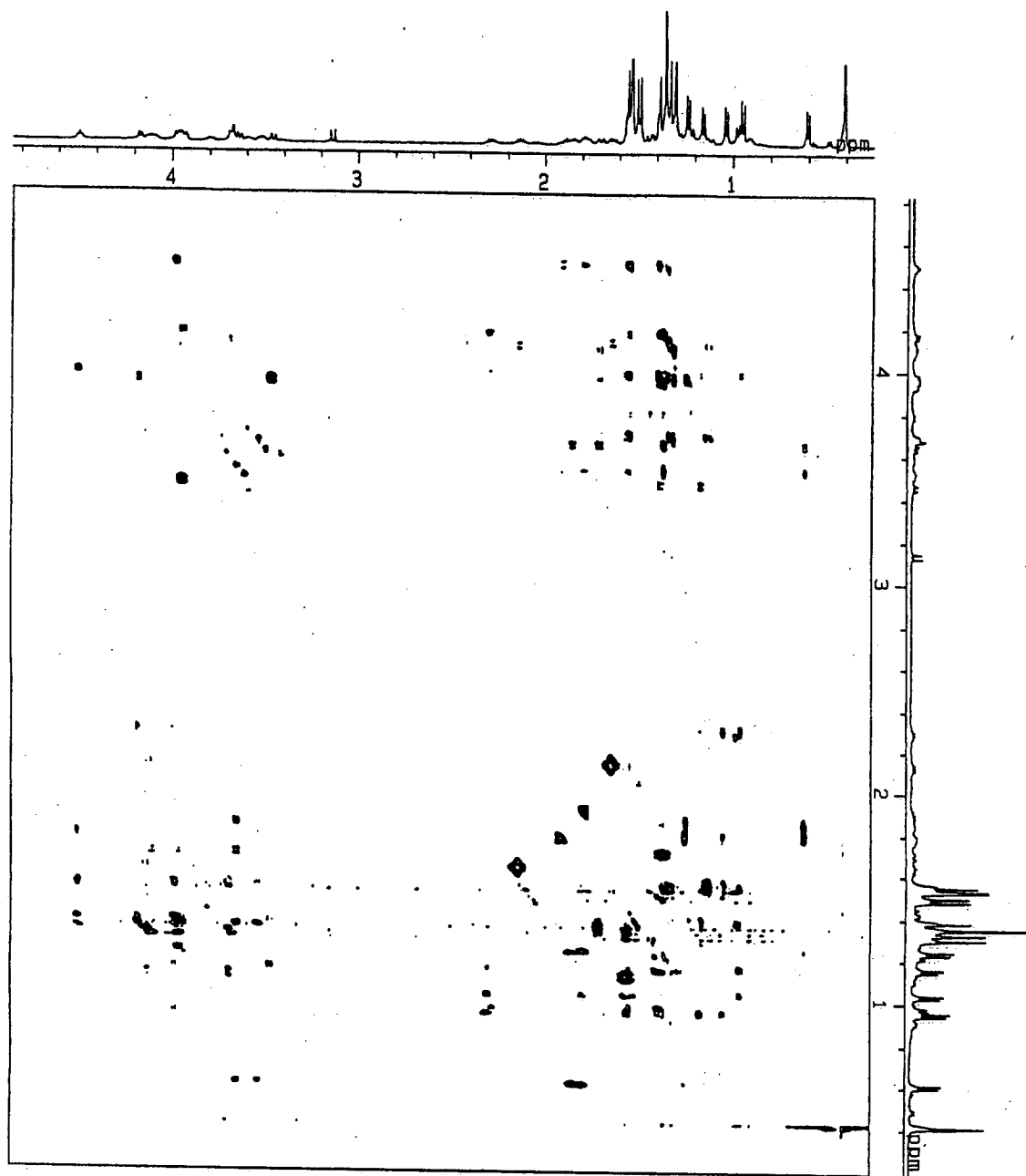


NOESY spectrum of **13** (500 MHz, benzene- d_6)



Summary of NMR data of **13a**)

C No.	$\delta^{13}\text{C}$	H No.	$\delta^1\text{H}$ ($J = \text{Hz}$)	$^1\text{H} - ^1\text{H}$ COSY	HMBC	NOE
1	68.3	1Ha	3.93 m	1Hb, 2H	20	25Me
		1Hb	3.46 (dd 1.5, 6.5)	1Ha, 2H	2, 3, 20, 26	
2	30.5	2H	1.34 m	1Ha,b, 3H, 20Me	3	
3	71.6	3H	4.17 (dd 2.0, 7.0)	2H, 4H	4, 20, 21	25Me
4	38.3	4H	2.30 m	3H, 5H, 21Me	2, 3, 5, 21	
5	74.3	5H	3.98 (dd 2.0, 9.0)	4H, 6H	4, 21, 22	28Me
6	32.8	6H	1.55 m	5H, 7H, 22Me		
7	70.2	7H	4.49 m	6H, 8Ha,b	8, 22	28Me
8	36.4	8Ha	1.90 m	7H, 8Hb, 9H	6, 7, 9	
		8Hb	1.77 m	7H, 8Ha, 9H	9	
9	72.0	9H	3.53 m	8Ha,b, 10H	7	31Me
10	35.0	10H	1.80 m	9H, 11H, 23Me	11	
11	73.1	11H	3.64 (dd 2.0, 8.0)	10H, 12H	12, 23	31Me
12	39.8	12H	1.84 m	11H, 13H, 24Me	13, 24	
13	71.6	13H	3.95 m	12H, 14Ha,b	24	34Me
14	35.0	14Ha	1.70 m	13H, 14Hb, 15H	13, 15, 16	
		14Hb	1.47 m	13H, 14Ha, 15H		
15	65.5	15H	4.09 m	14Ha,b, 16Ha,b		34Me
16	44.1	16Ha	2.14 m	15H, 16Hb, 17H	14, 15, 18	
		16Hb	1.63 m	15H, 16Ha, 17H	14, 15	
17	65.5	17H	4.13 (dd 2.5, 6.5)	16Ha,b, 18Ha,b		37Me
18	31.5	18Ha	1.55 m	17H, 18Hb, 19Ha,b	17	
		18Hb	1.33 m	17H, 18Ha, 19Ha,b		
19	59.8	19Ha	3.68 m	18Ha,b, 19Hb	18, 38	37Me
		19Hb	3.69 m	18Ha,b, 19Ha	18	
20	13.0	20Me	1.16 (d 7.0)	2H	1, 2, 3	
21	10.1	21Me	0.95 (d 7.5)	4H	3, 4, 5	
22	6.1	22Me	1.03 (d 7.0)	6H	5, 6, 7	
23	11.6	23Me	0.61 (d 6.5)	10H	9, 10, 11	
24	9.6	24Me	1.24 (d 6.5)	12H	11, 12, 13	
25	19.6	25Me	1.36 s		26	1H, 3H
26	98.6					
27	30.7	27Me	1.55 s		26	5H, 7H
28	19.8	28Me	1.39 s		29	
29	98.7					
30	30.5	30Me	1.54 s		29	
31	19.8	31Me	1.36 s		32	9H, 11H
32	97.7					
33	30.5	33Me	1.49 s		32	
34	20.0	34Me	1.30 s		35	13H, 15H
35	98.7					
36	30.5	36Me	1.50 s		35	
37	19.6	37Me	1.33 s		38	17H, 19Ha,b
38	98.2					
39	30.5	39Me	1.53 s		38	

a) Spectra were obtained in benzene- d_6 .