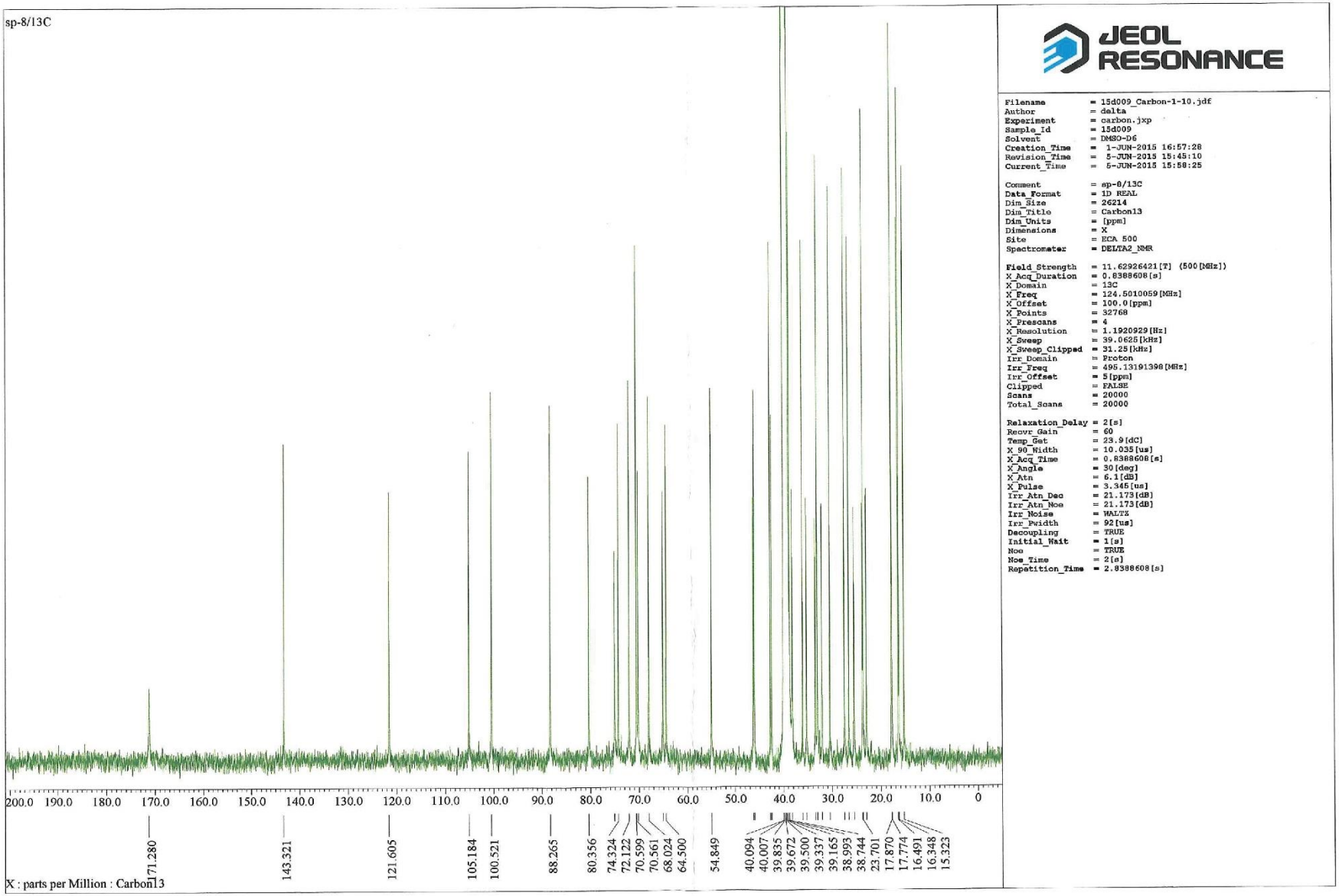

Figure 15. DEPT 90 and 135 pulse NMR spectra of longispinoside A (**2**) in DMSO-d_6.

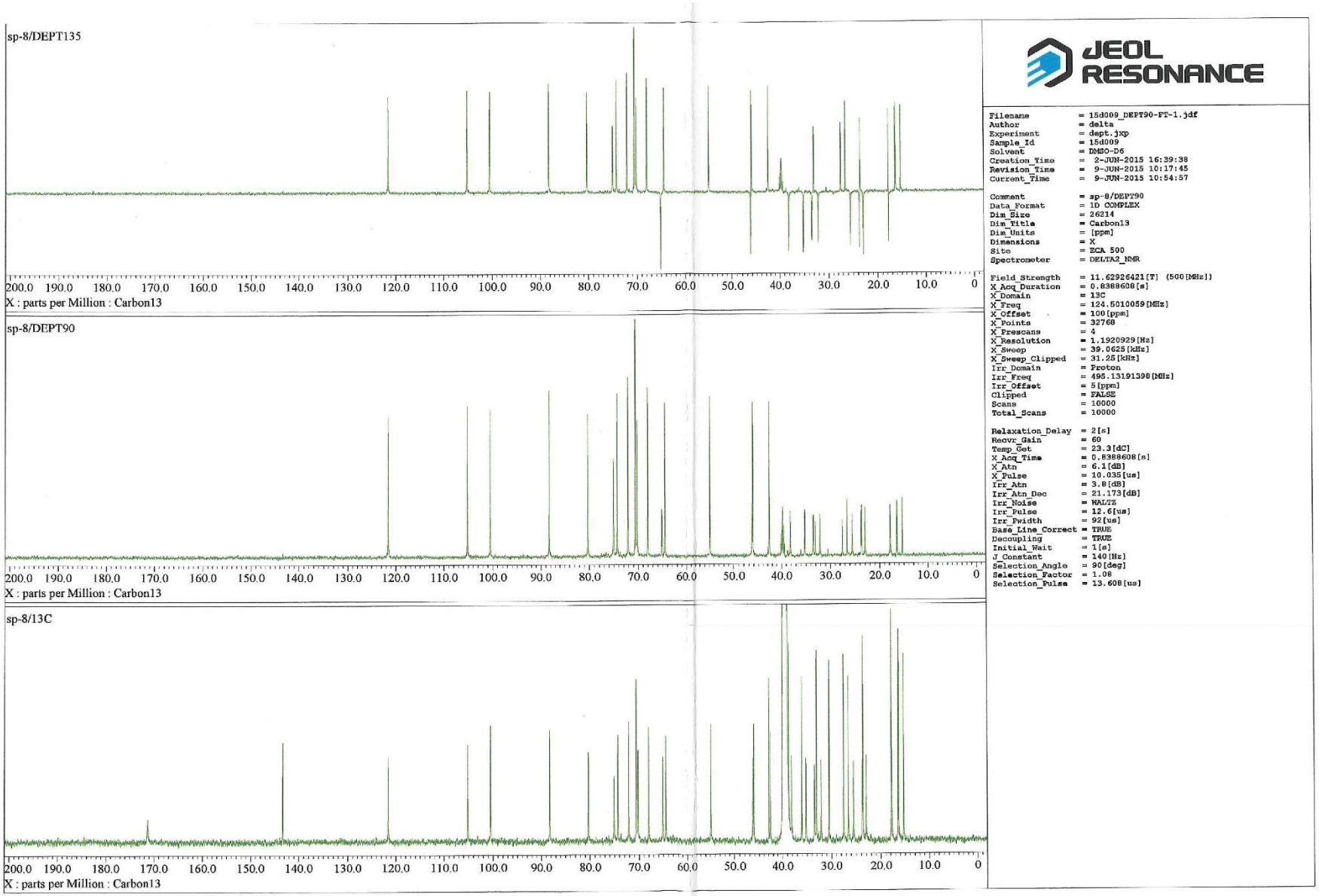

Figure 16. DQF-COSY spectrum of longispinoside A (**2**) in DMSO-d_6.

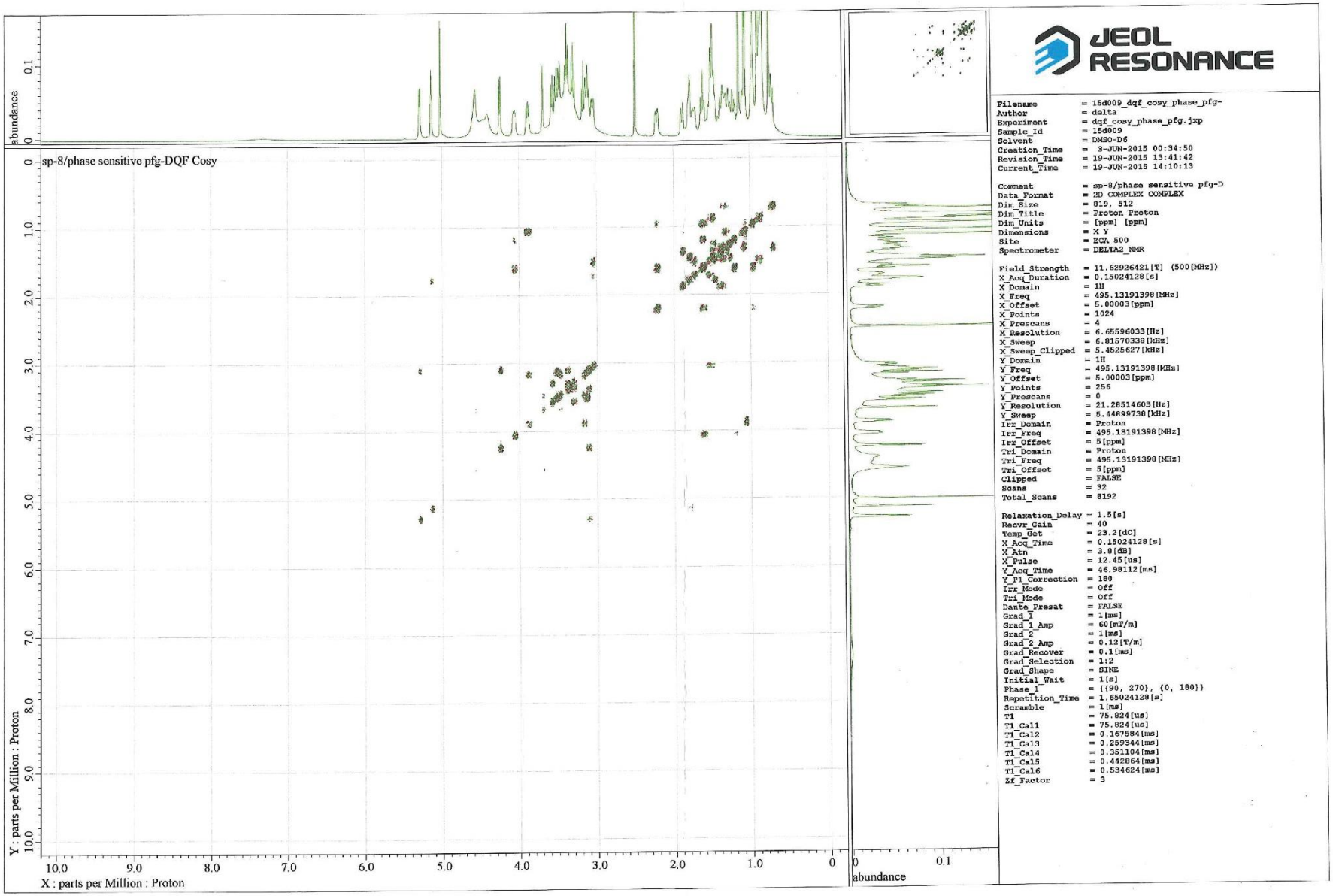

Figure 17. HMQC spectrum of longispinoside A (**2**) in DMSO-d_6.

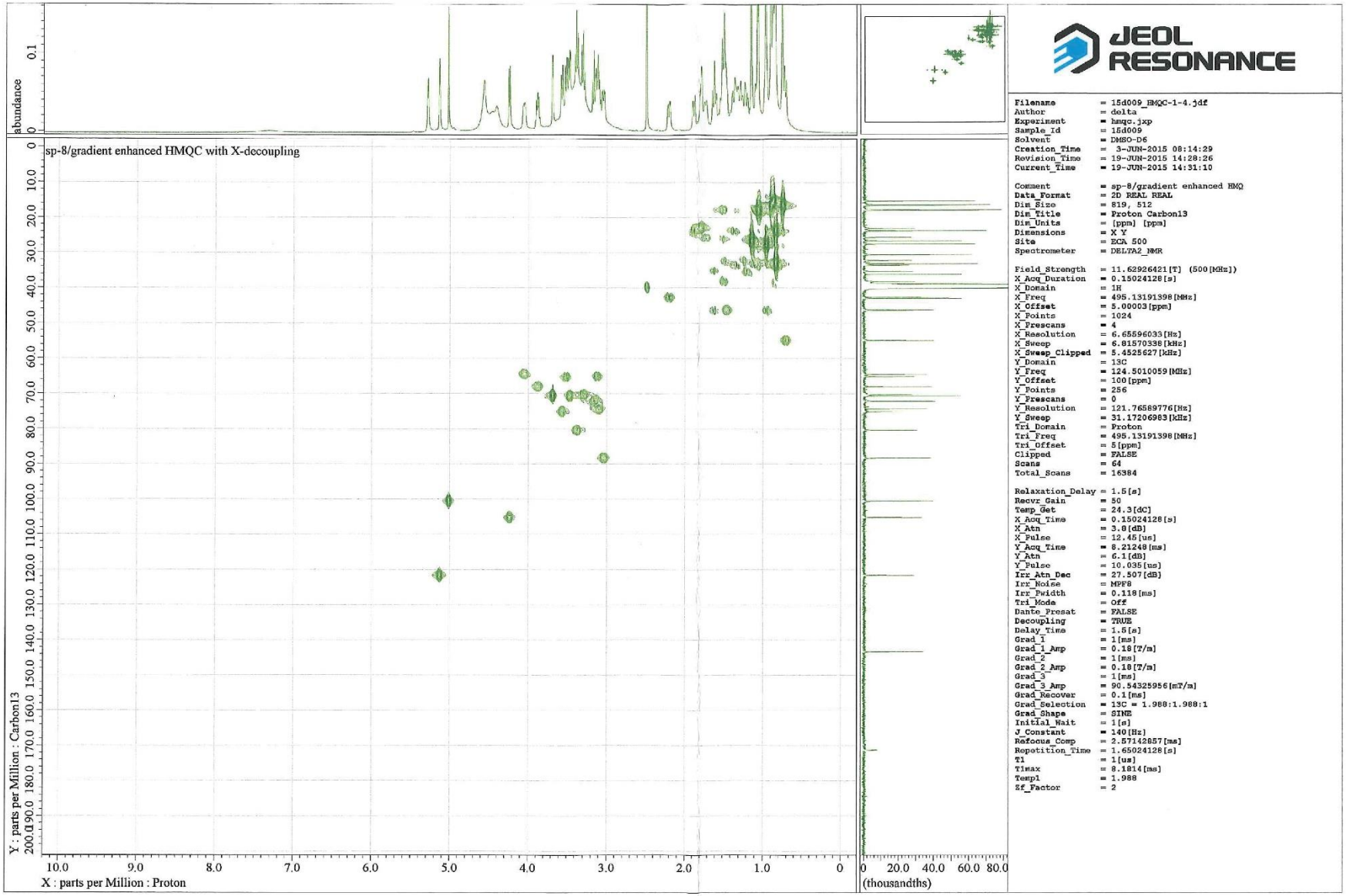

Figure 18. HMBC spectrum of longispinoside A (**2**) in DMSO-d_6.

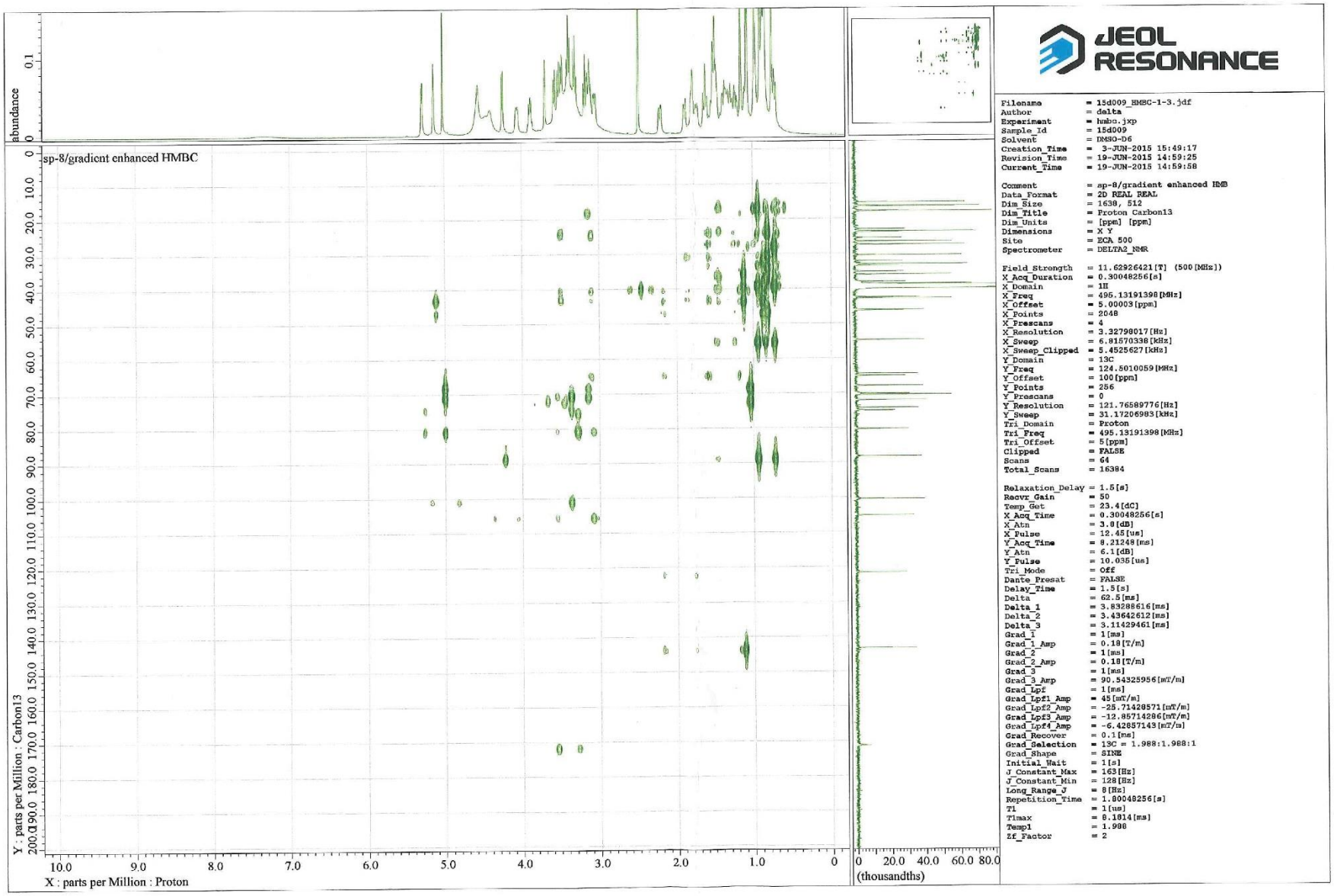

Figure 19. HSQC-TOCSY spectrum of longispinoside A (**2**) in DMSO-d_6.

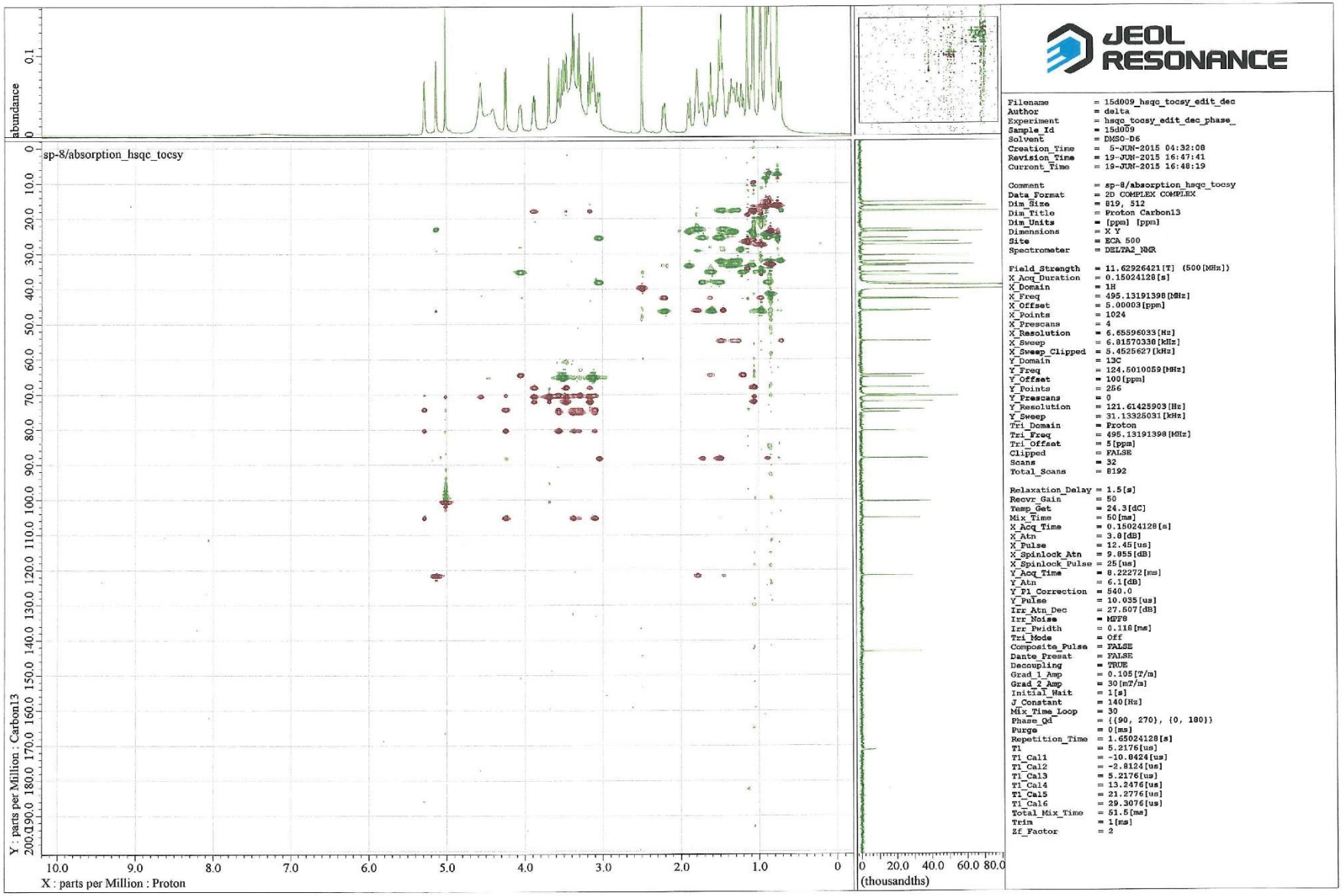

Figure 20. pfg-TOCSY spectrum of longispinoside A (**2**) in DMSO-d_6.

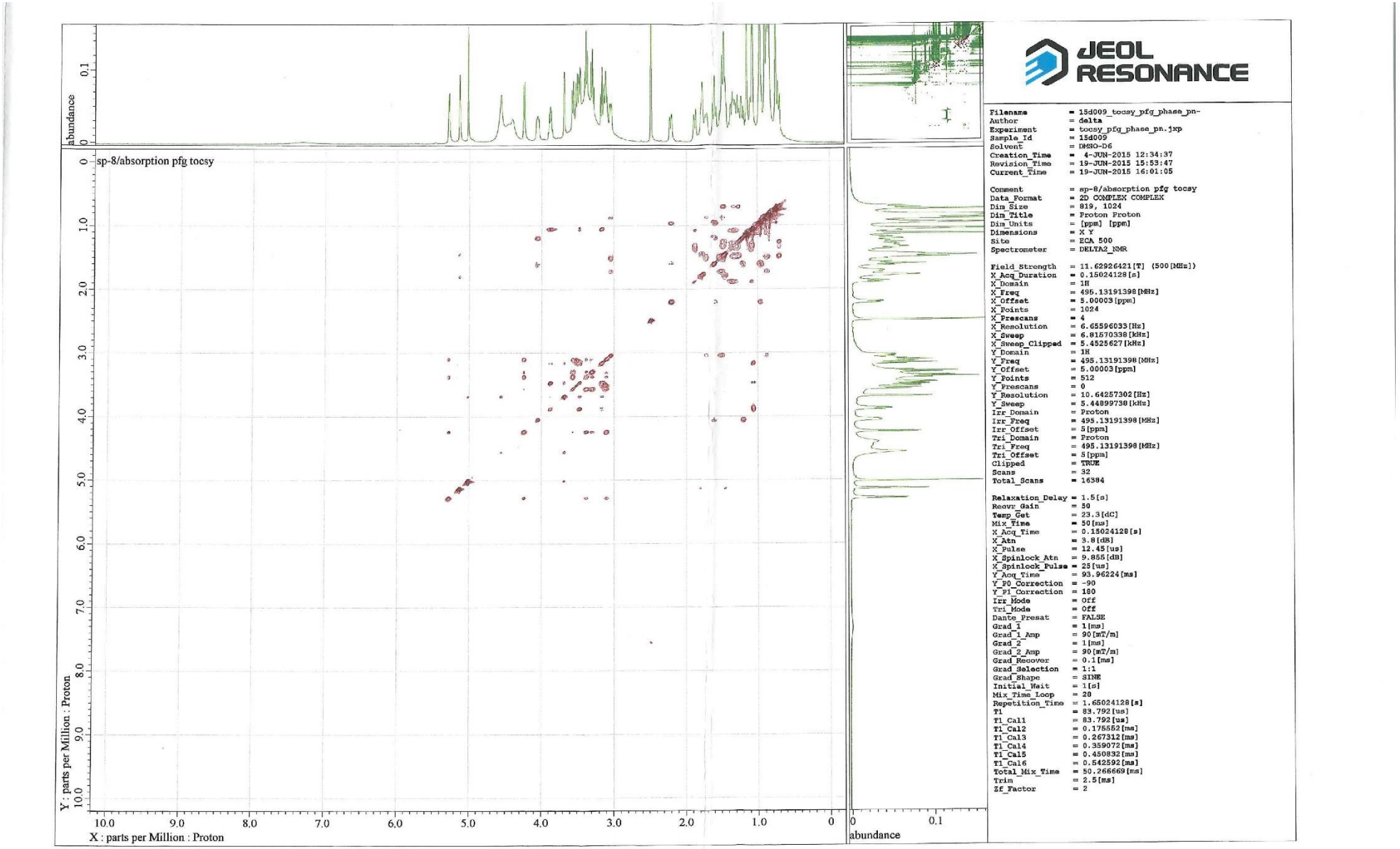

Figure 21. NOESY spectrum of longispinoside A (**2**) in DMSO-d_6.

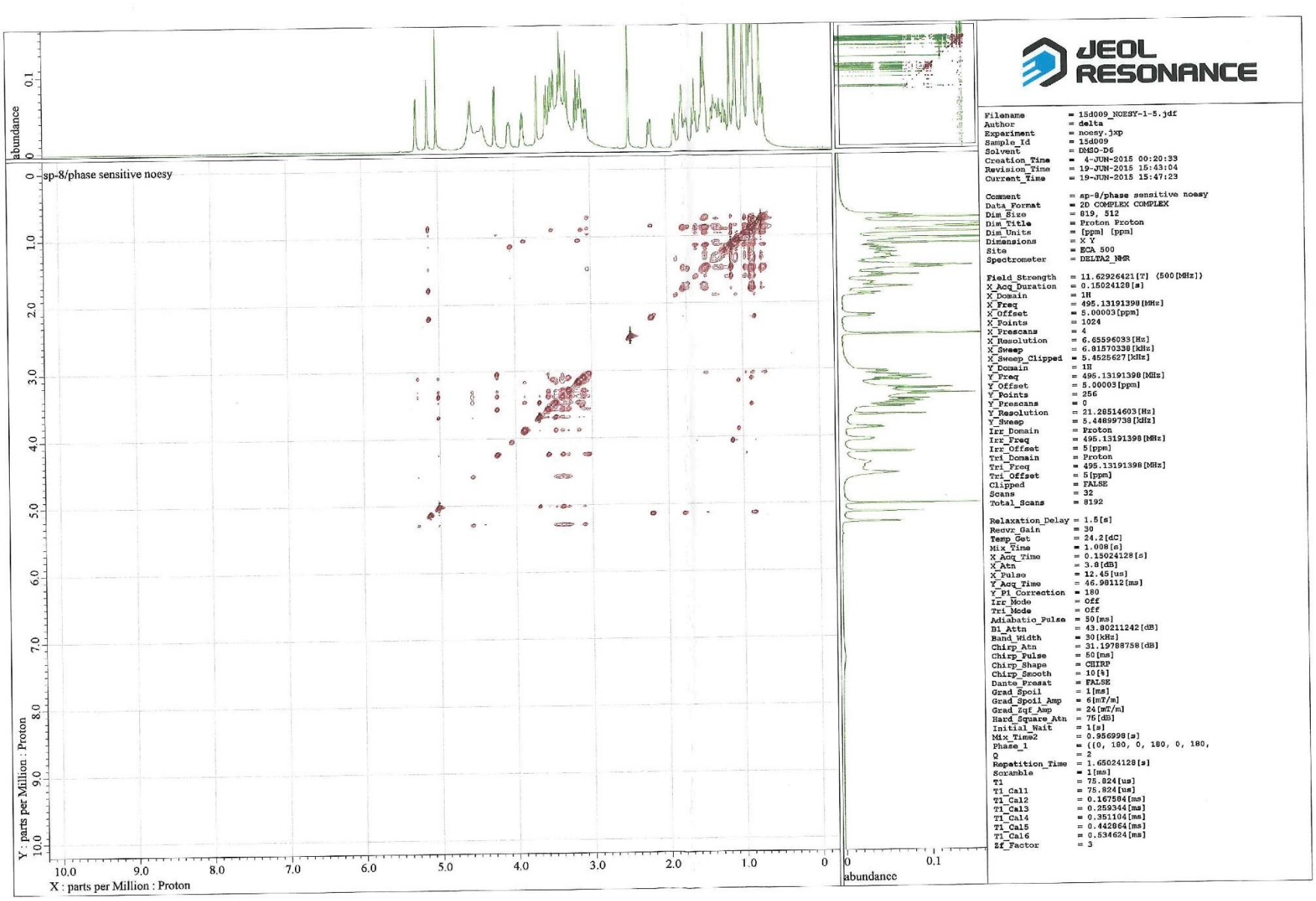

Figure 22. ^{1}H NMR spectrum (500 MHz) of longispinoside A methyl ester (**3**) in DMSO-d_6.

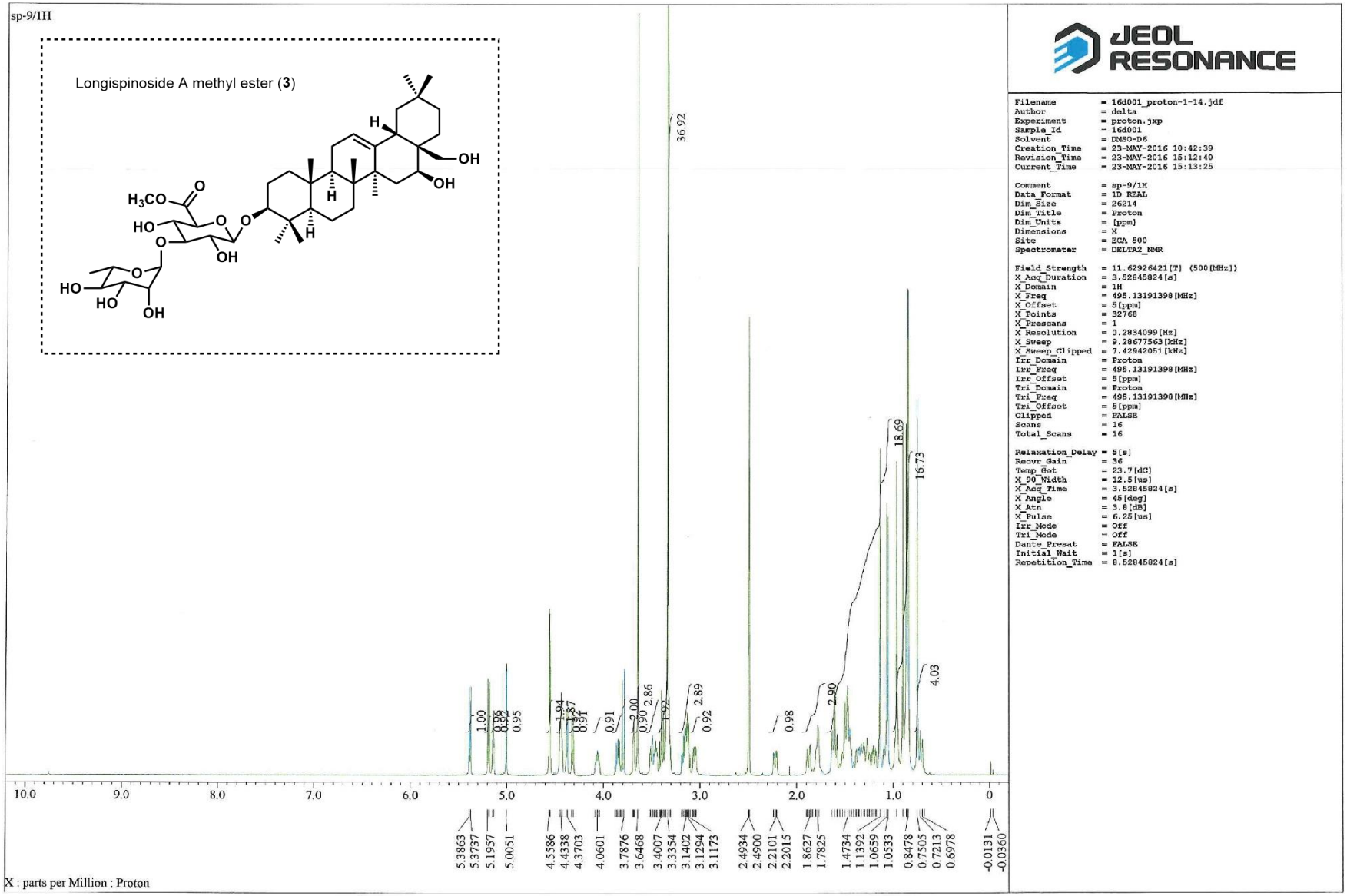

Figure 23. ^{13}C NMR spectrum (125 MHz) of longispinoside A methyl ester (**3**) in DMSO-d_6.

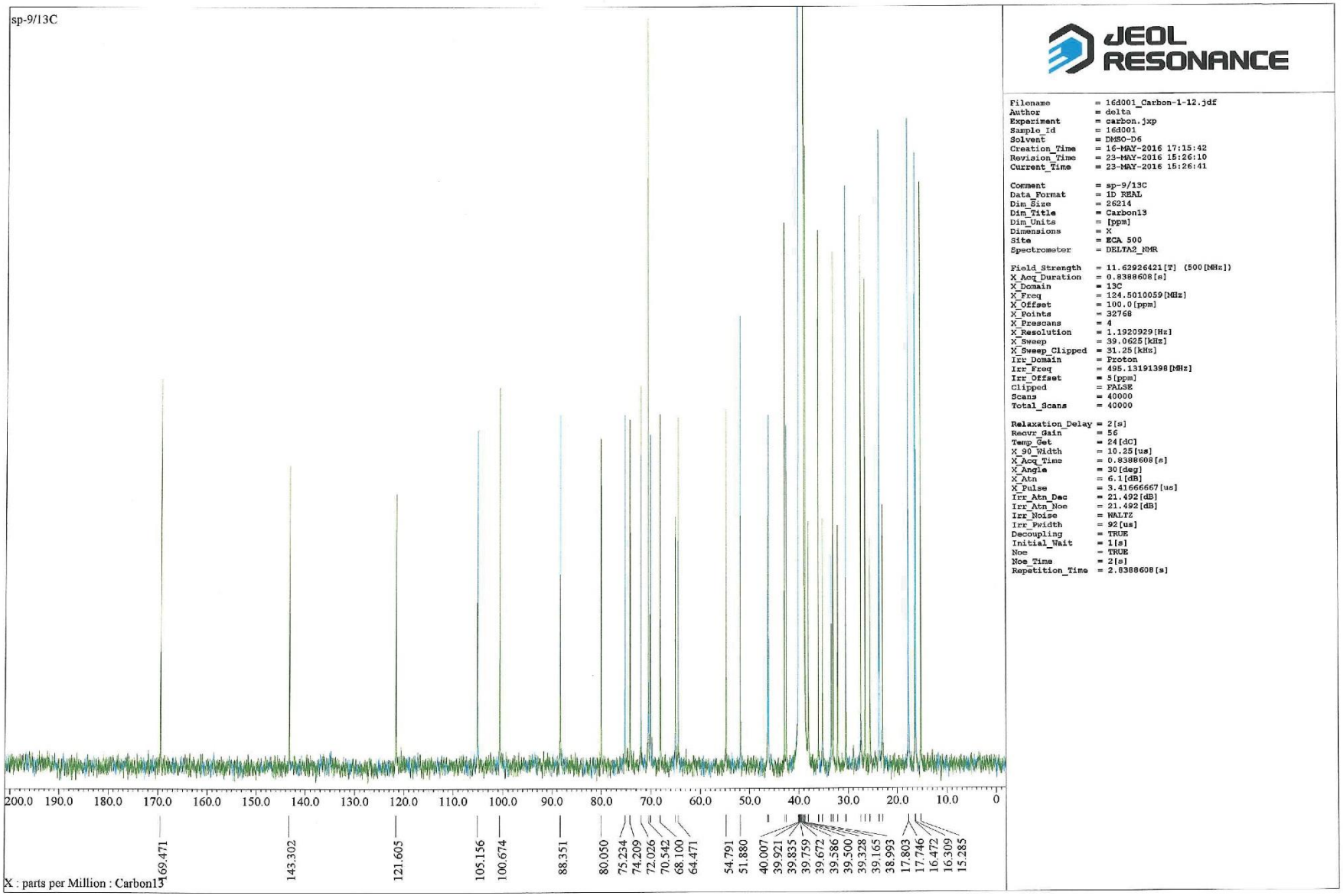

Figure 24. DEPT 90 and 135 pulse NMR spectra of longispinoside A methyl ester (**3**) in DMSO-d_6.

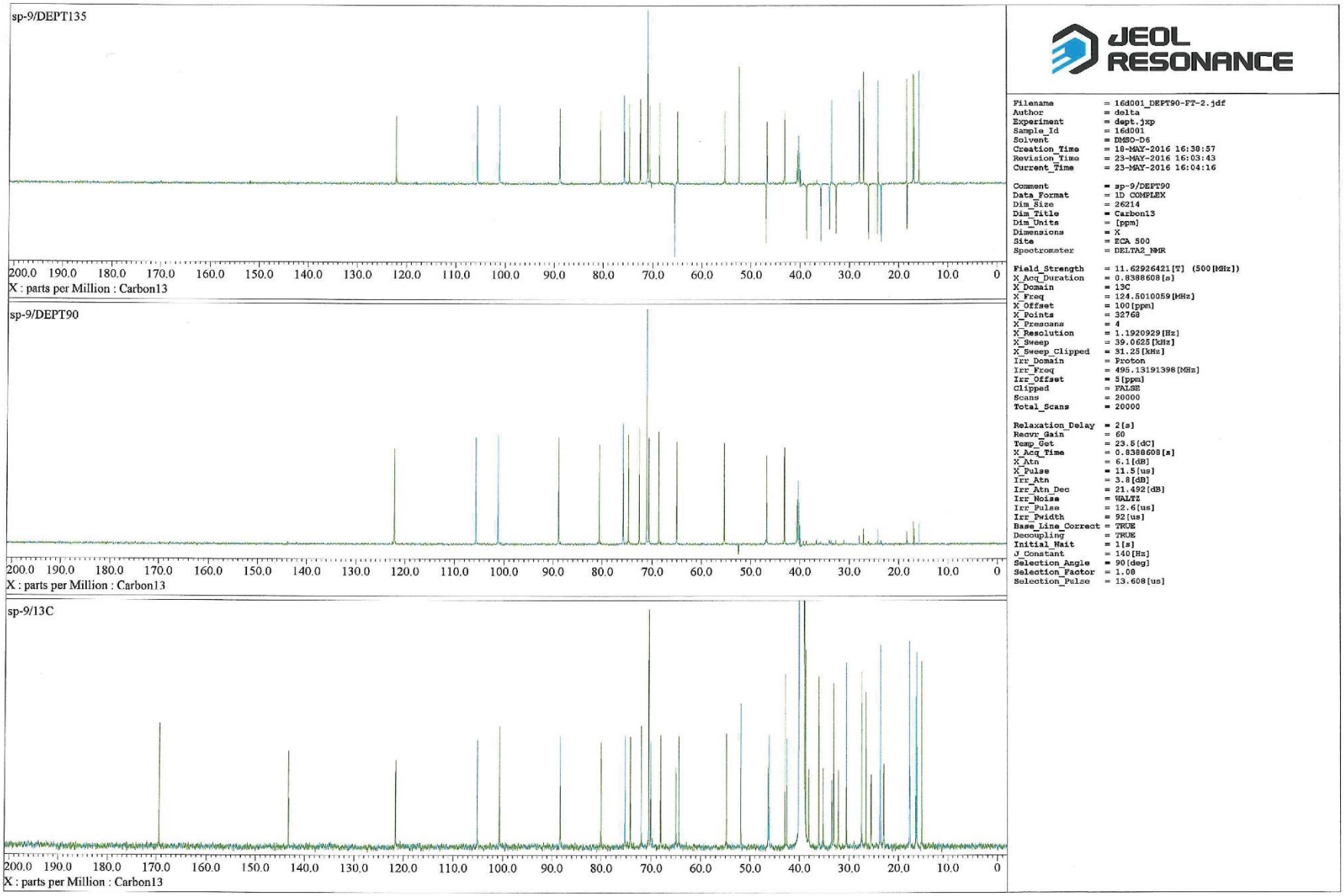

Figure 25. DQF-COSY spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

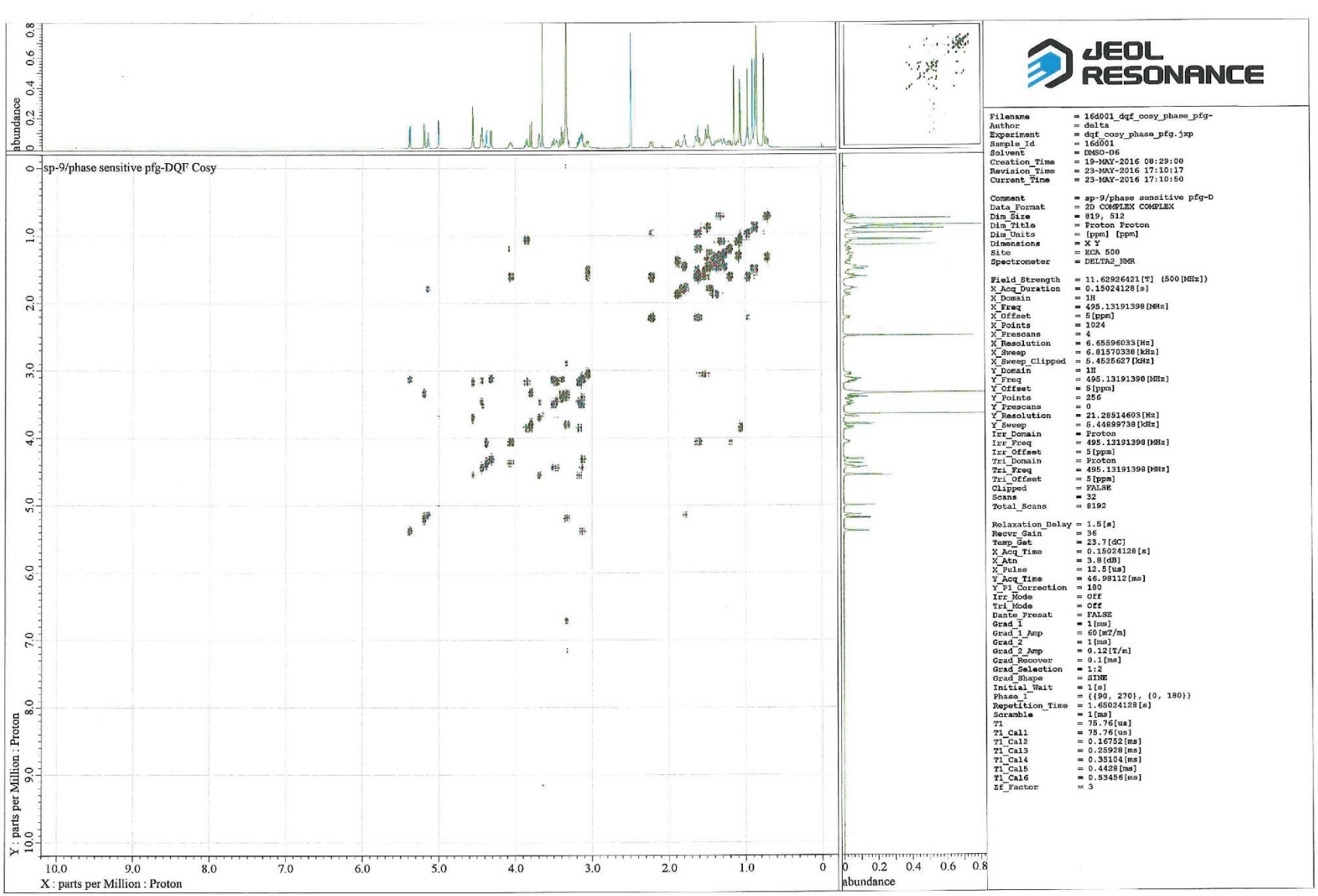

Figure 26. HMQC spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

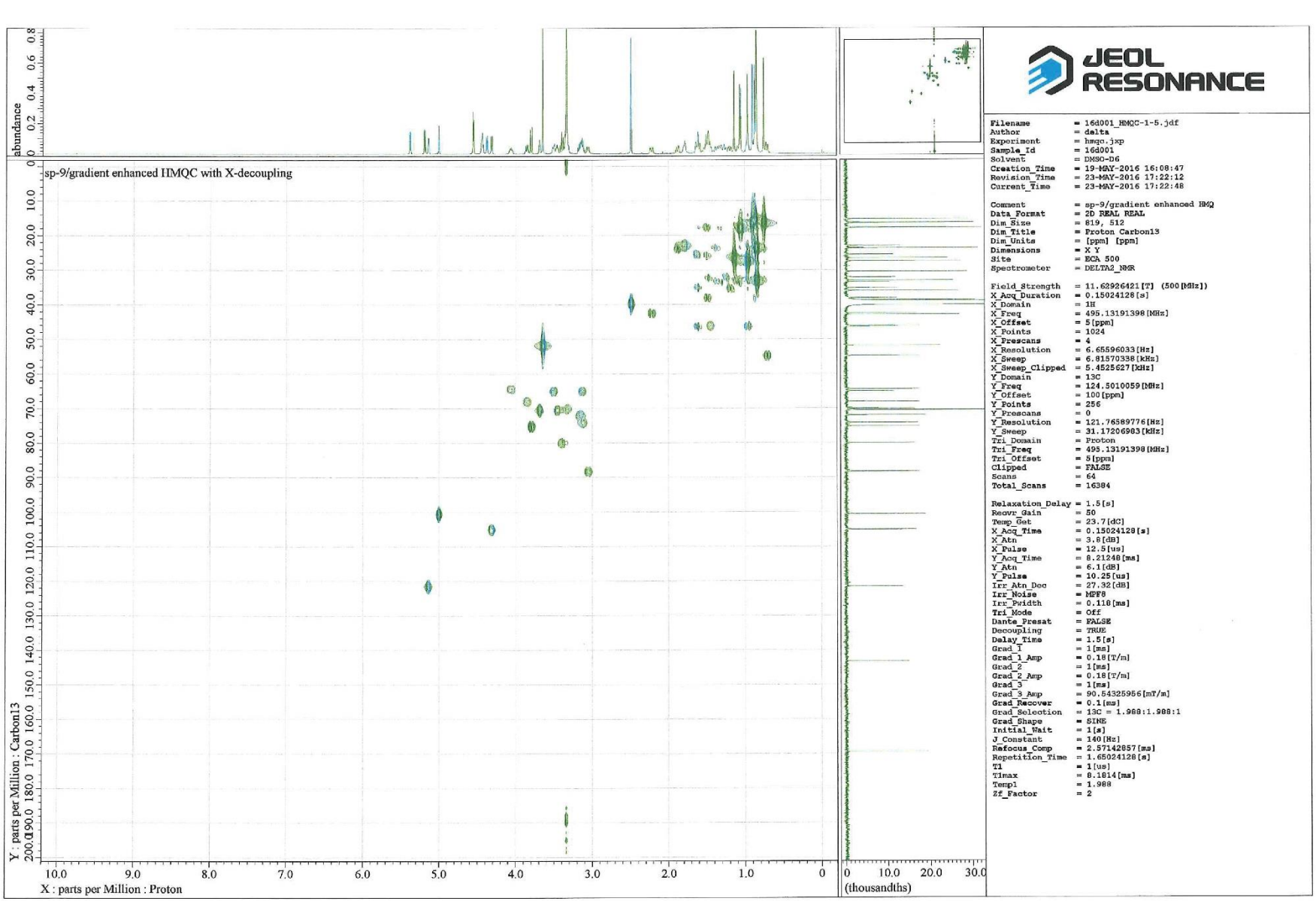

Figure 27. HMBC spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

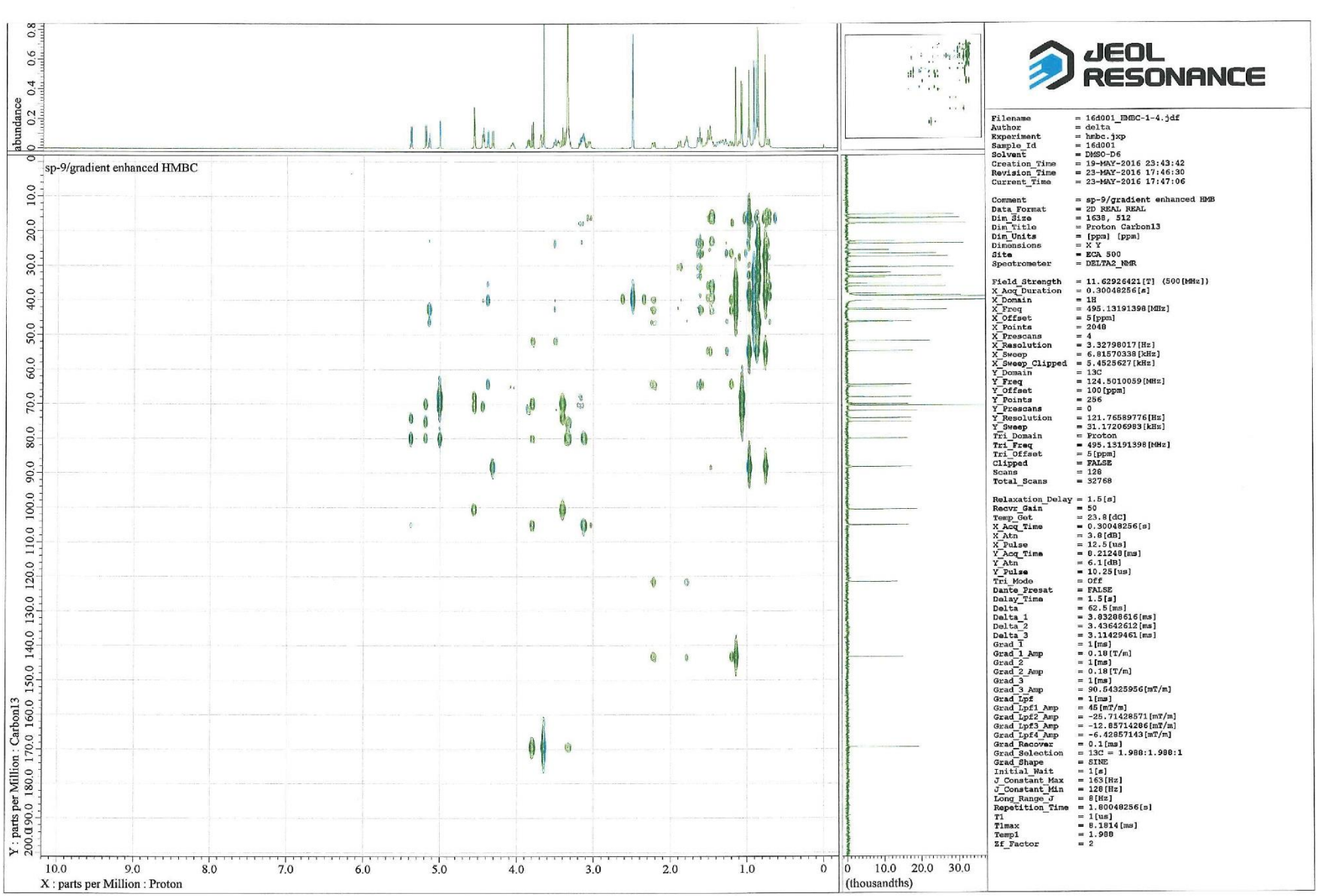

Figure 28. HSQC-TOCSY spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

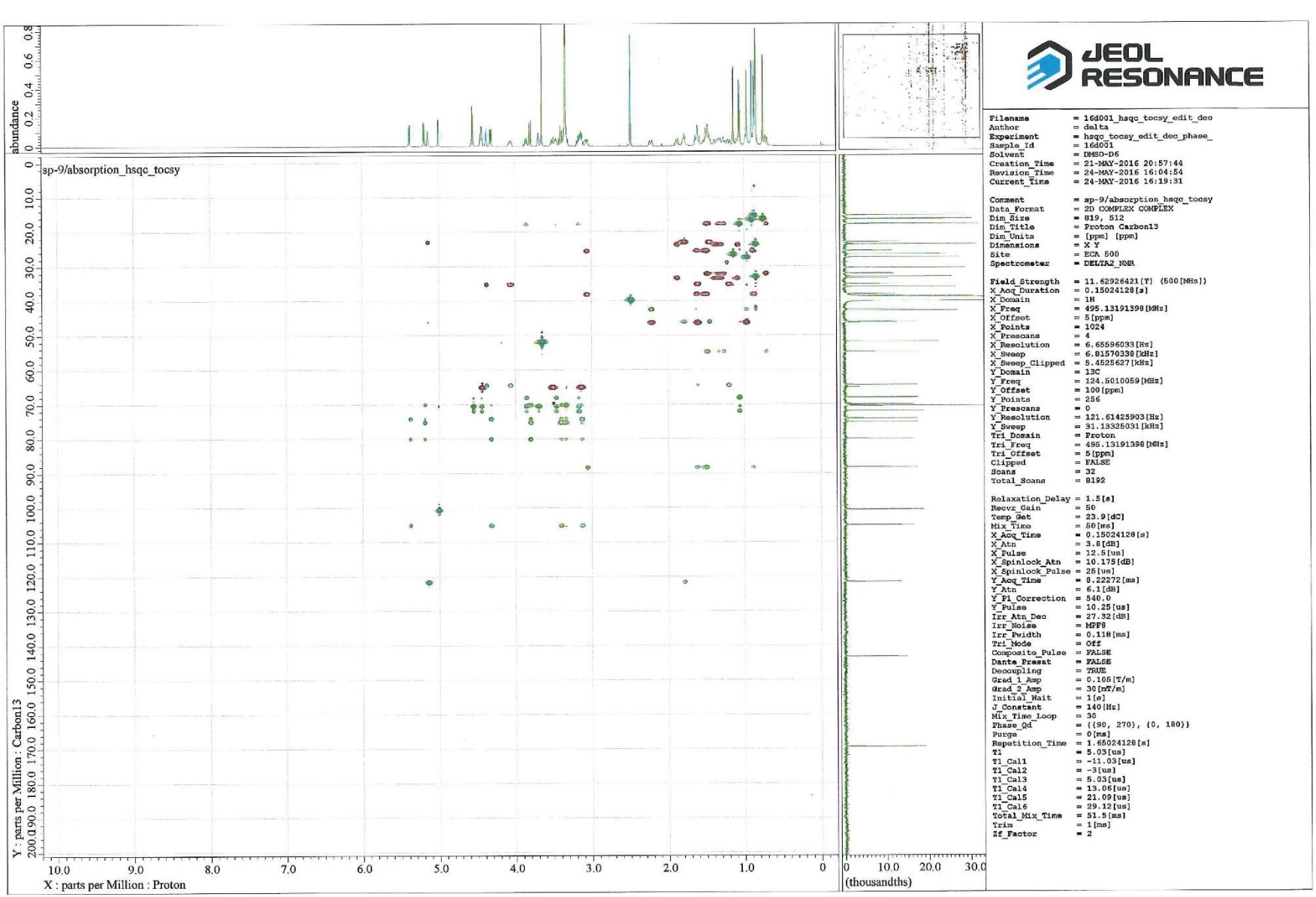

Figure 29. pfg-TOCSY spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

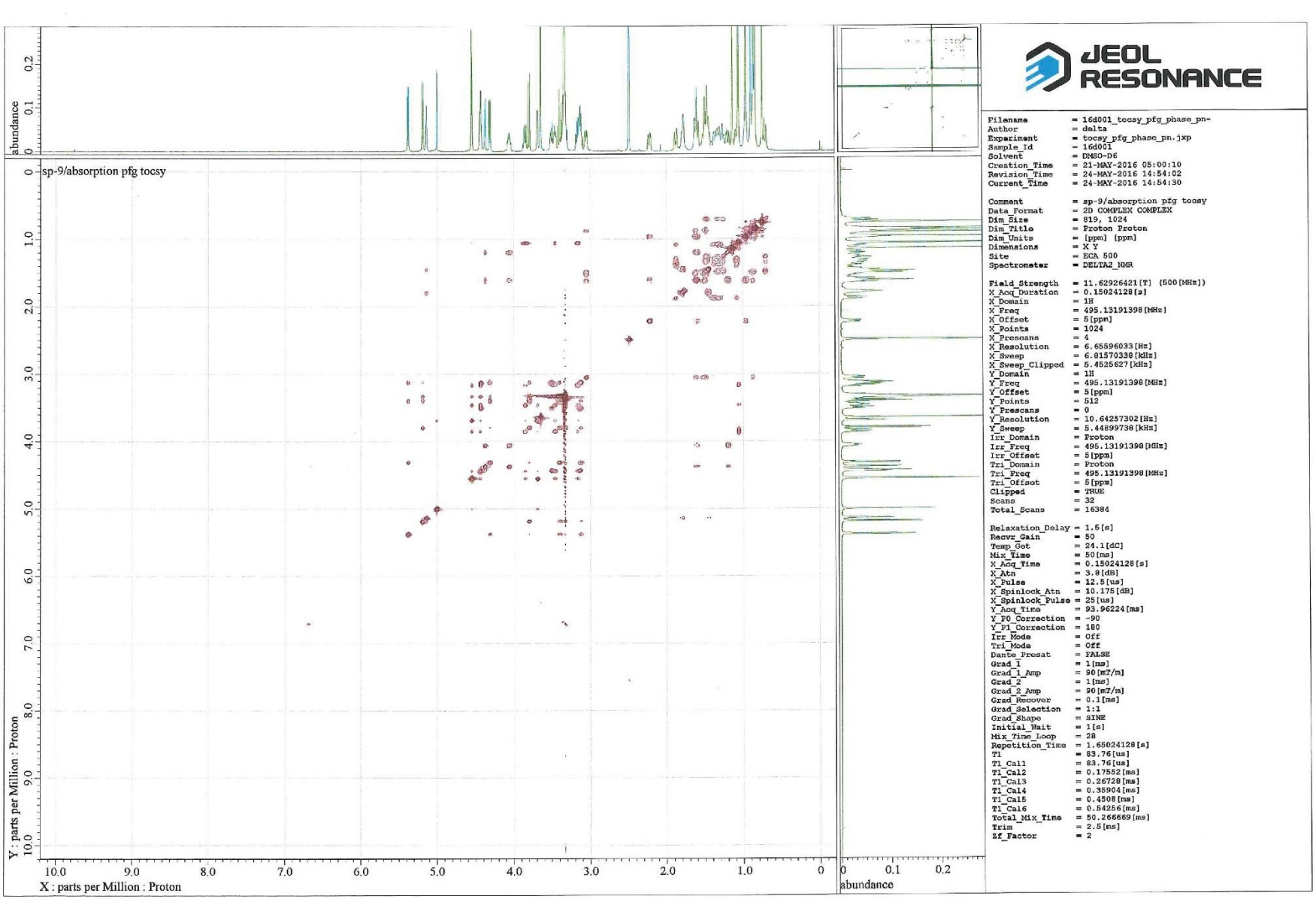

Figure 30. NOESY spectrum of longispinoside A methyl ester (**3**) in DMSO-d_6.

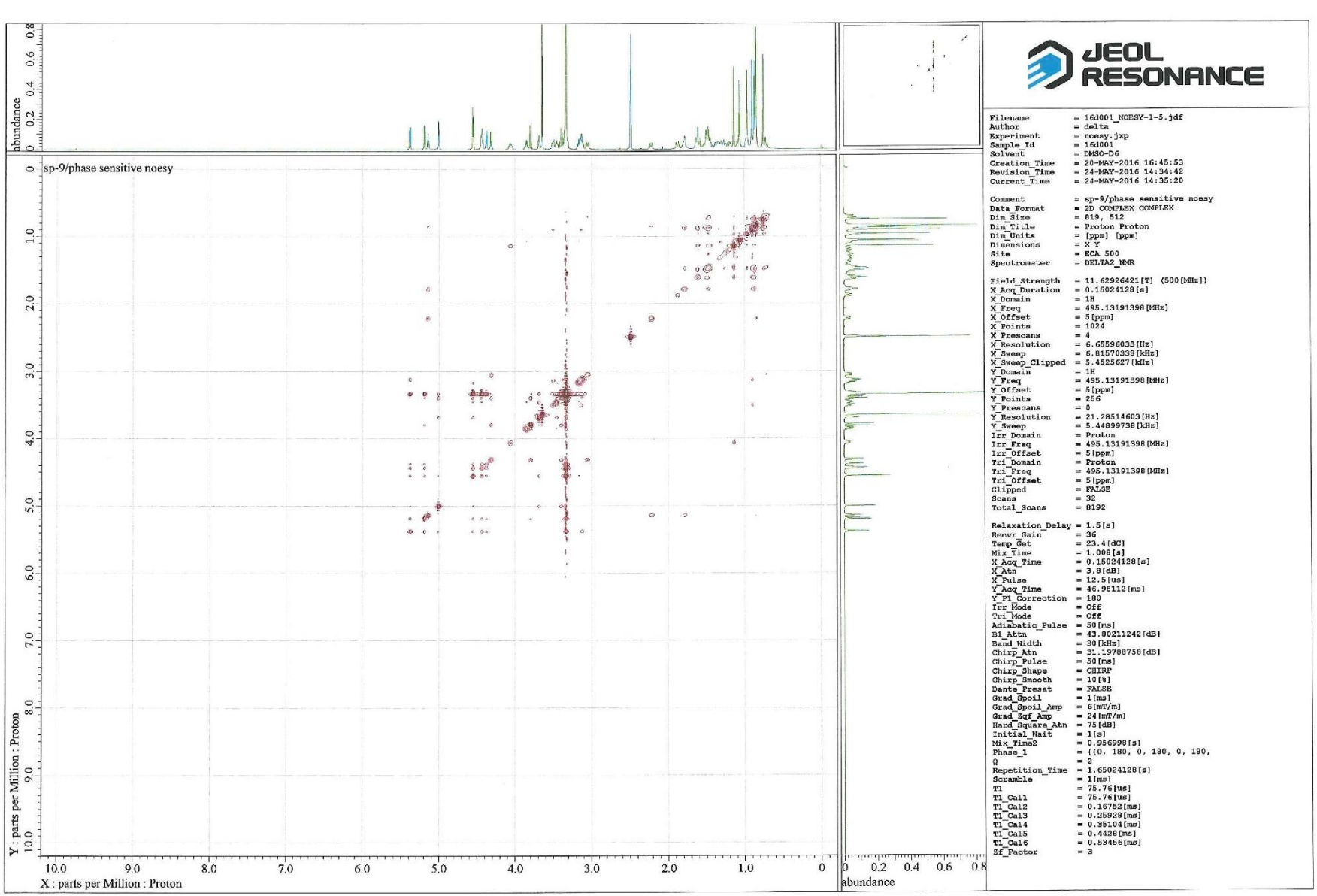

Figure 31. ^{1}H NMR spectrum (500 MHz) of erythronoside A methyl ester (**4**) in DMSO-d_6.

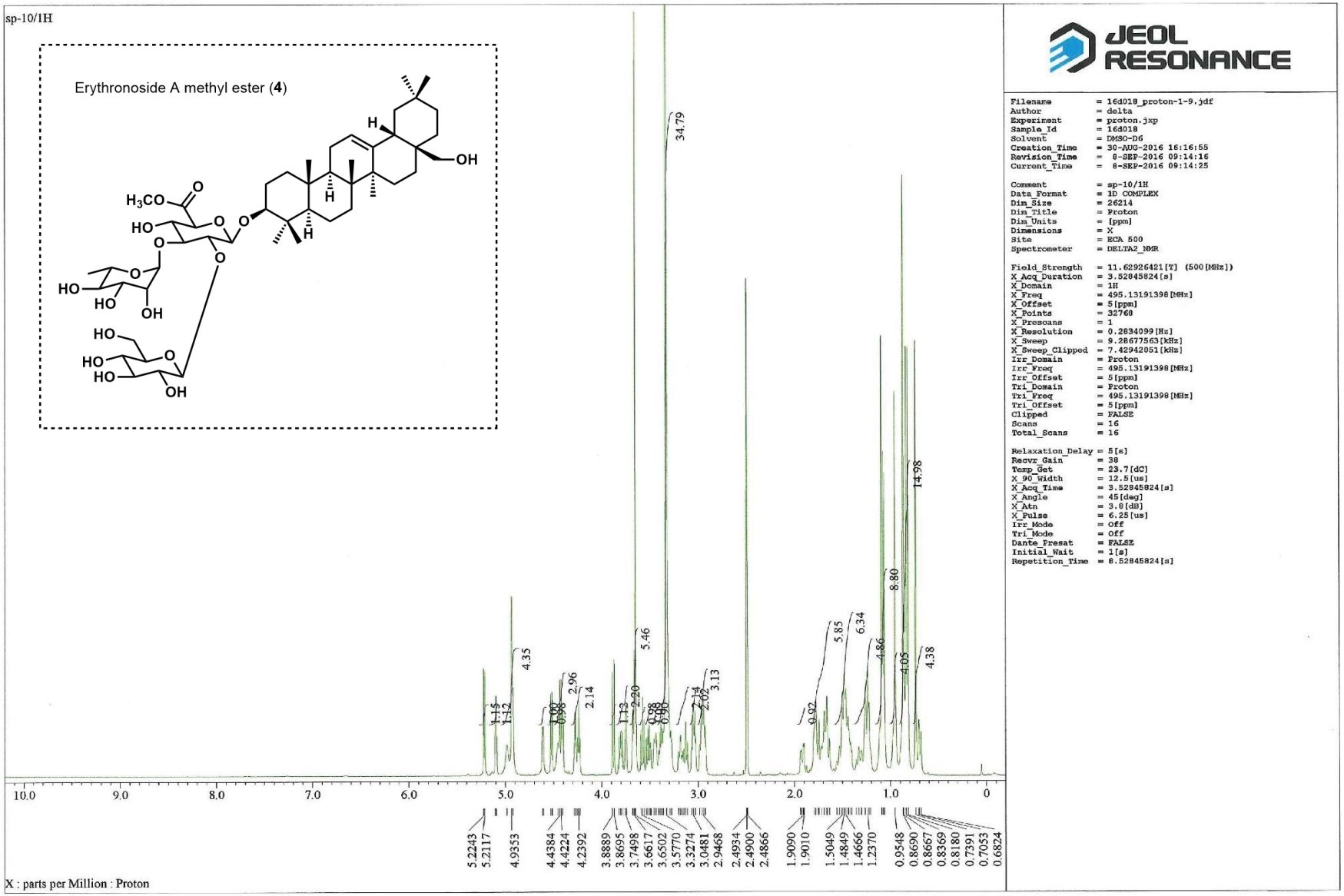

Figure 32. ^{13}C NMR spectrum (125 MHz) of erythronoside A methyl ester (**4**) in DMSO-d_6.

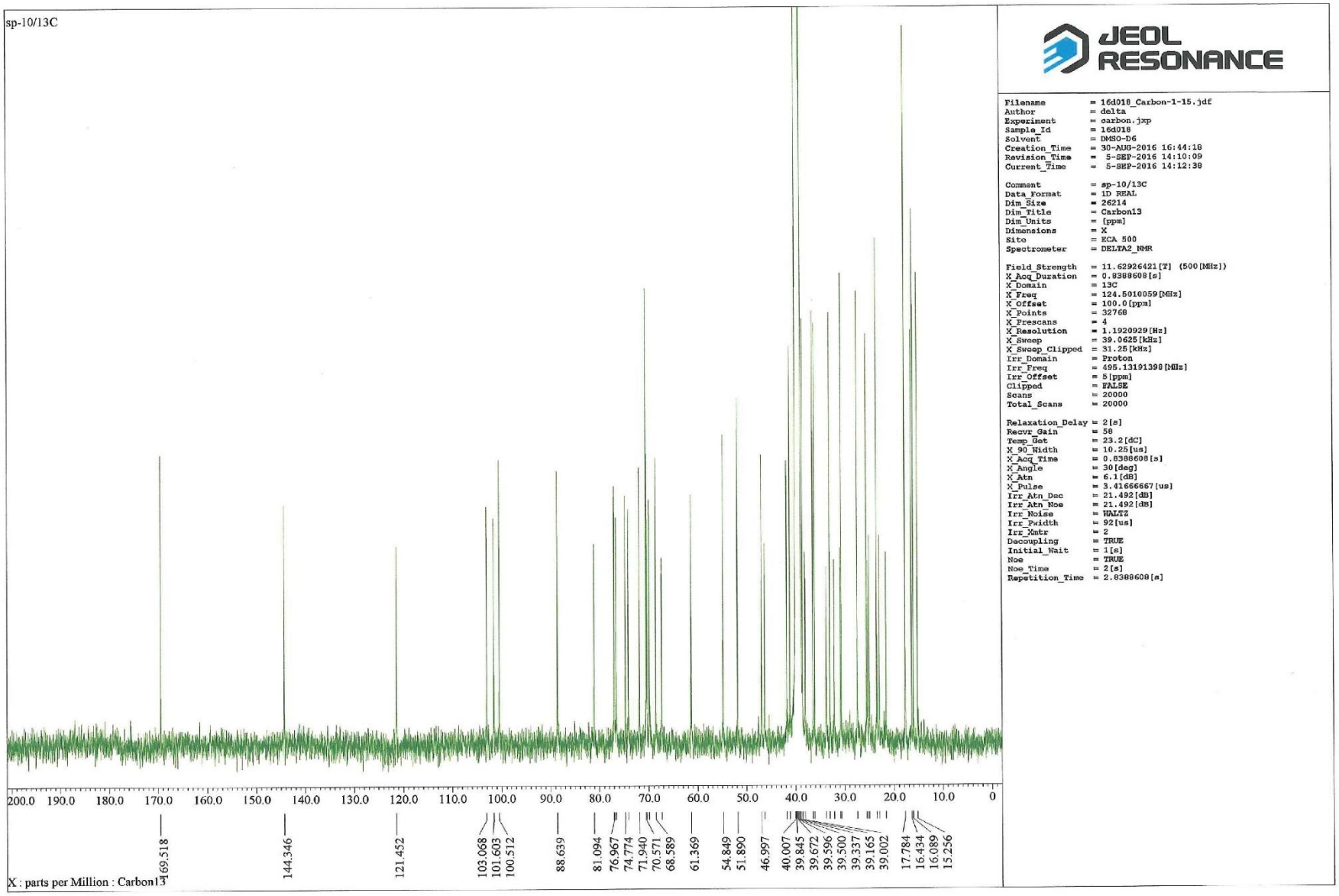

Figure 33. DEPT 90 and 135 pulse NMR spectra of erythronoside A methyl ester (**4**) in DMSO-d_6.

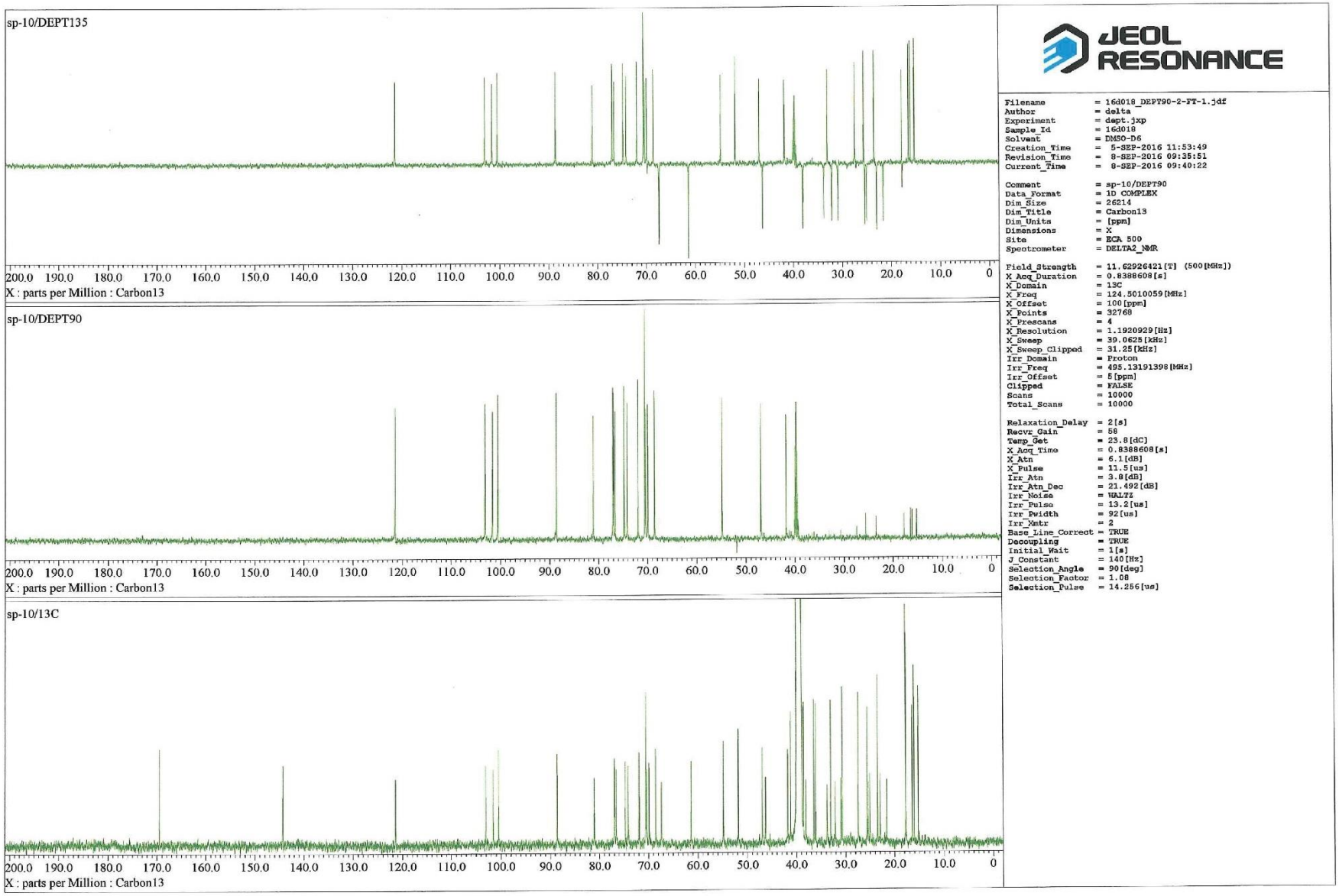

Figure 34. DQF-COSY spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

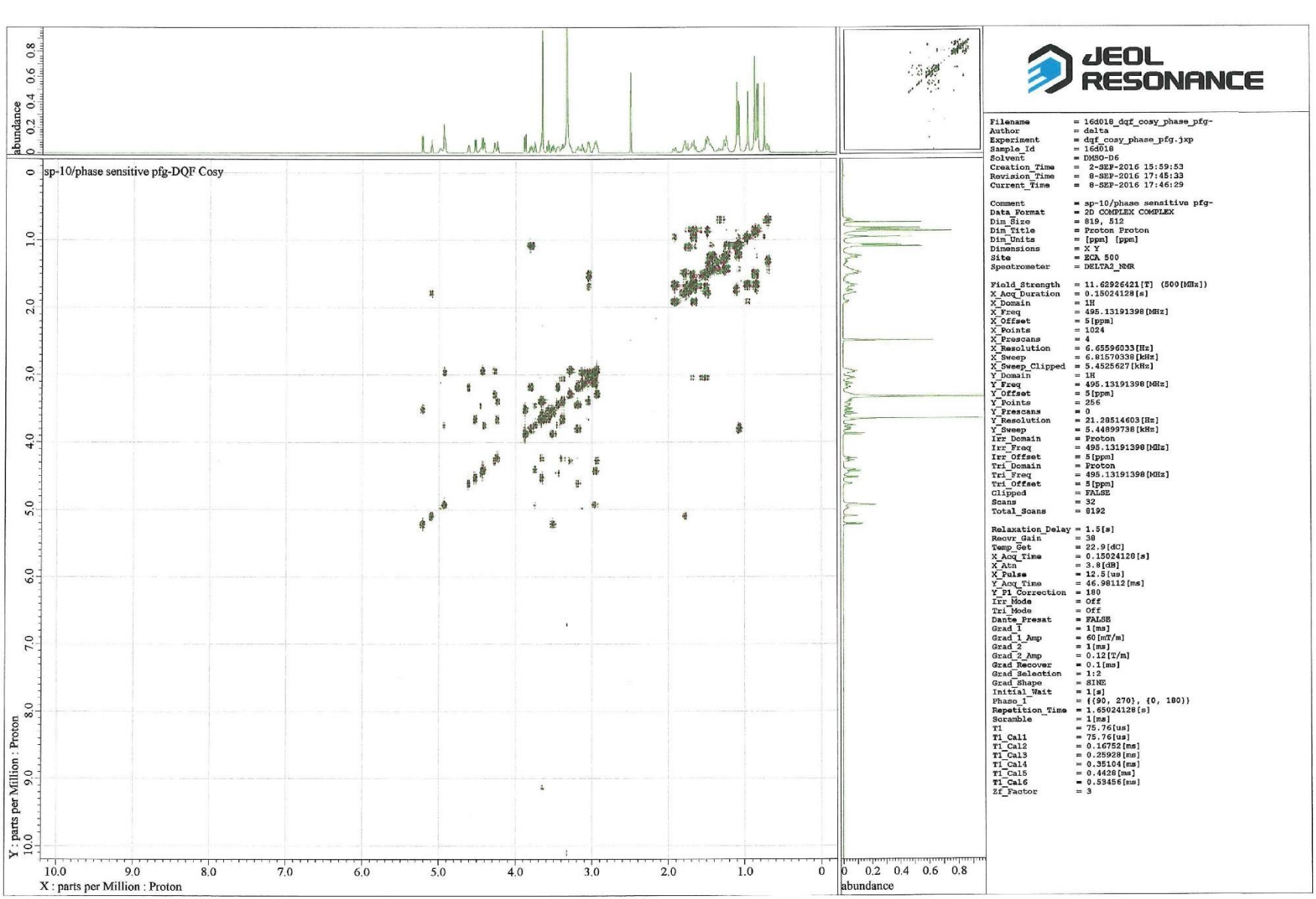

Figure 35. HMQC spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

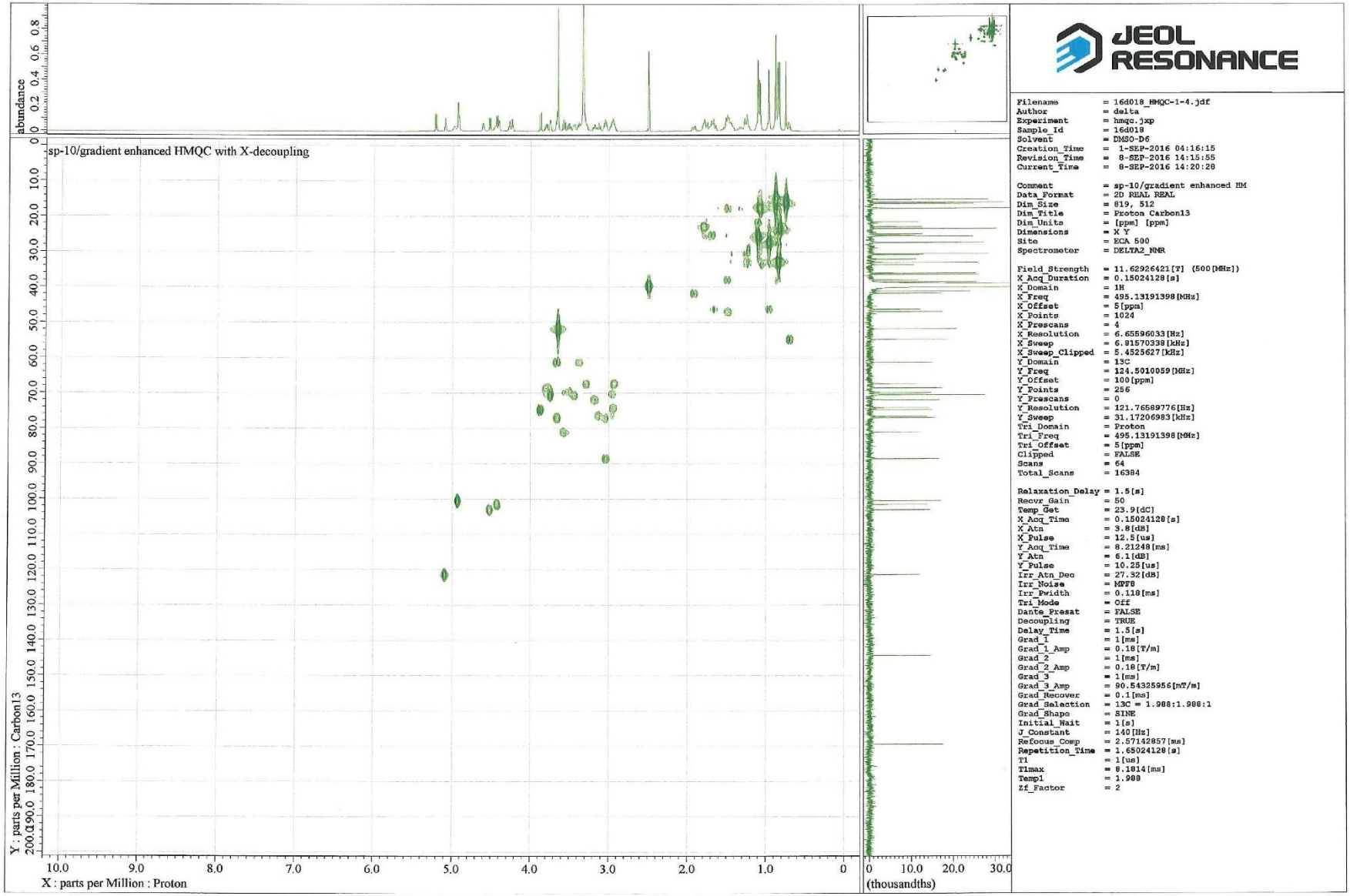

Figure 36. HMBC spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

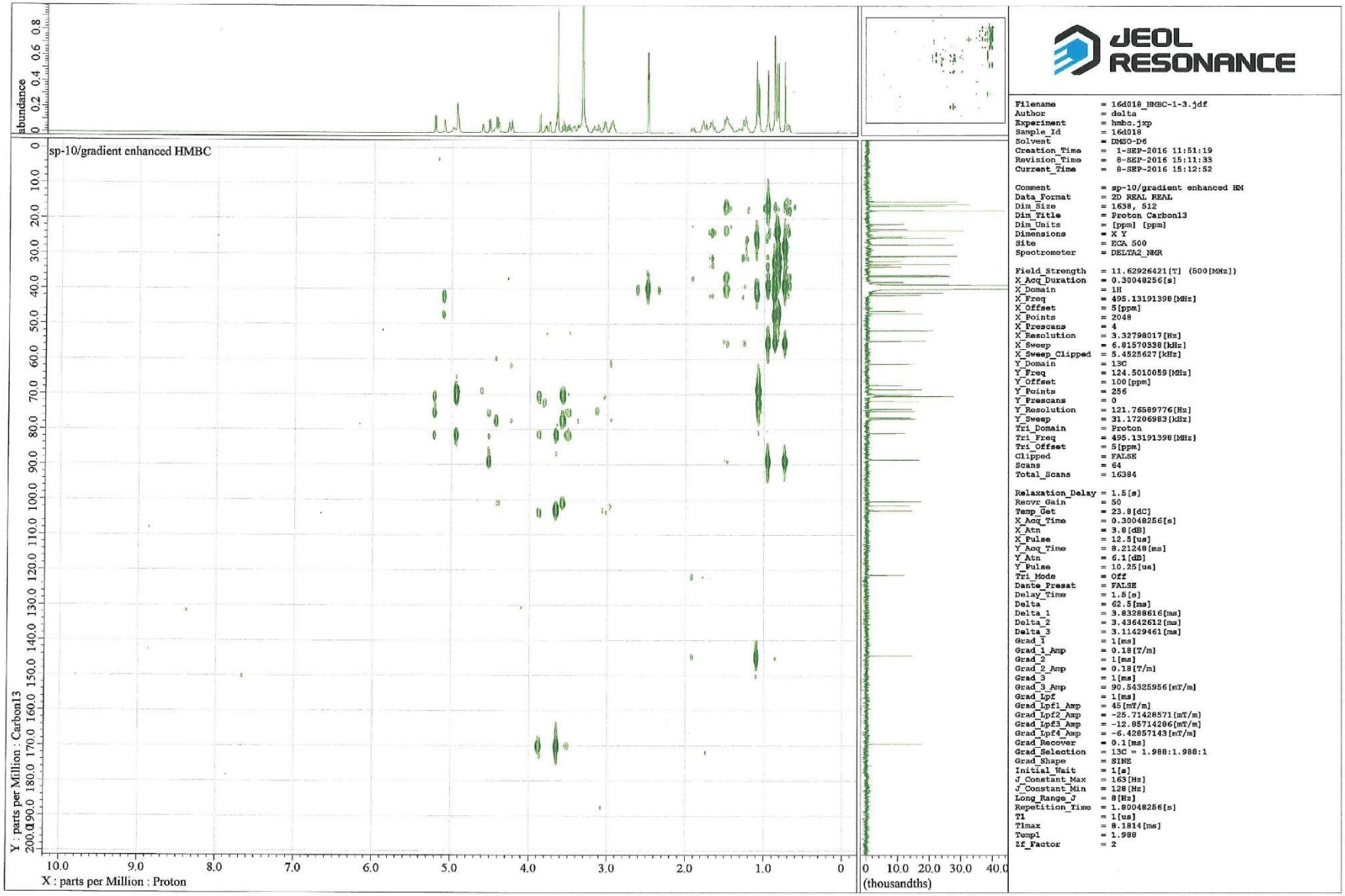

Figure 37. HSQC-TOCSY spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

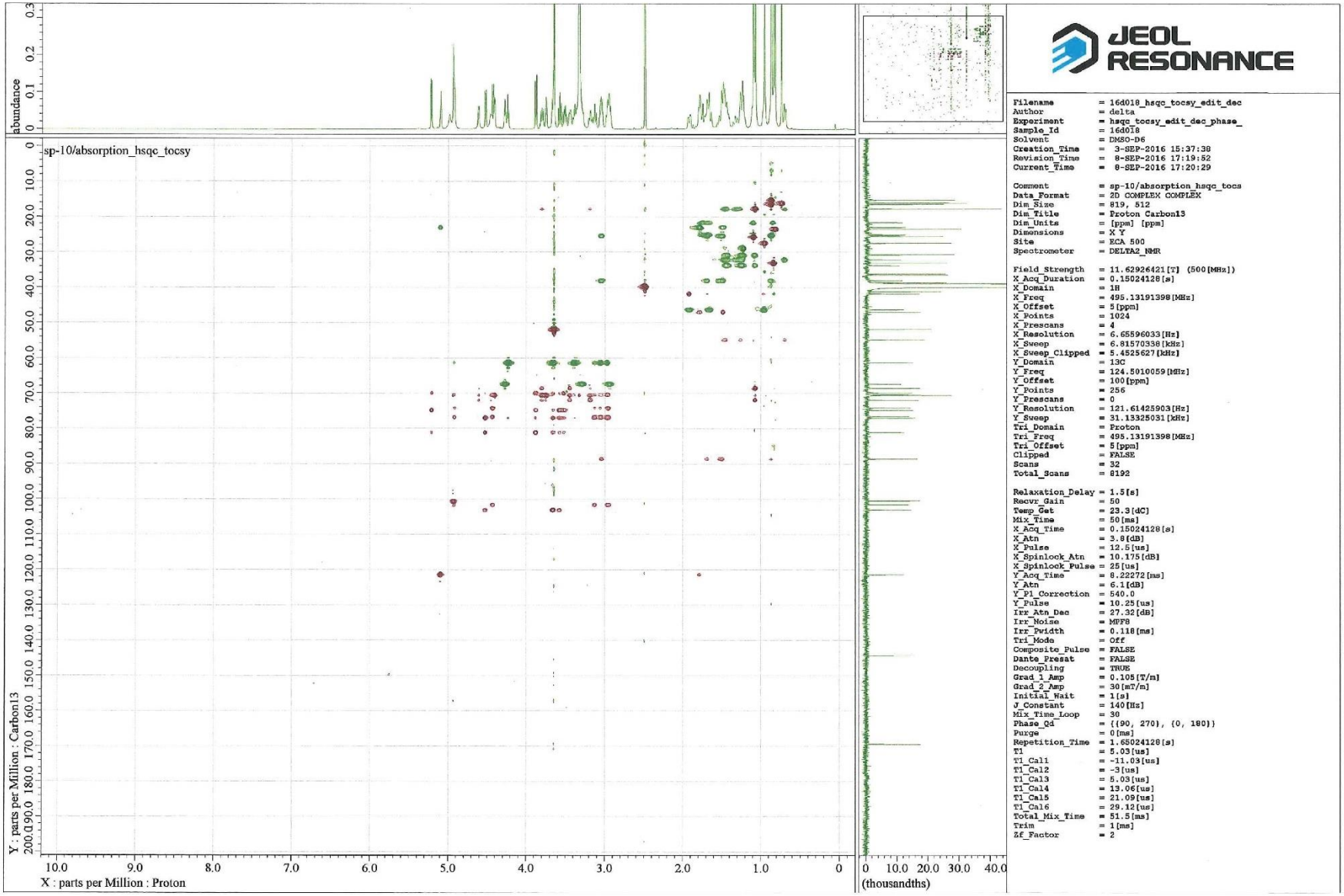

Figure 38. pfg-TOCSY spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

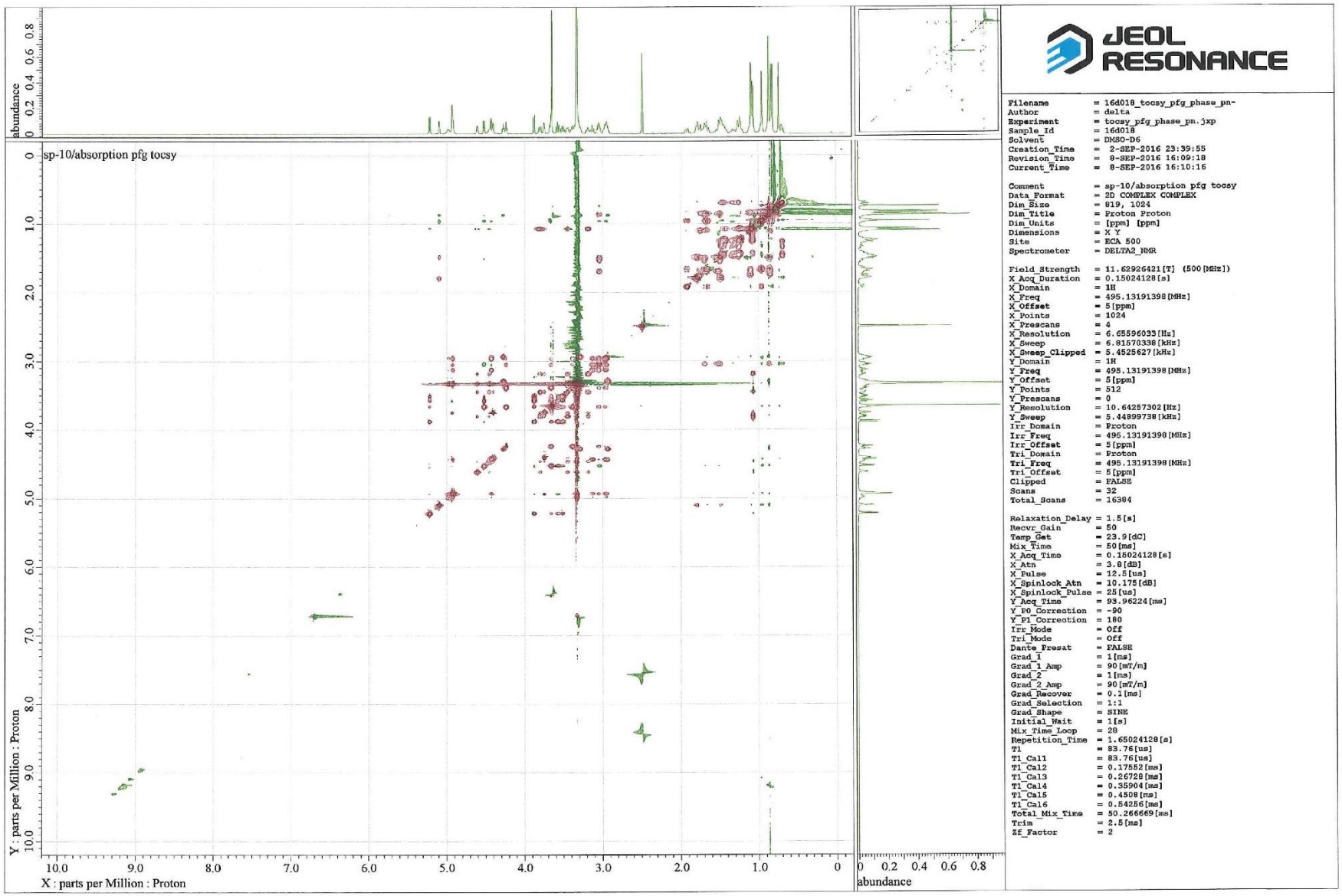

Figure 39. NOESY spectrum of erythronoside A methyl ester (**4**) in DMSO-d_6.

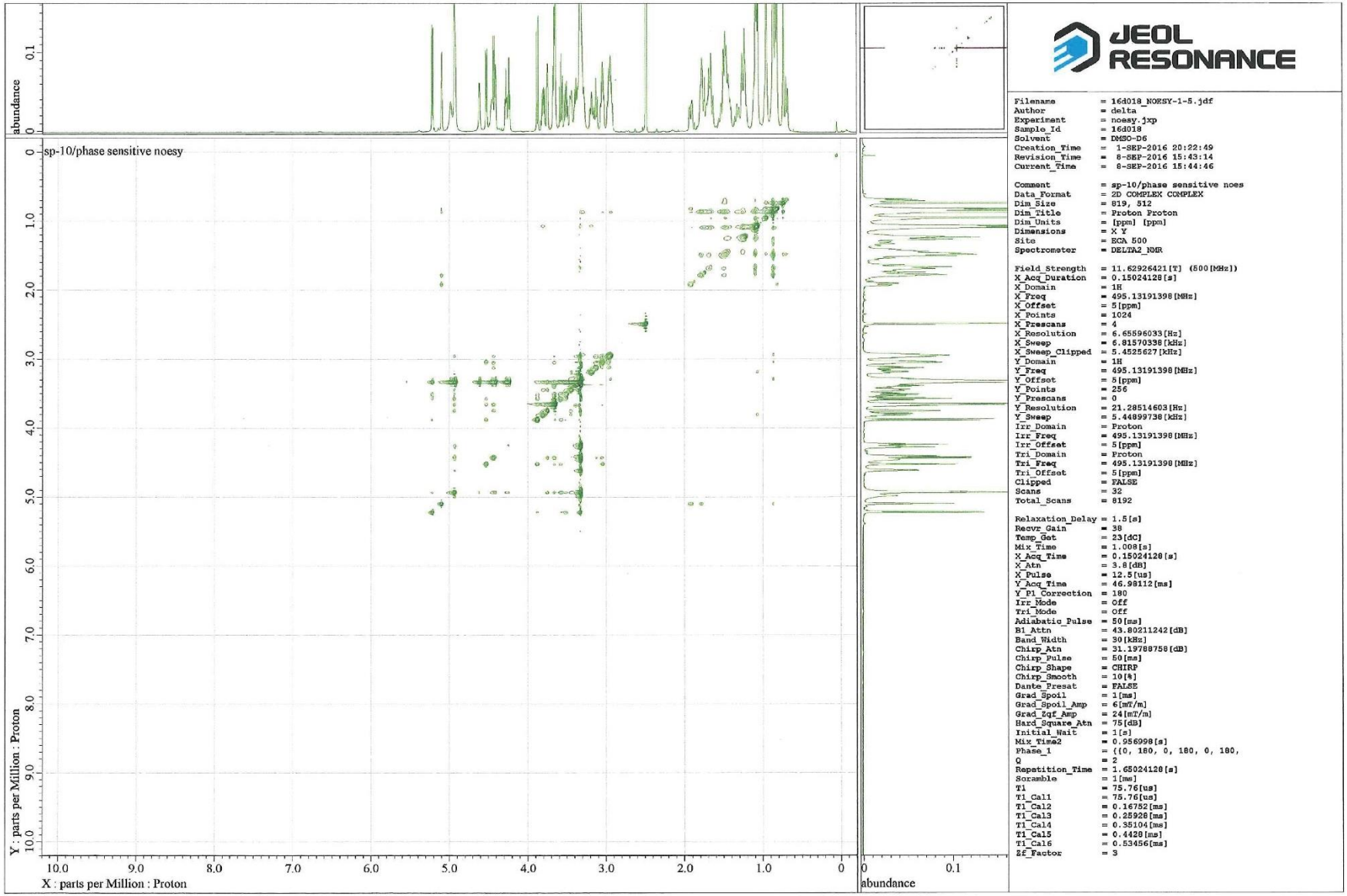

Figure 40. ^{1}H NMR spectrum (500 MHz) of cochalinoside C (**5**) in DMSO-d_6.

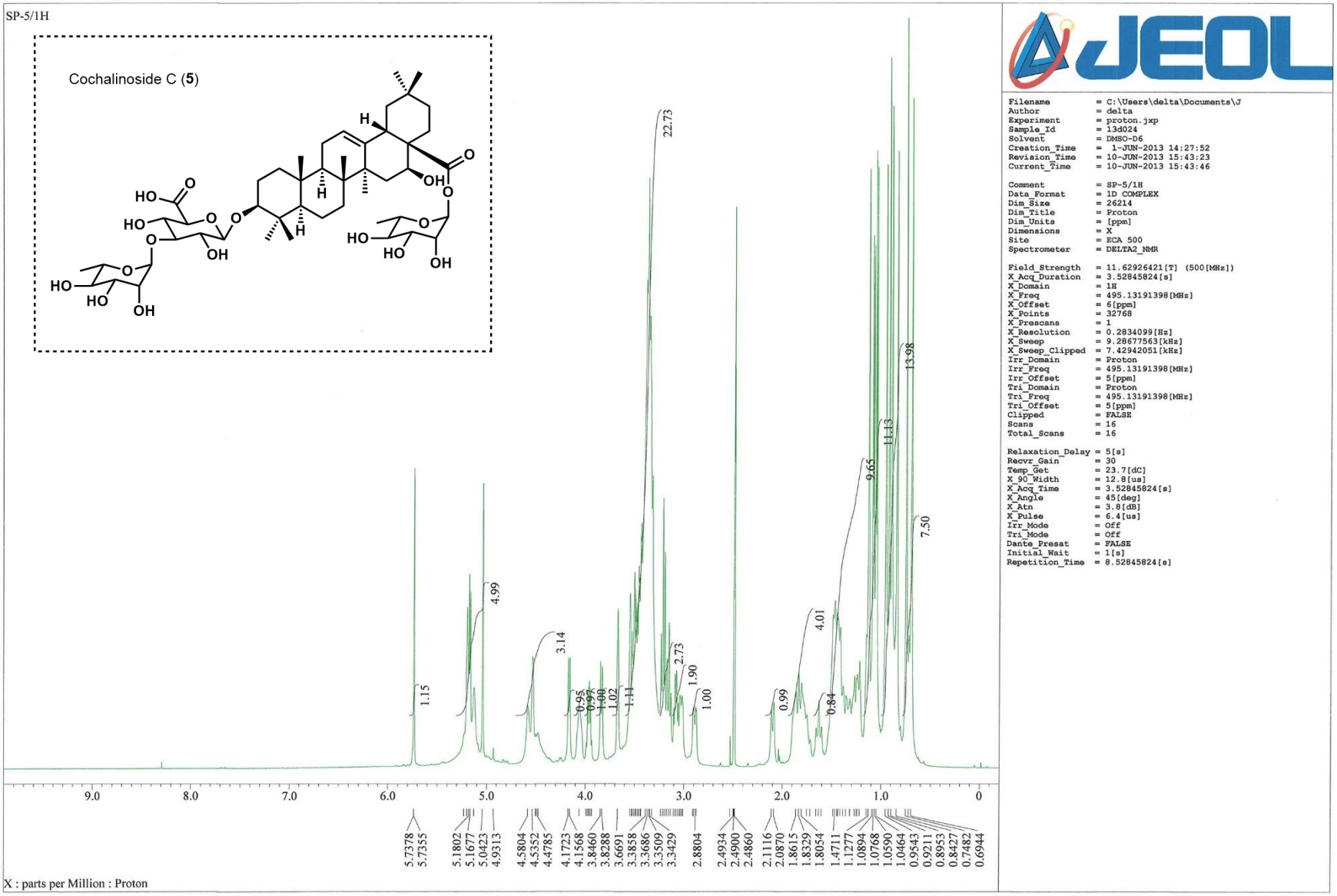

Figure 41. ^{13}C NMR spectrum (125 MHz) of cochalinoside C (**5**) in DMSO-d_6.

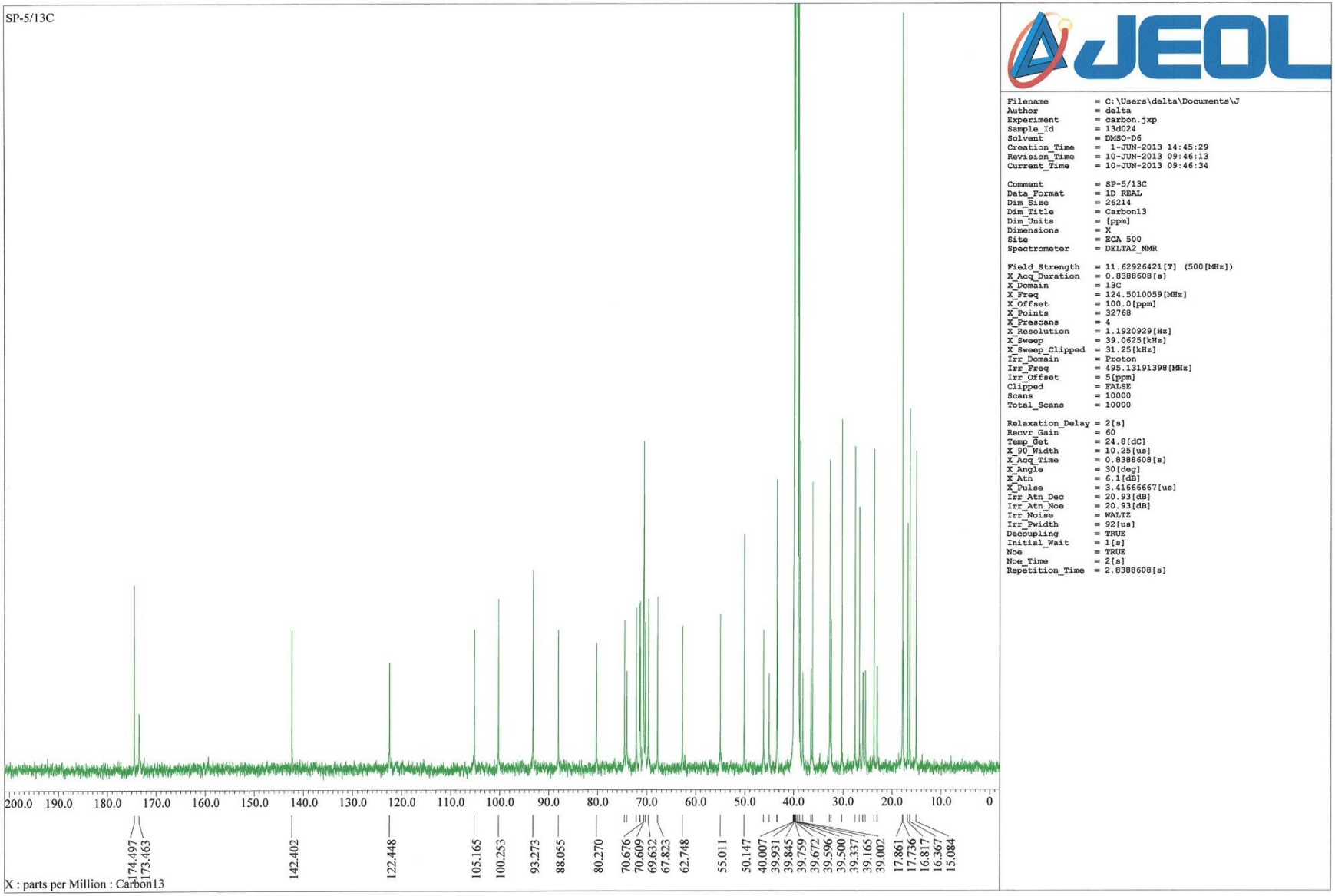

Figure 42. DEPT 90 and 135 pulse NMR spectra of cochalinoside C (**5**) in DMSO-d_6.

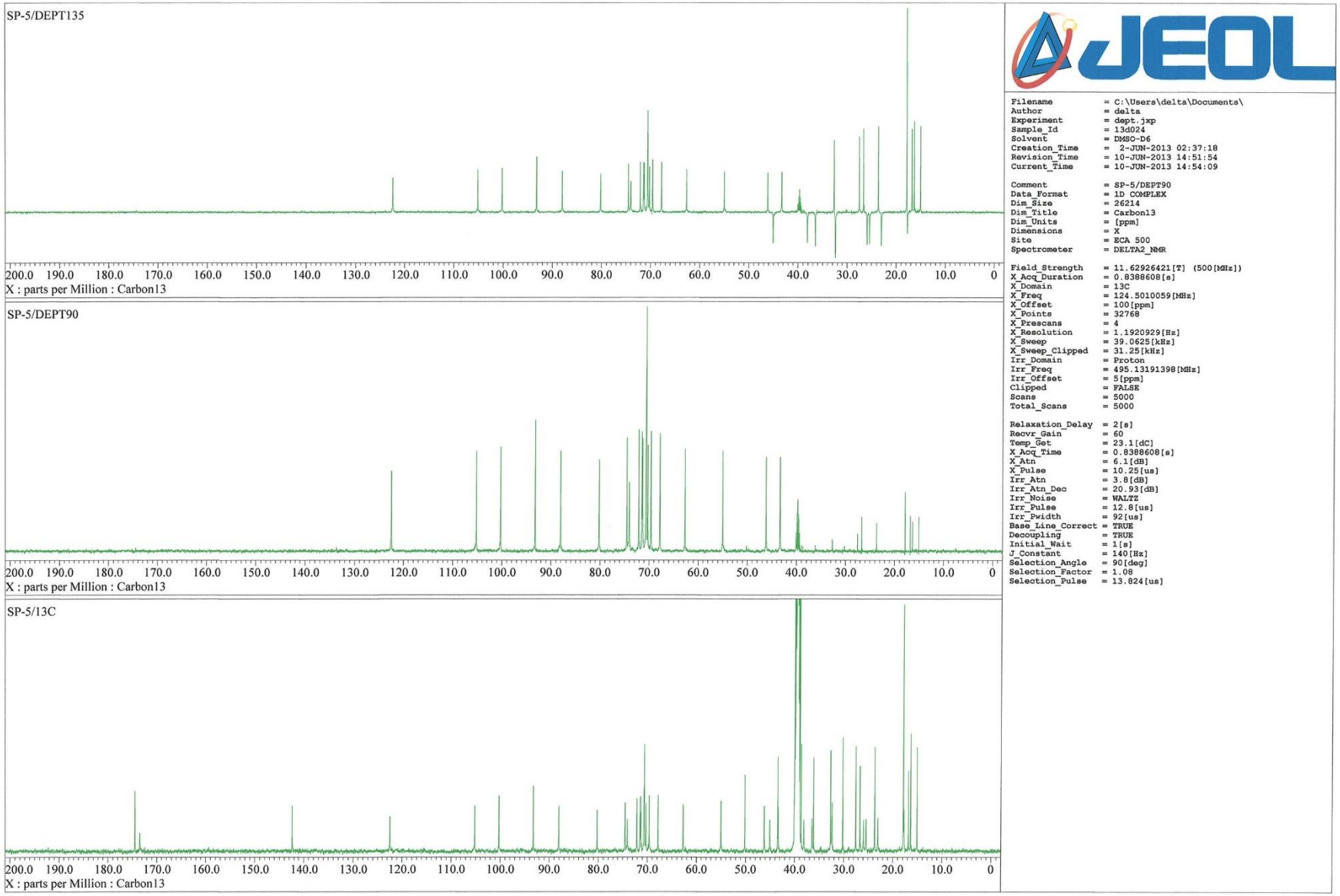

Figure 43. DQF-COSY spectrum of cochalinoside C (**5**) in DMSO-d_6.

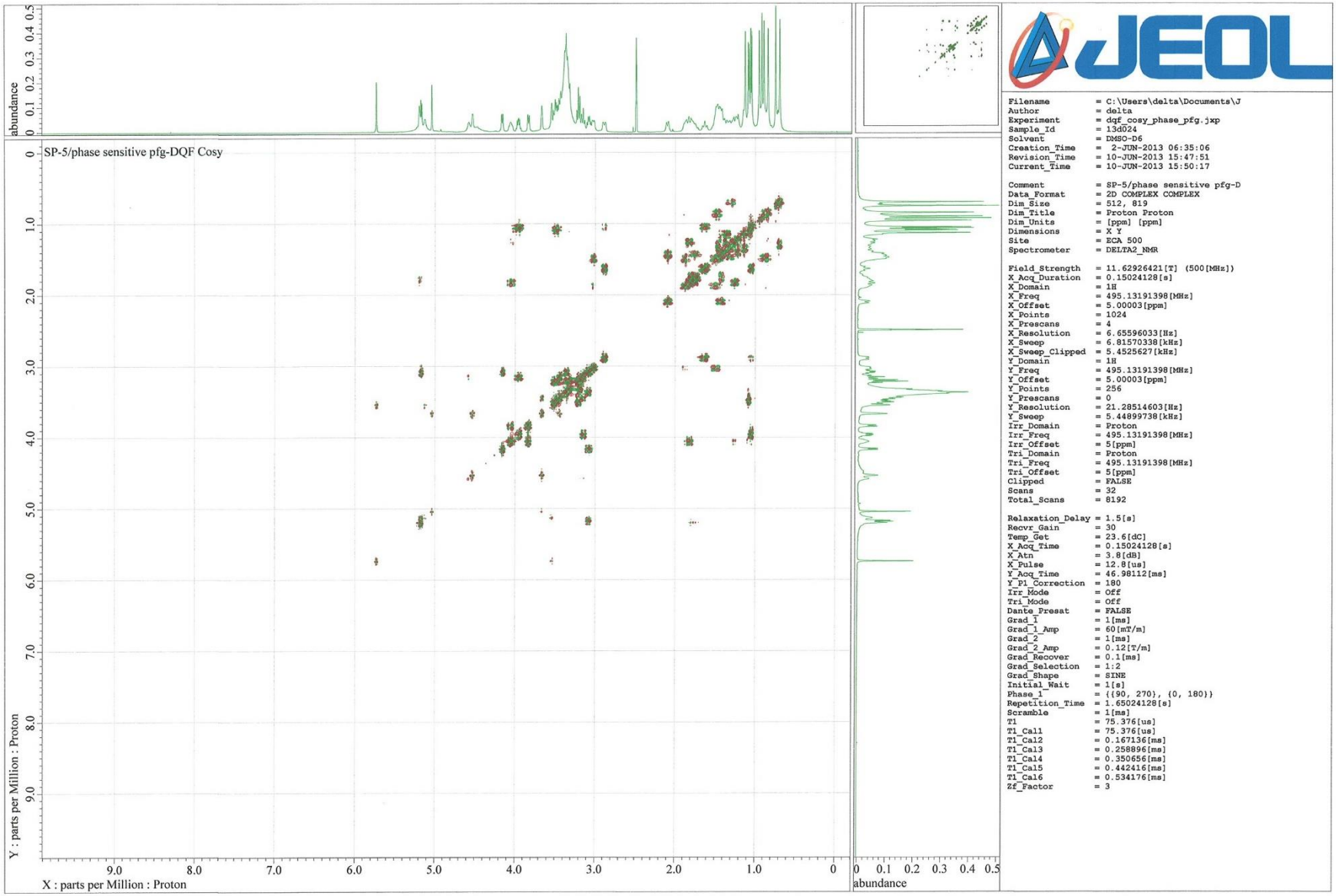

Figure 44. HMQC spectrum of cochalinoside C (**5**) in DMSO-d_6.

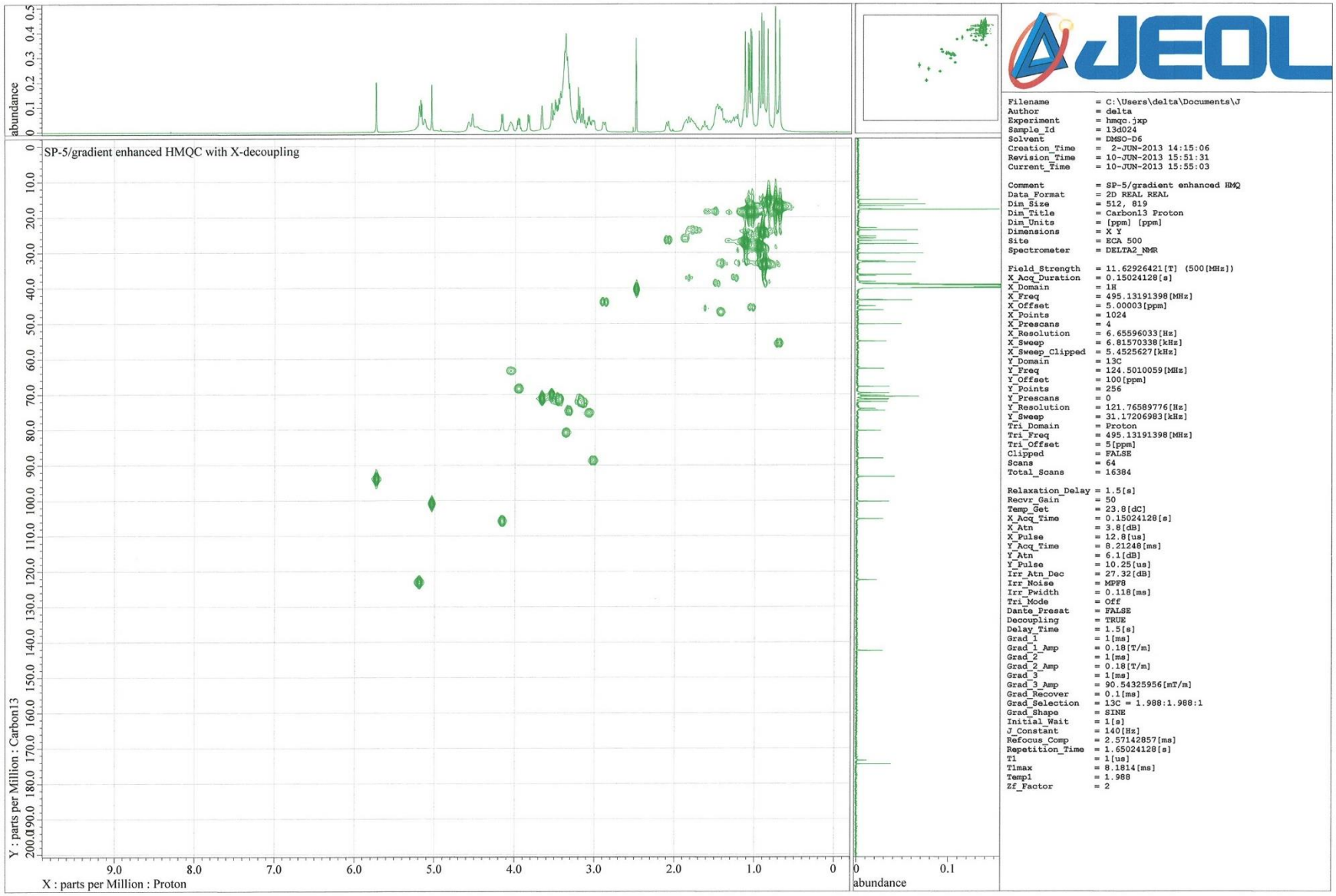

Figure 45. HMBC spectrum of cochalinoside C (**5**) in DMSO-d_6.

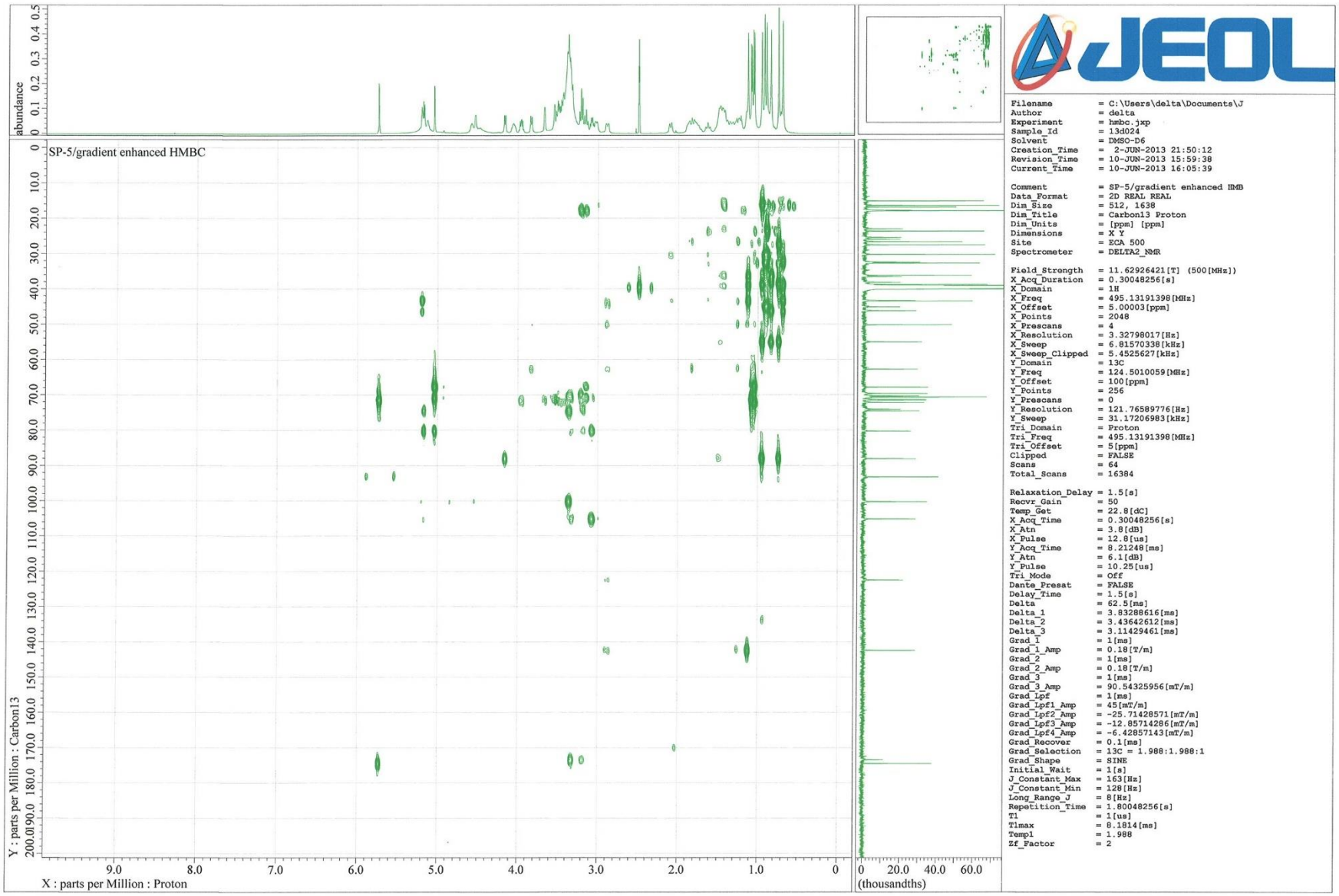

Figure 46. HSQC-TOCSY spectrum of cochalinoside C (**5**) in DMSO-d_6.

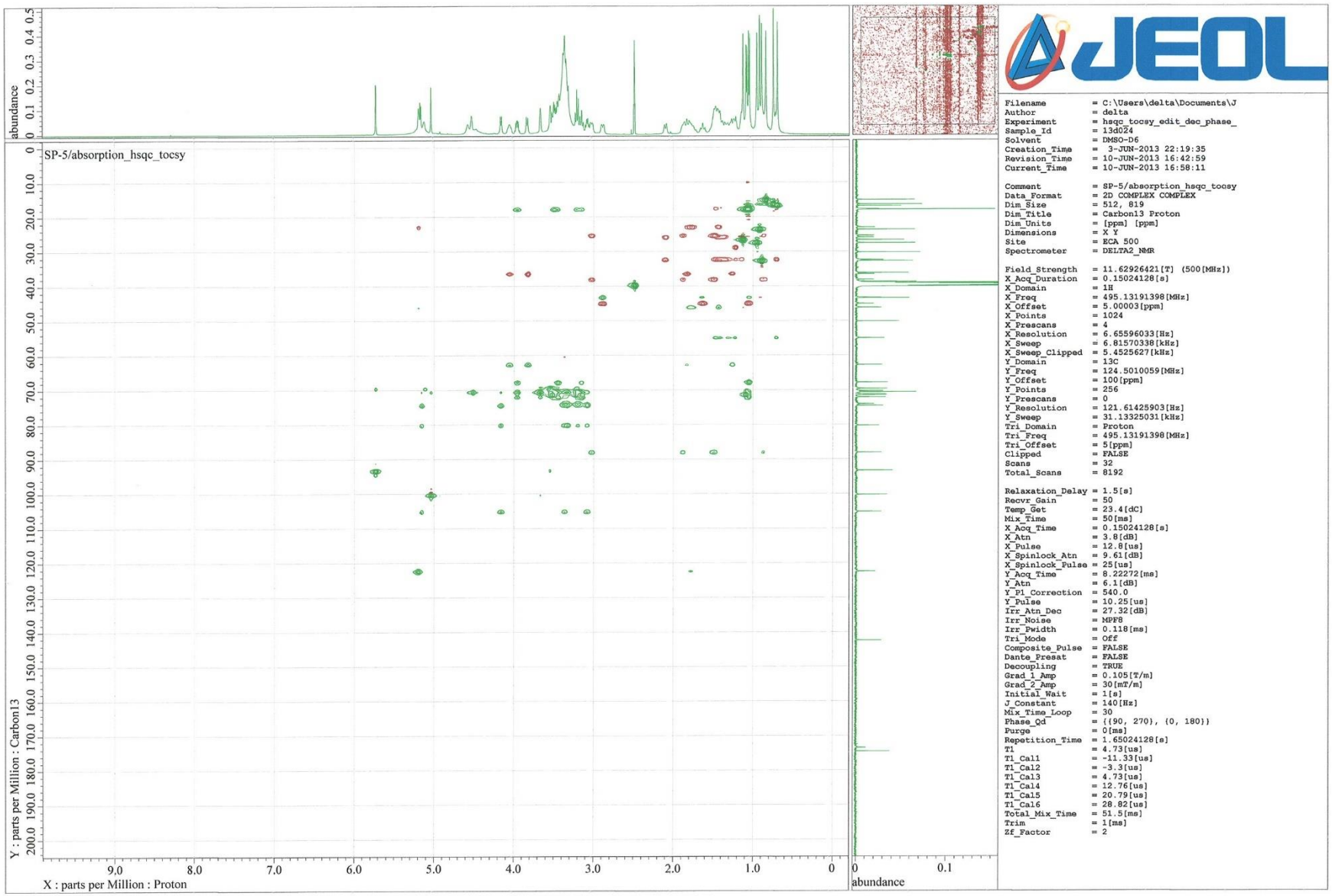

Figure 47. pfg-TOCSY spectrum of cochalinoside C (**5**) in DMSO-d_6.

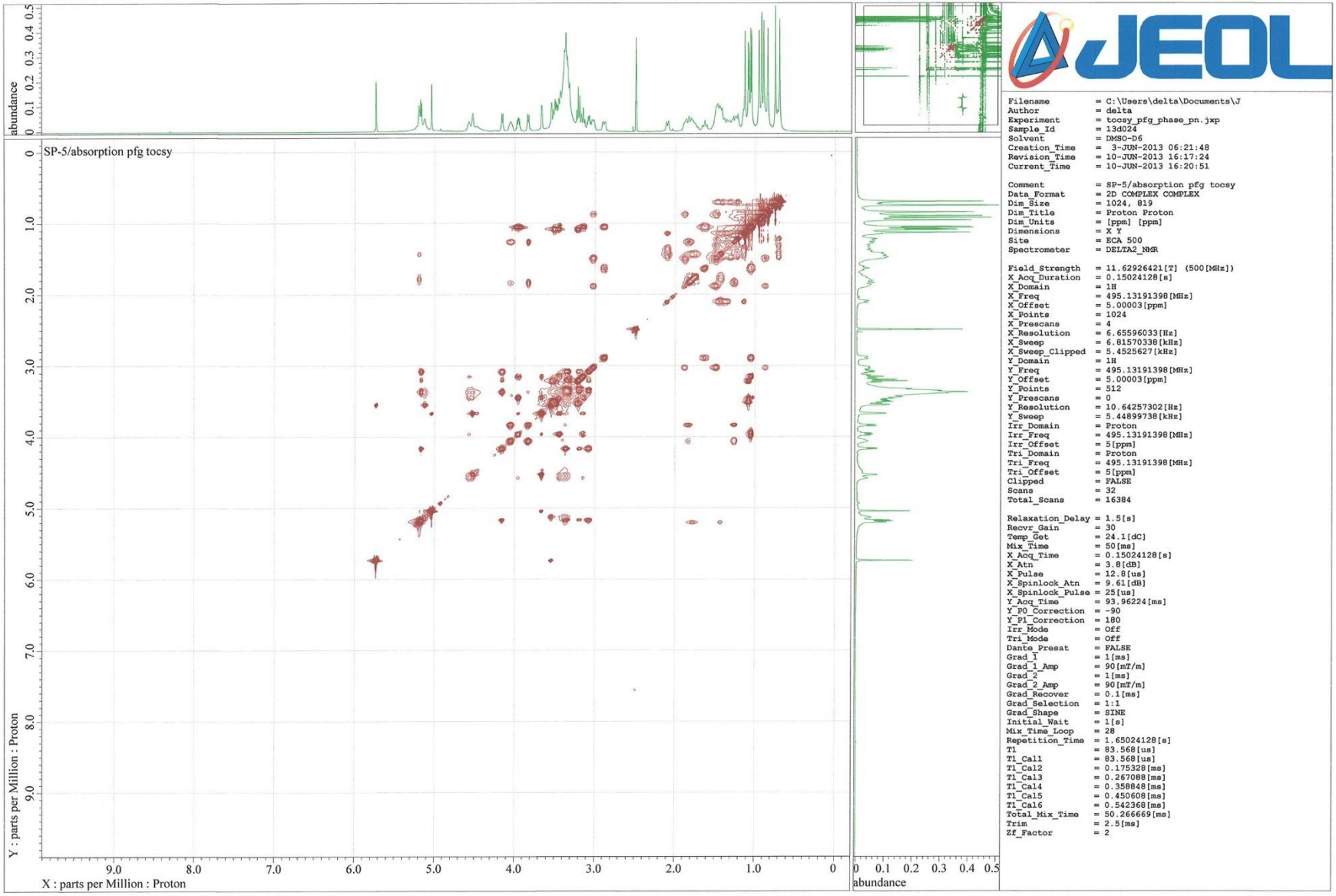

Figure 48. NOESY spectrum of cochalinoside C (**5**) in DMSO-d_6.

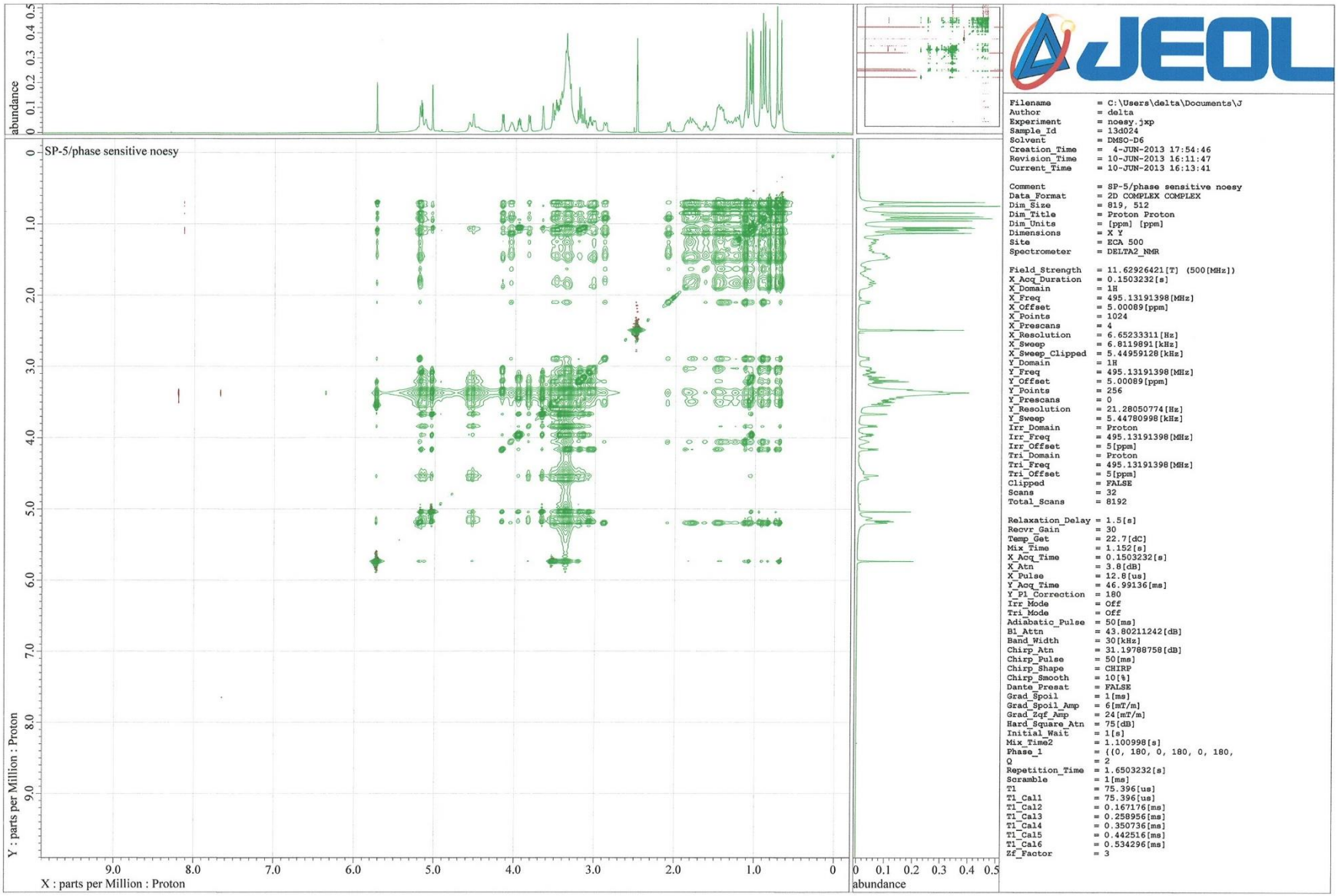

Figure 49. ^{1}H NMR spectrum (500 MHz) of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

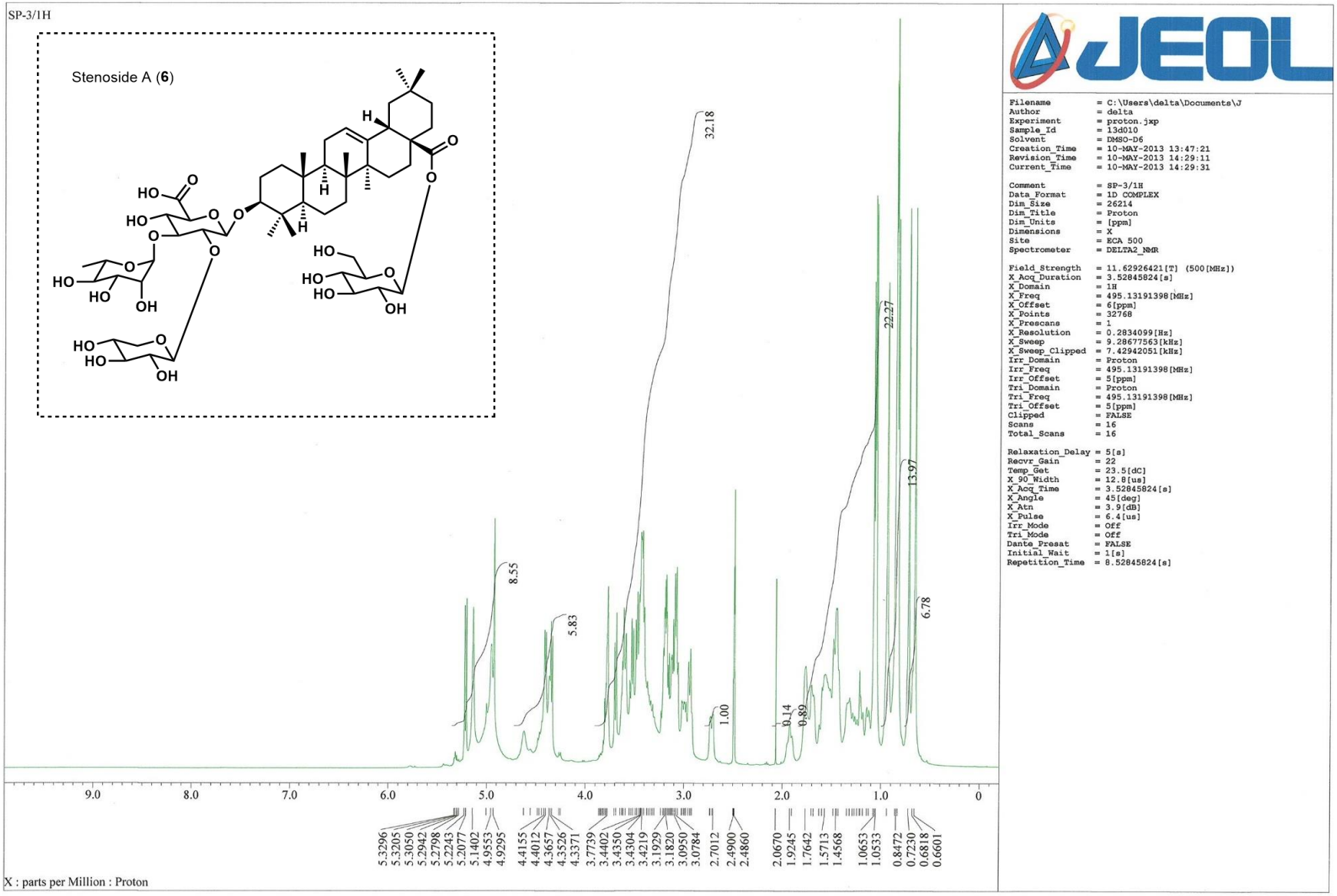

Figure 50. ^{13}C NMR spectrum (125 MHz) of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

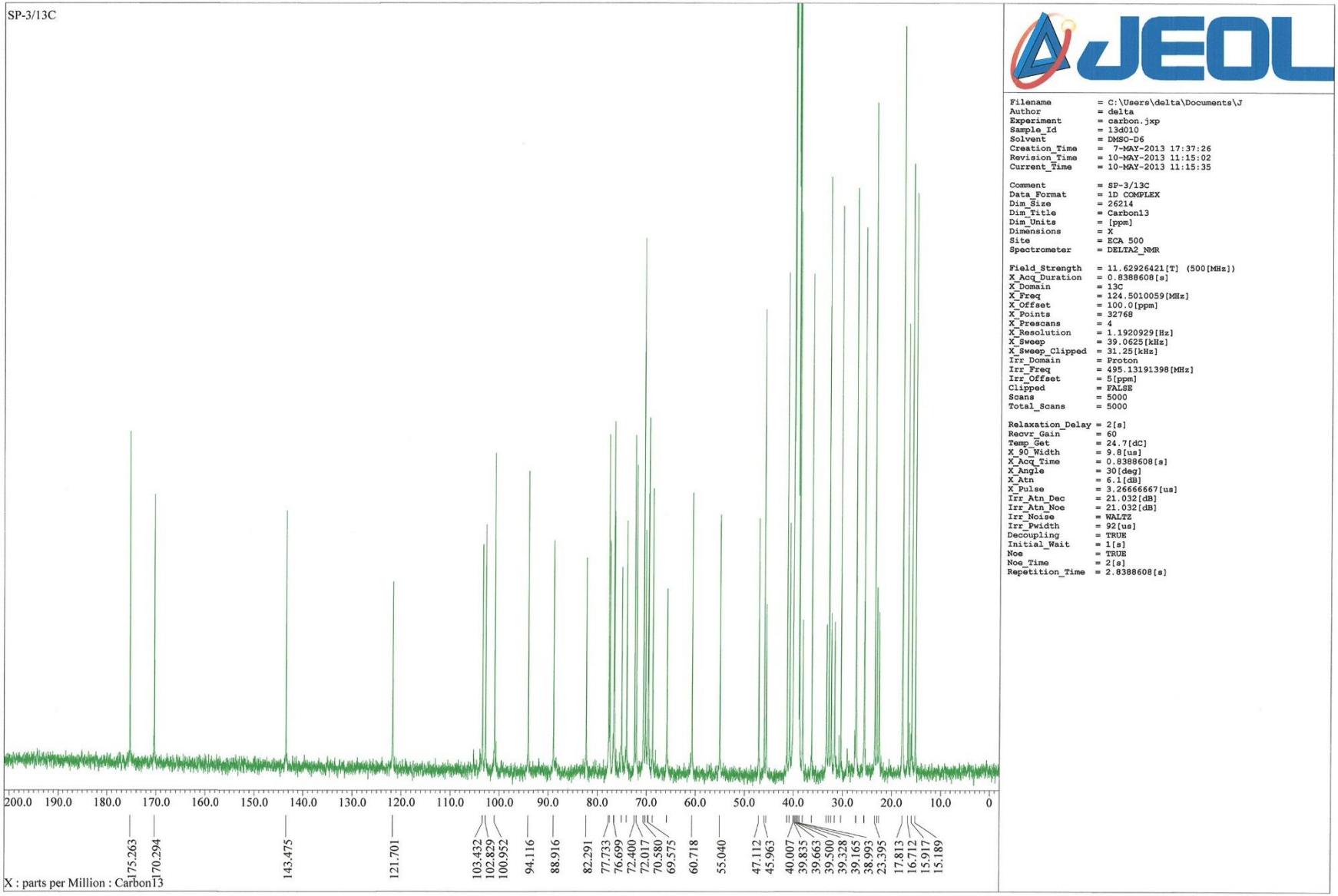

Figure 51. DEPT 90 and 135 pulse NMR spectra of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

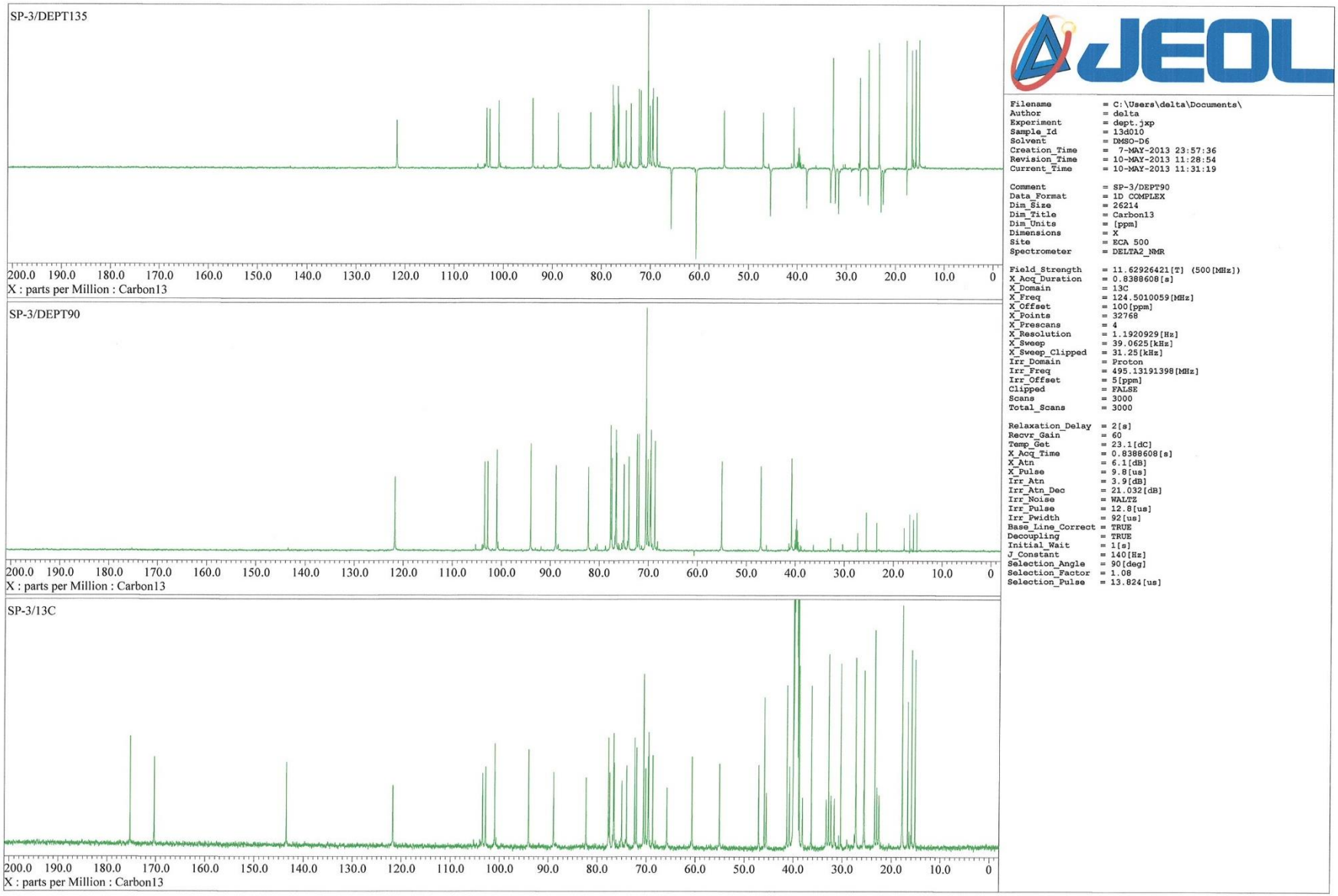

Figure 52. ^{1}H-^{1}H COSY spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

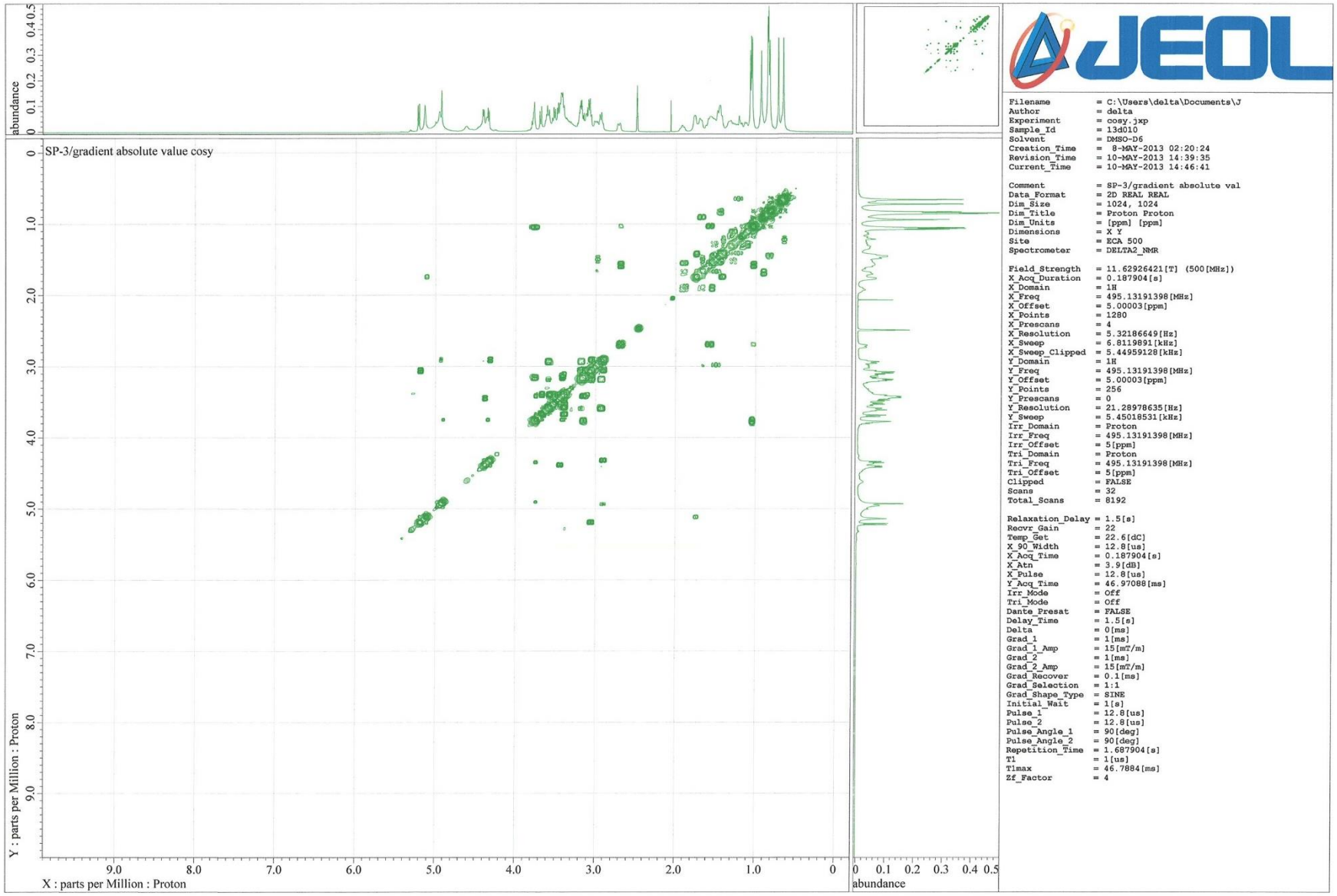

Figure 53. HMQC spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

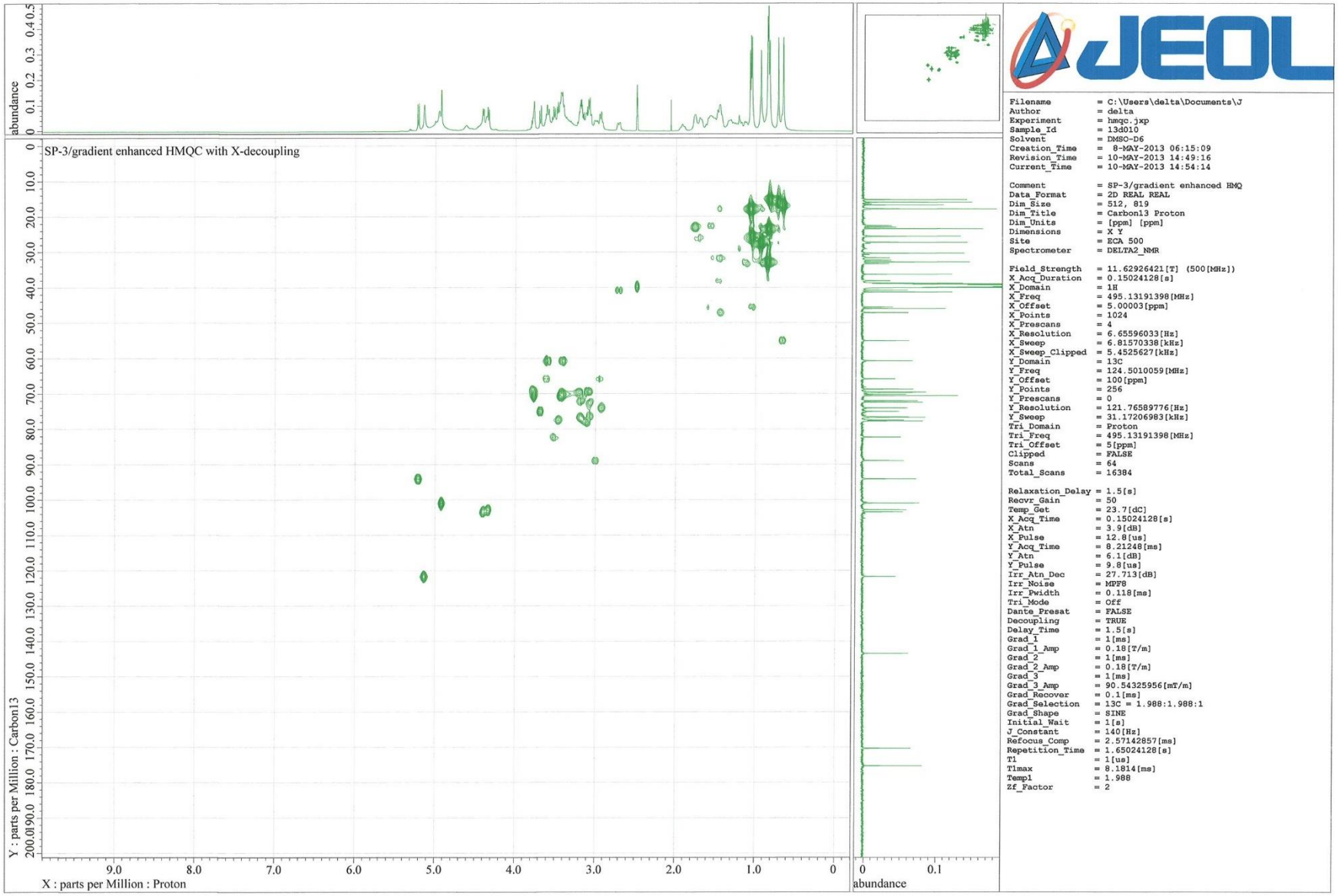

Figure 54. HMBC spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

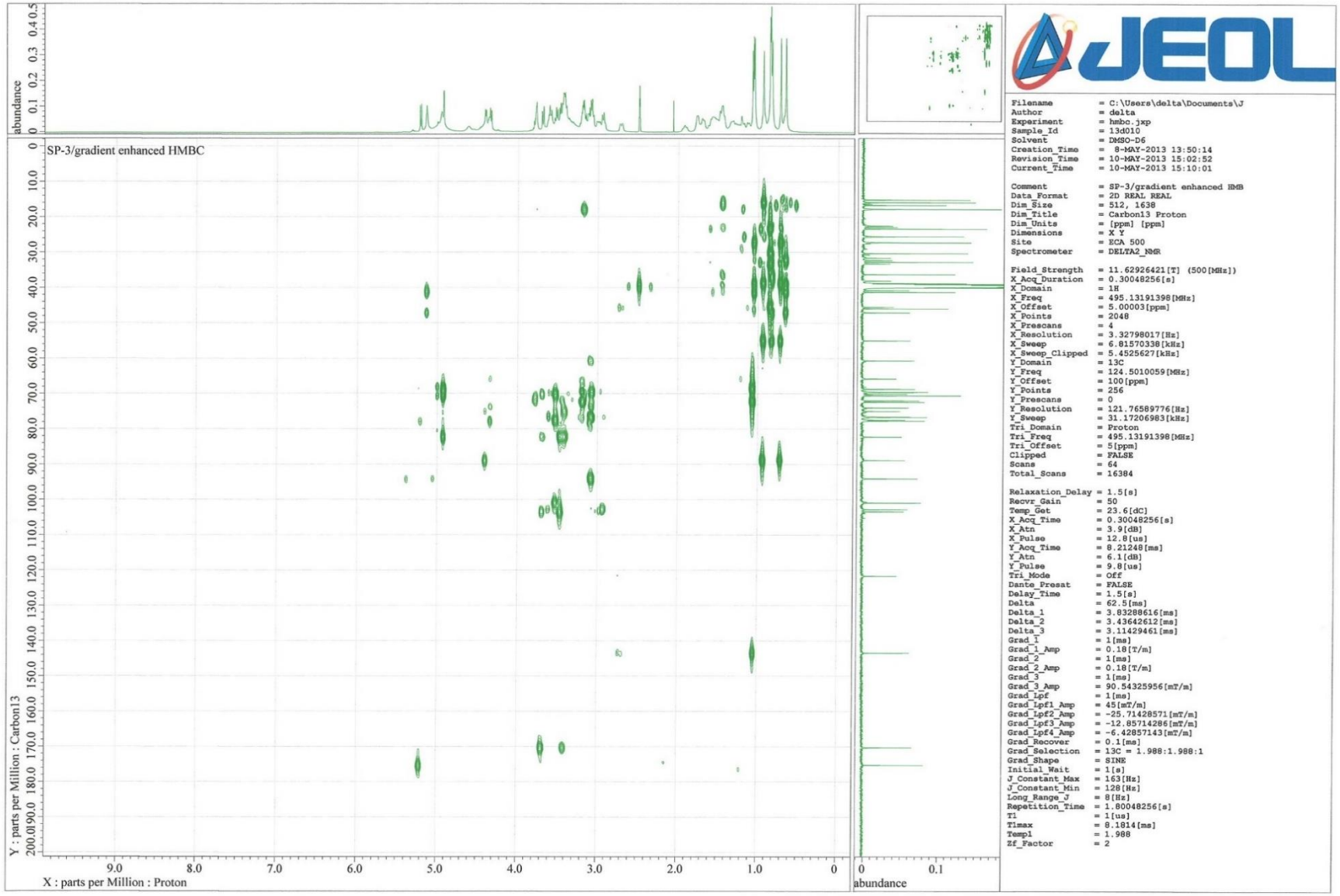

Figure 55. HSQC-TOCSY spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

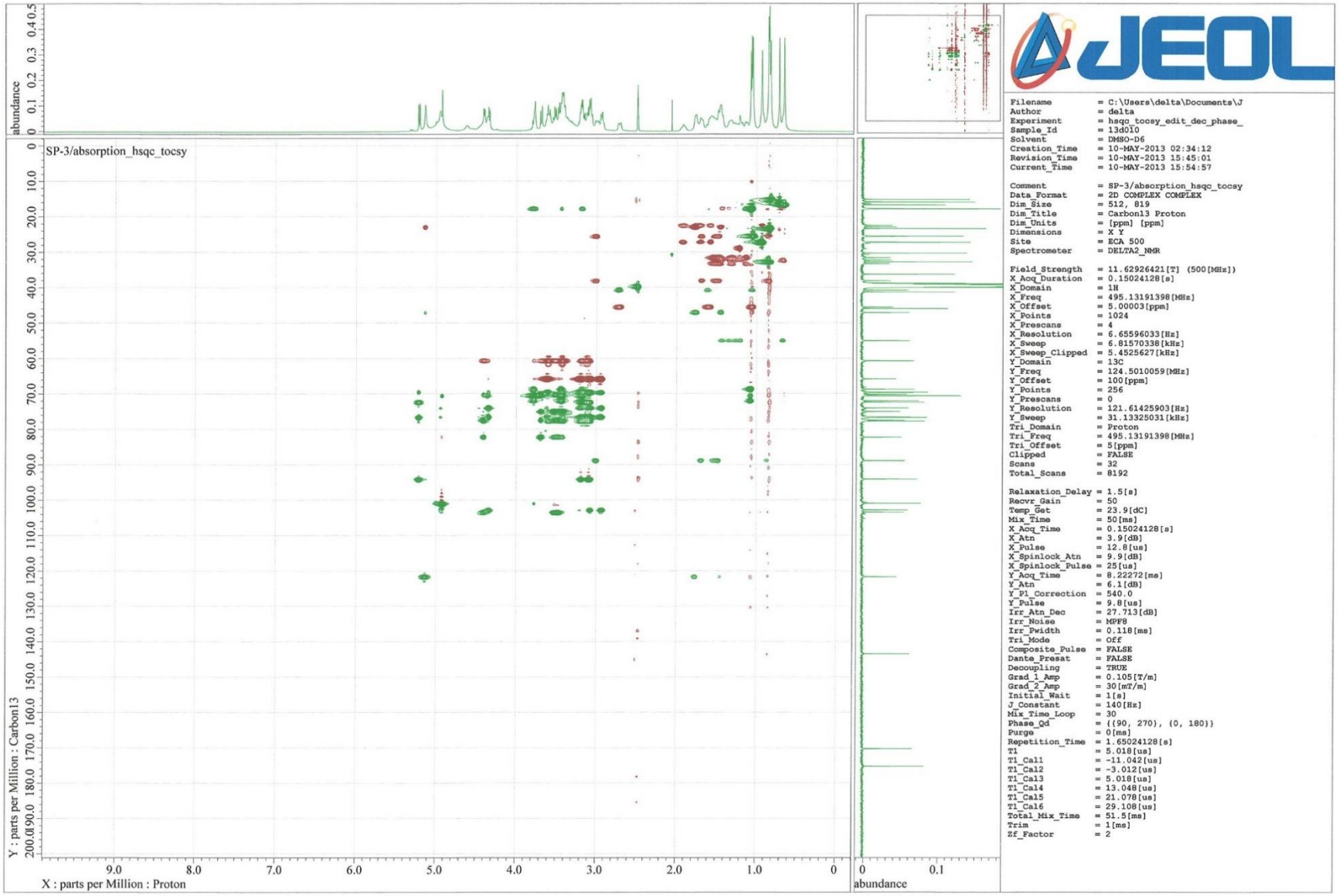

Figure 56. pfg-TOCSY spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

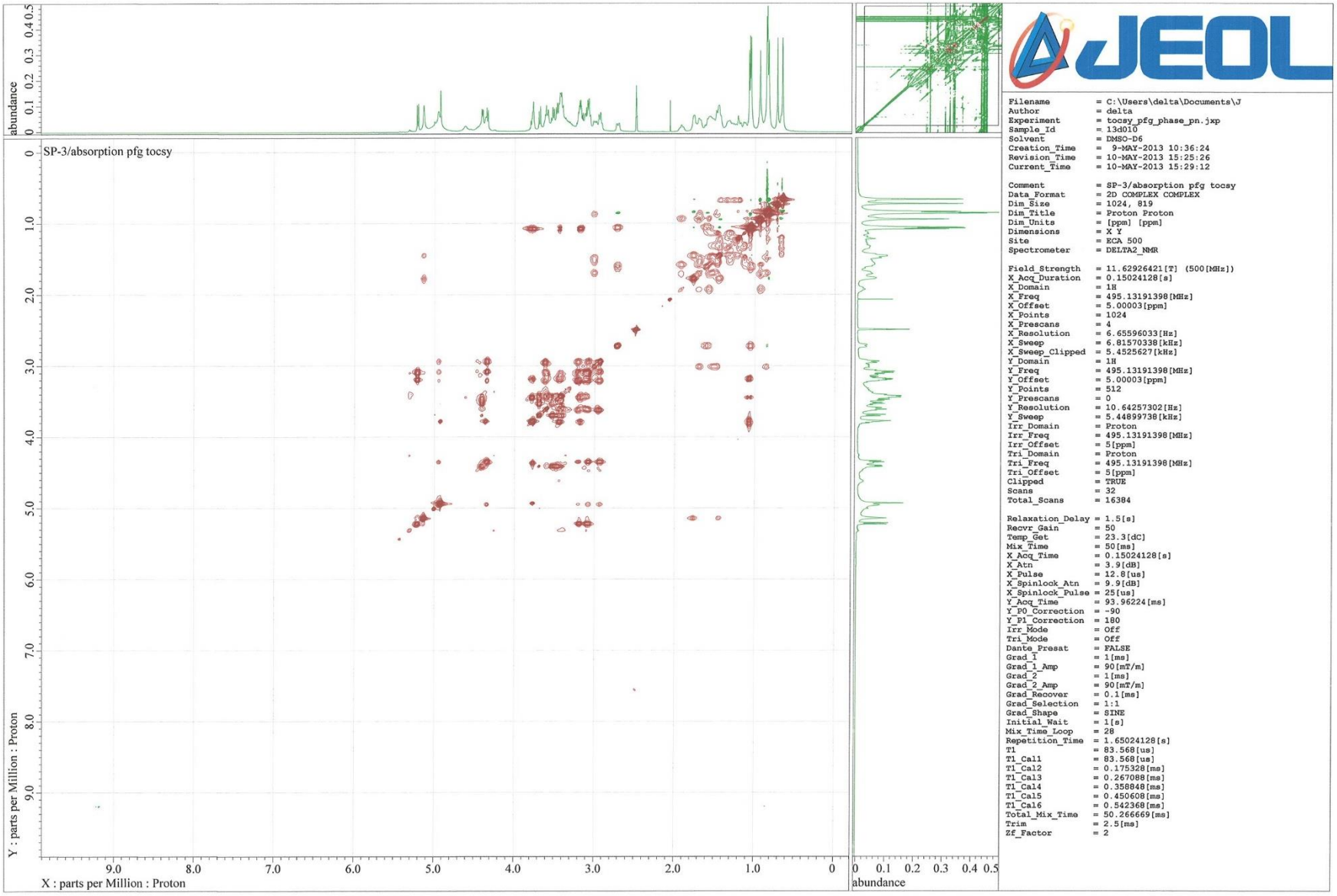

Figure 57. NOESY spectrum of oleanolic acid 3-*O*-β-D-xylopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-β-D-glucuronopyranosyl-28-*O*-β-D-glucopyranoside (**6**) in DMSO-d_6.

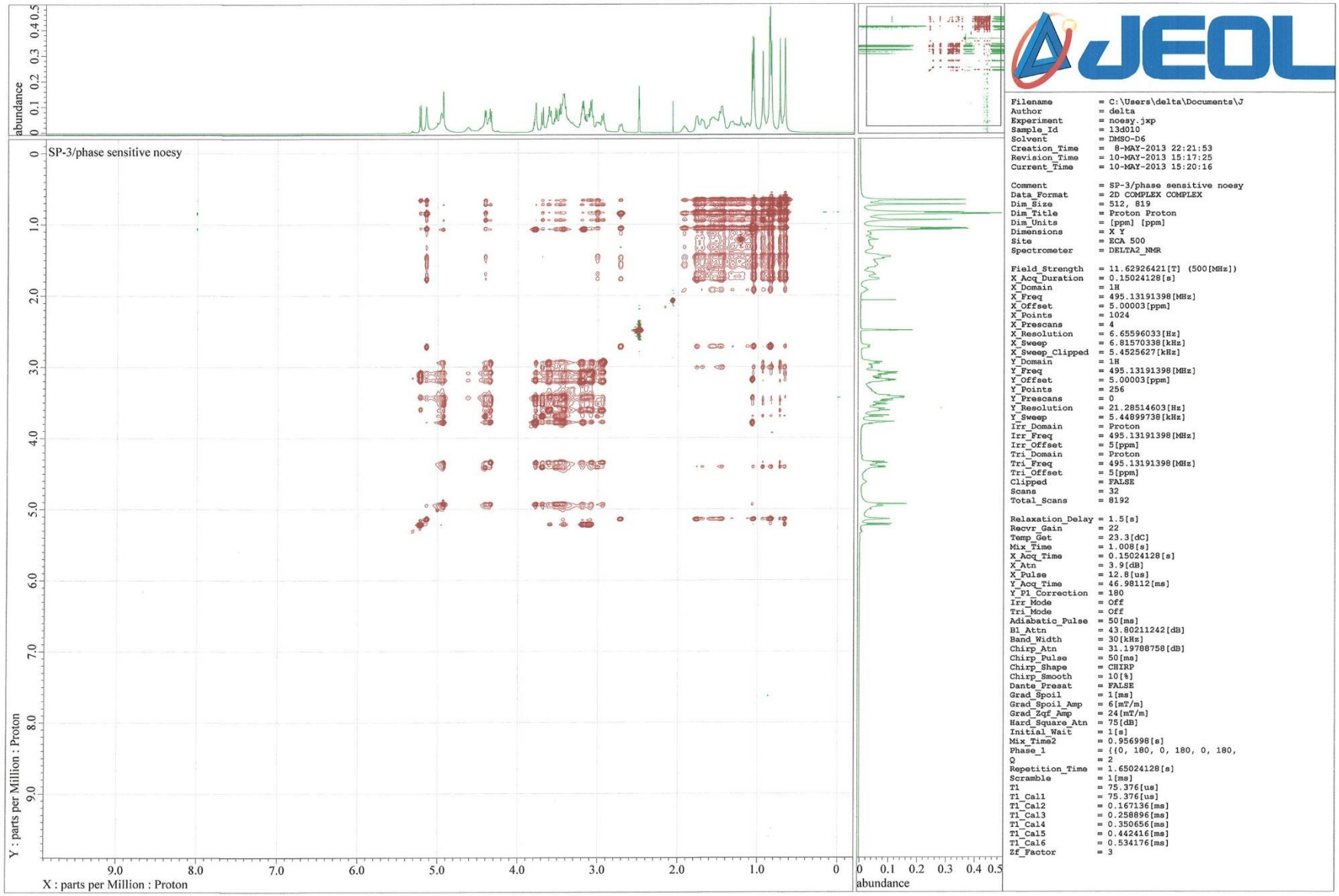

Figure 58. ^{1}H NMR spectrum (500 MHz) of stenoside A (**7**) in DMSO-d_6.

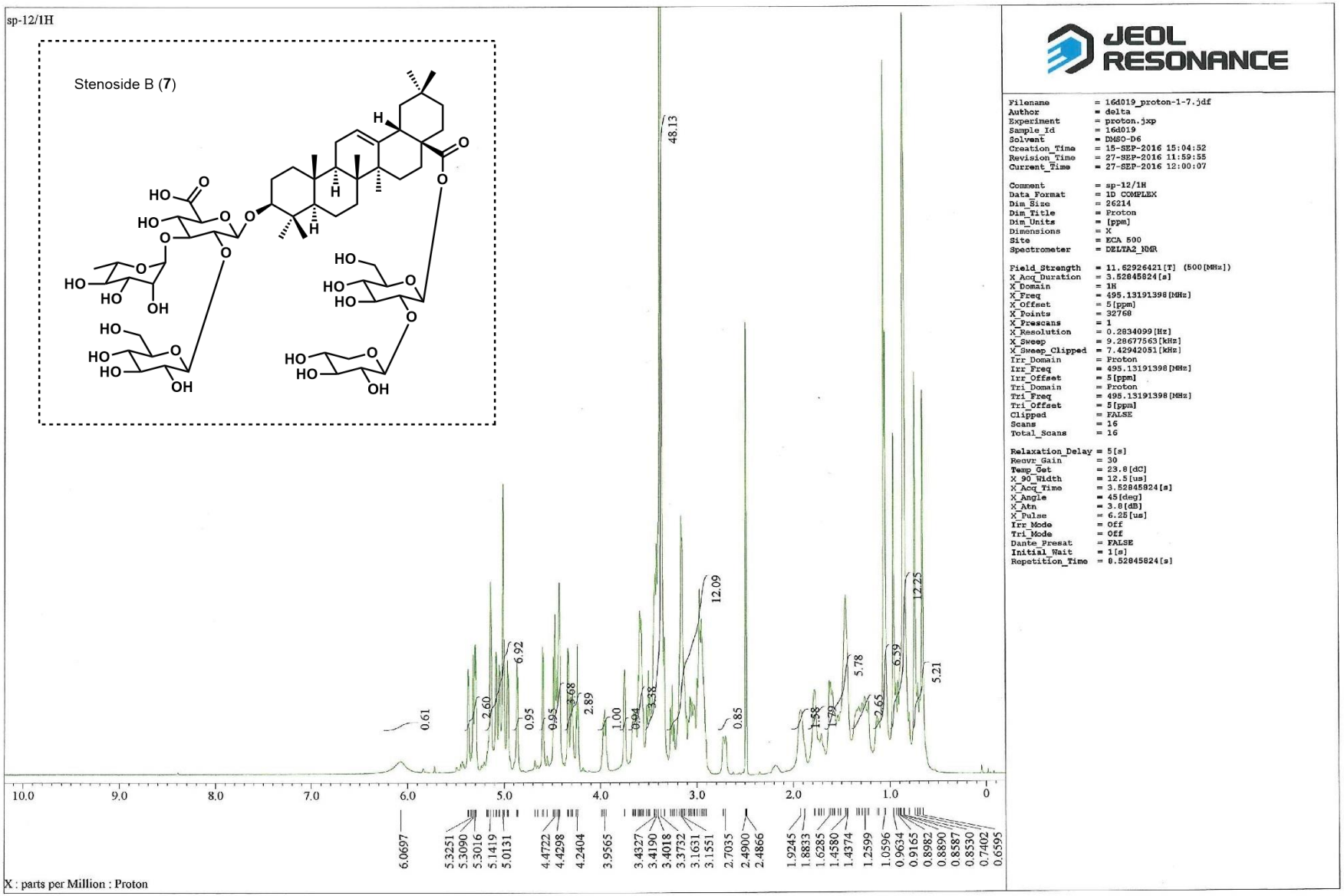

Figure 59. ^{13}C NMR spectrum (125 MHz) of stenoside A (**7**) in DMSO-d_6.

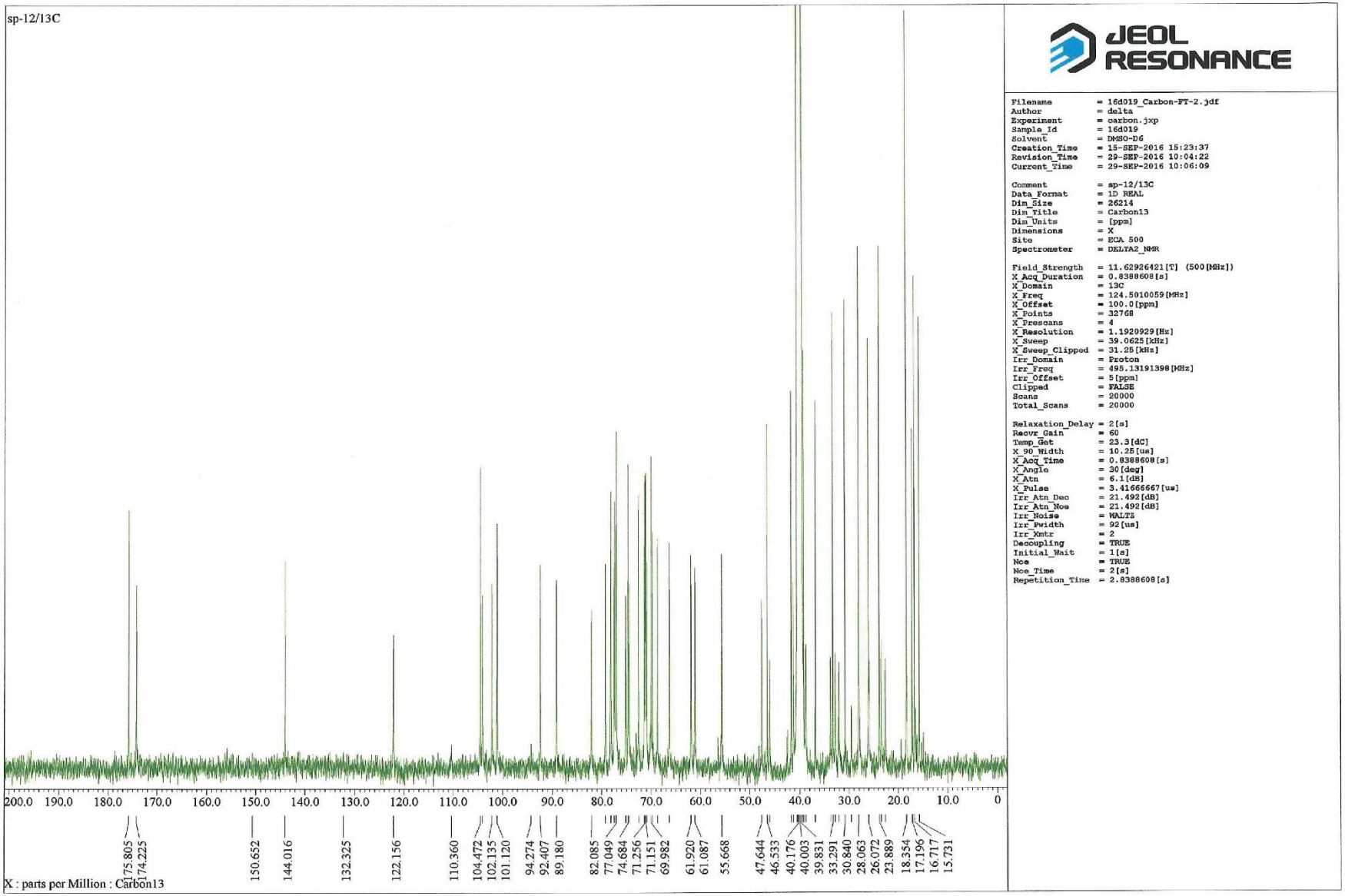

Figure 60. DEPT 90 and 135 pulse NMR spectra of stenoside A (**7**) in DMSO-d_6.

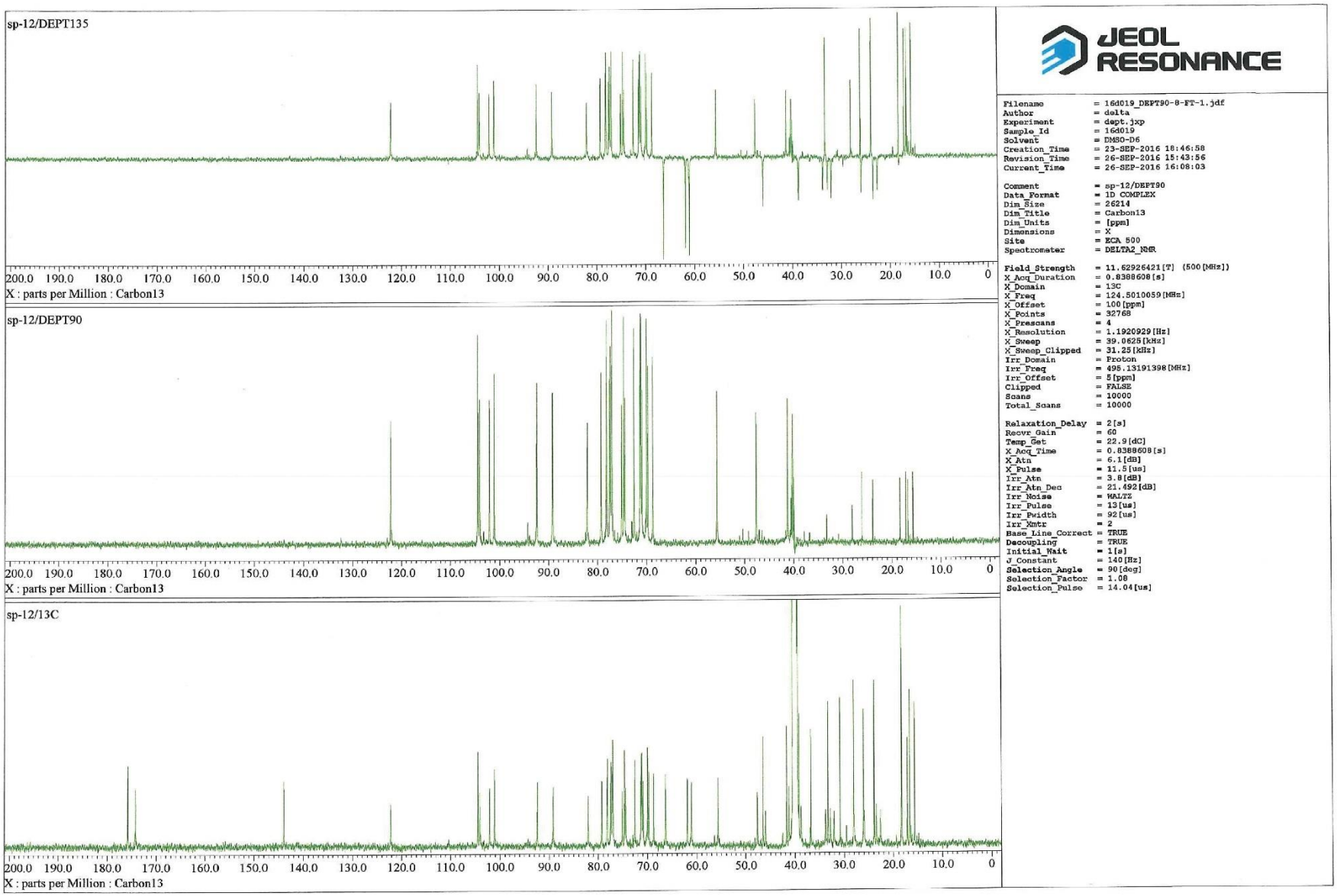

Figure 61. DQF-COSY spectrum of stenoside A (**7**) in DMSO-d_6.

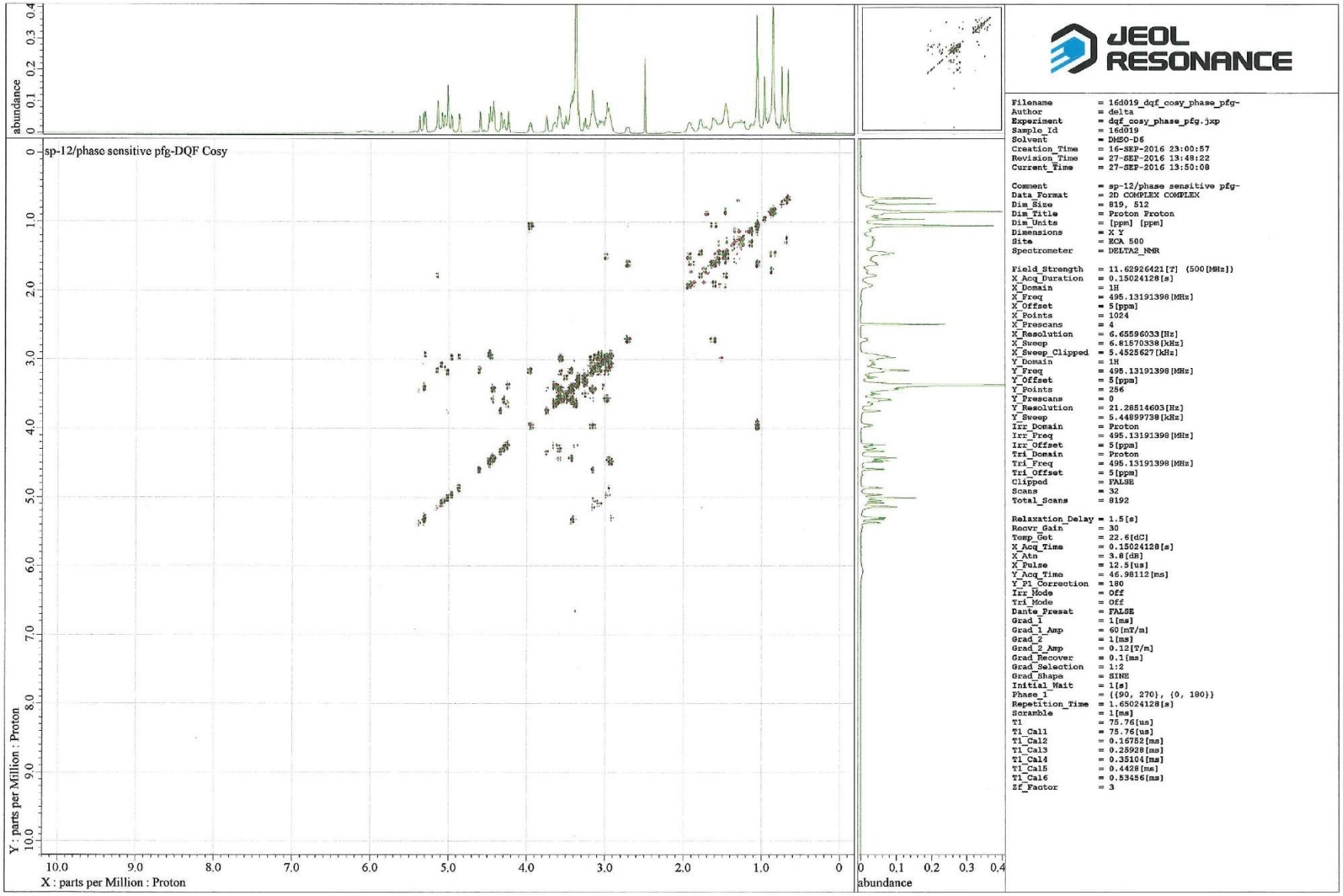

Figure 62. HMQC spectrum of stenoside A (**7**) in DMSO-d_6.

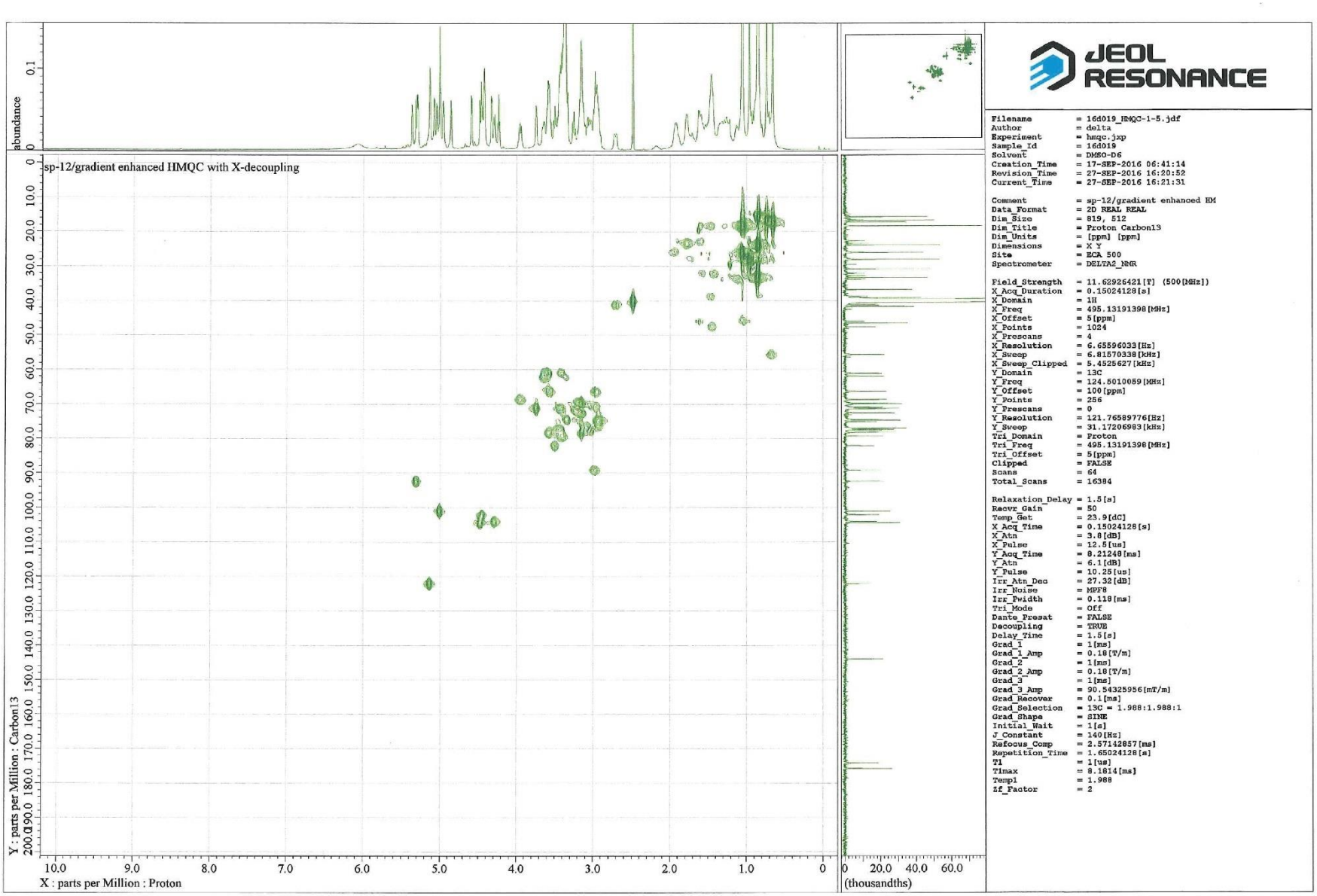

Figure 63. HMBC spectrum of stenoside A (**7**) in DMSO-d_6.

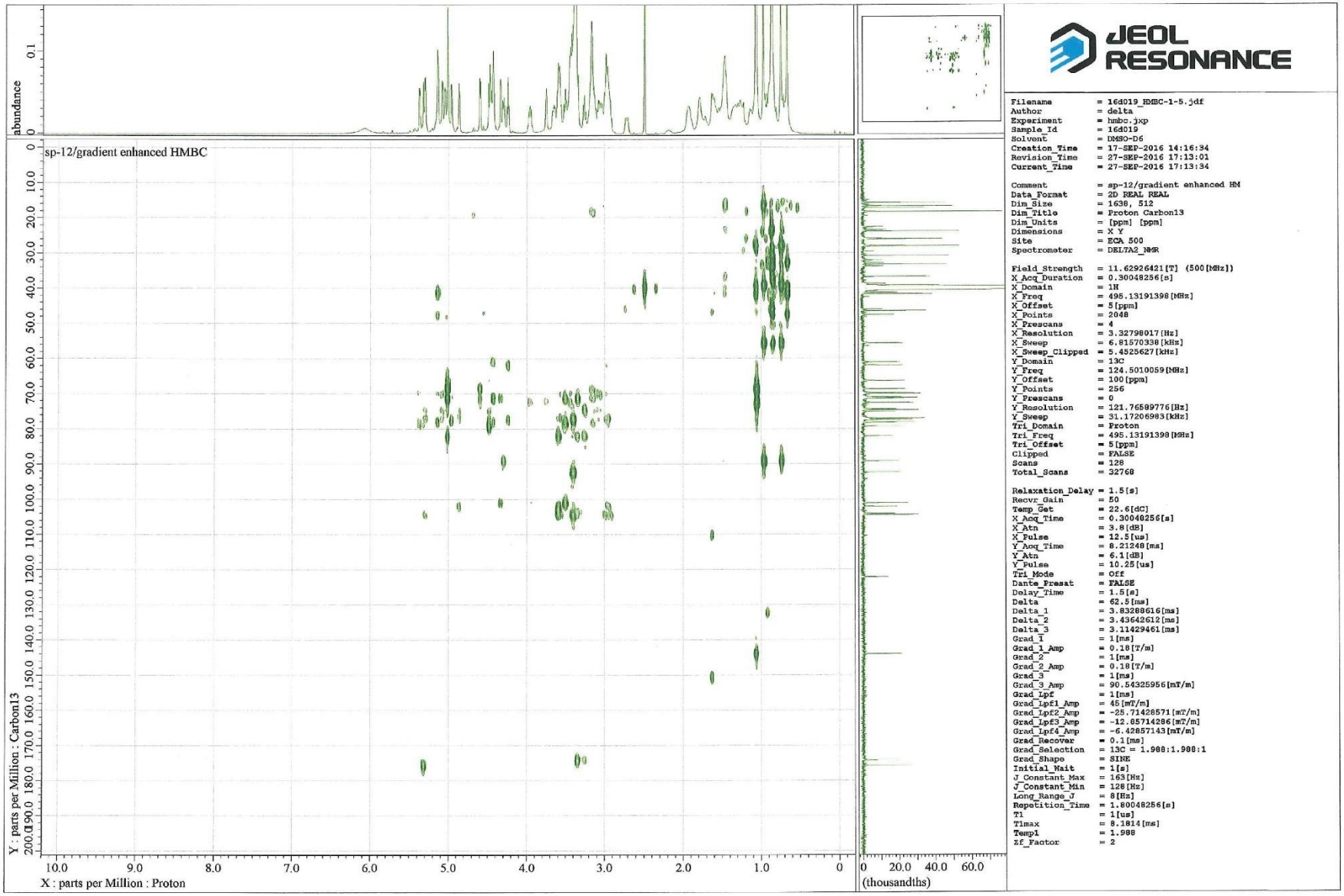

Figure 64. HSQC-TOCSY spectrum of stenoside A (**7**) in DMSO-d_6.

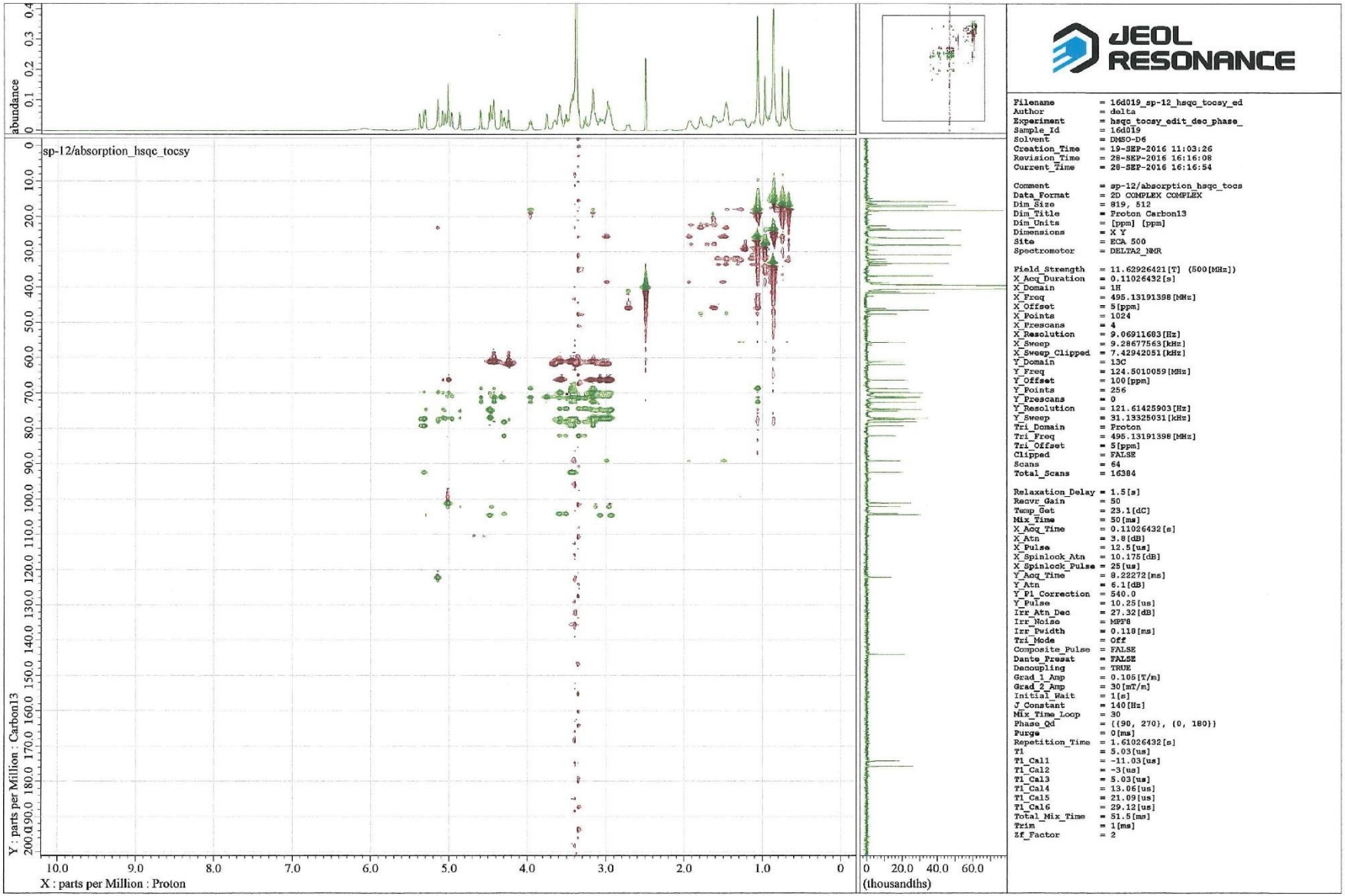

Figure 65. pfg-TOCSY spectrum of stenoside A (**7**) in DMSO-d_6.

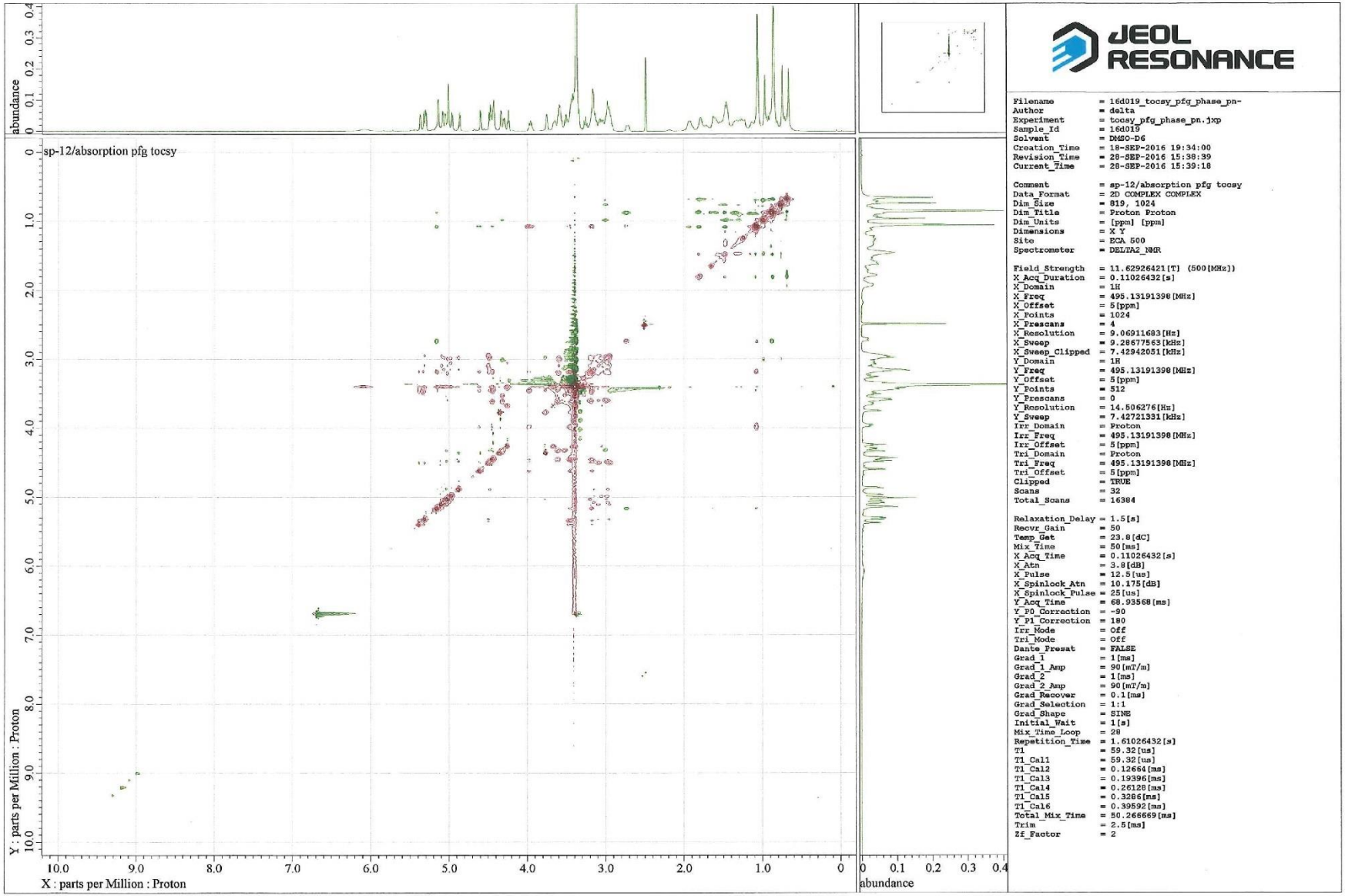

Figure 66. NOESY spectrum of stenoside A (**7**) in DMSO-d_6.