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## **APPENDIX**

# สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

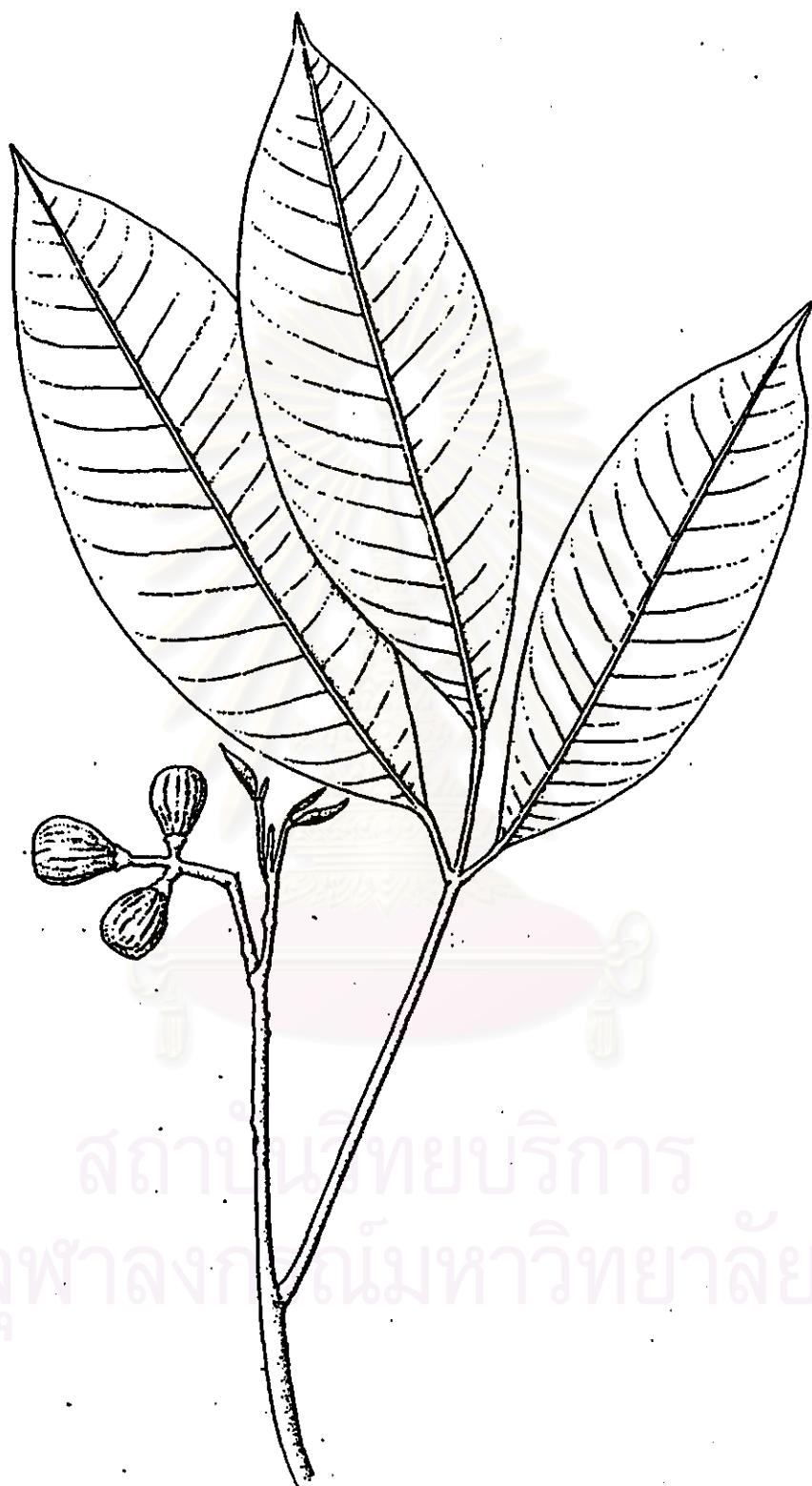


Figure 1 *Aglaia chittagonga* Miq.

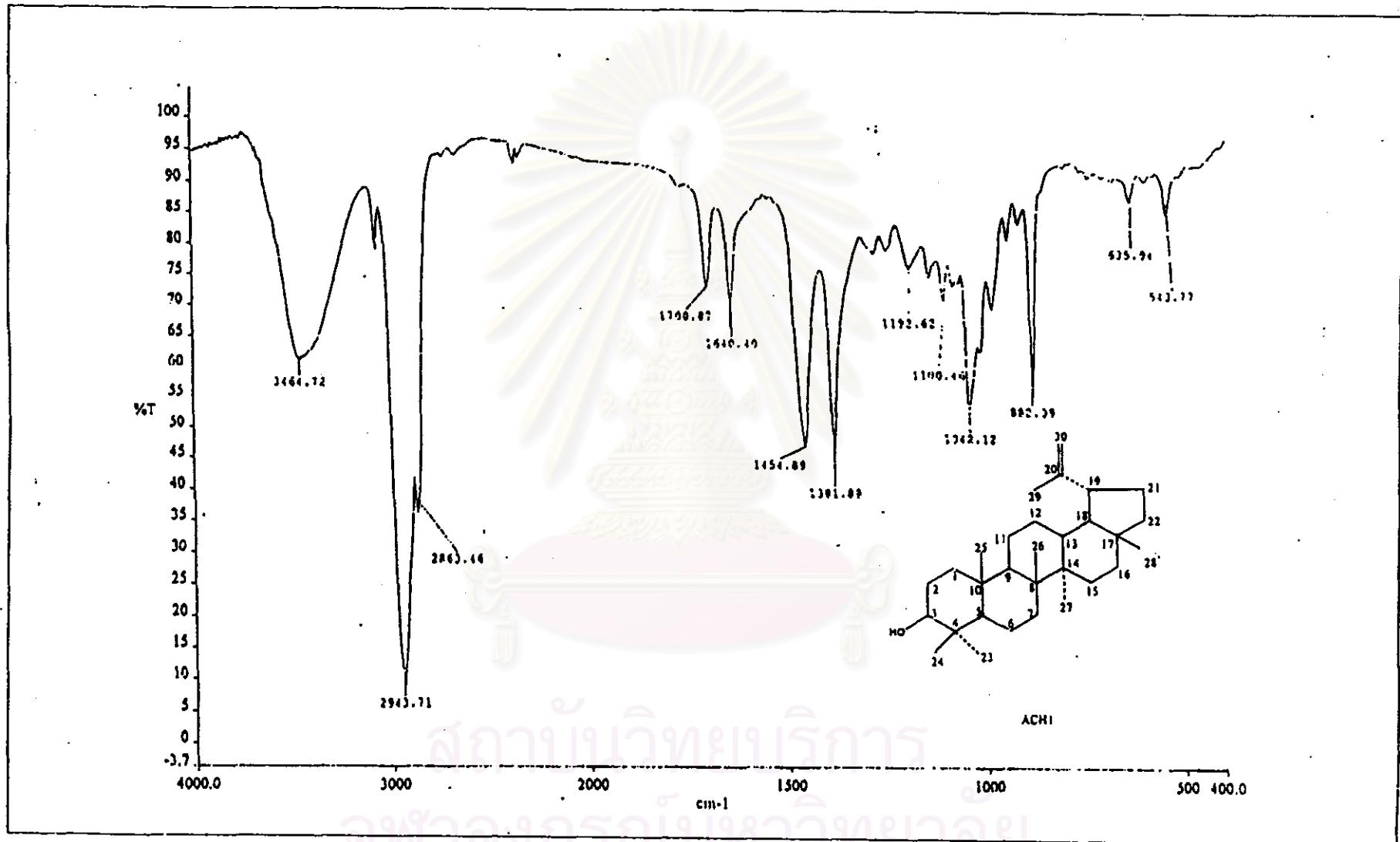


Figure 8 IR spectrum of compound ACH1 (KBr disc)

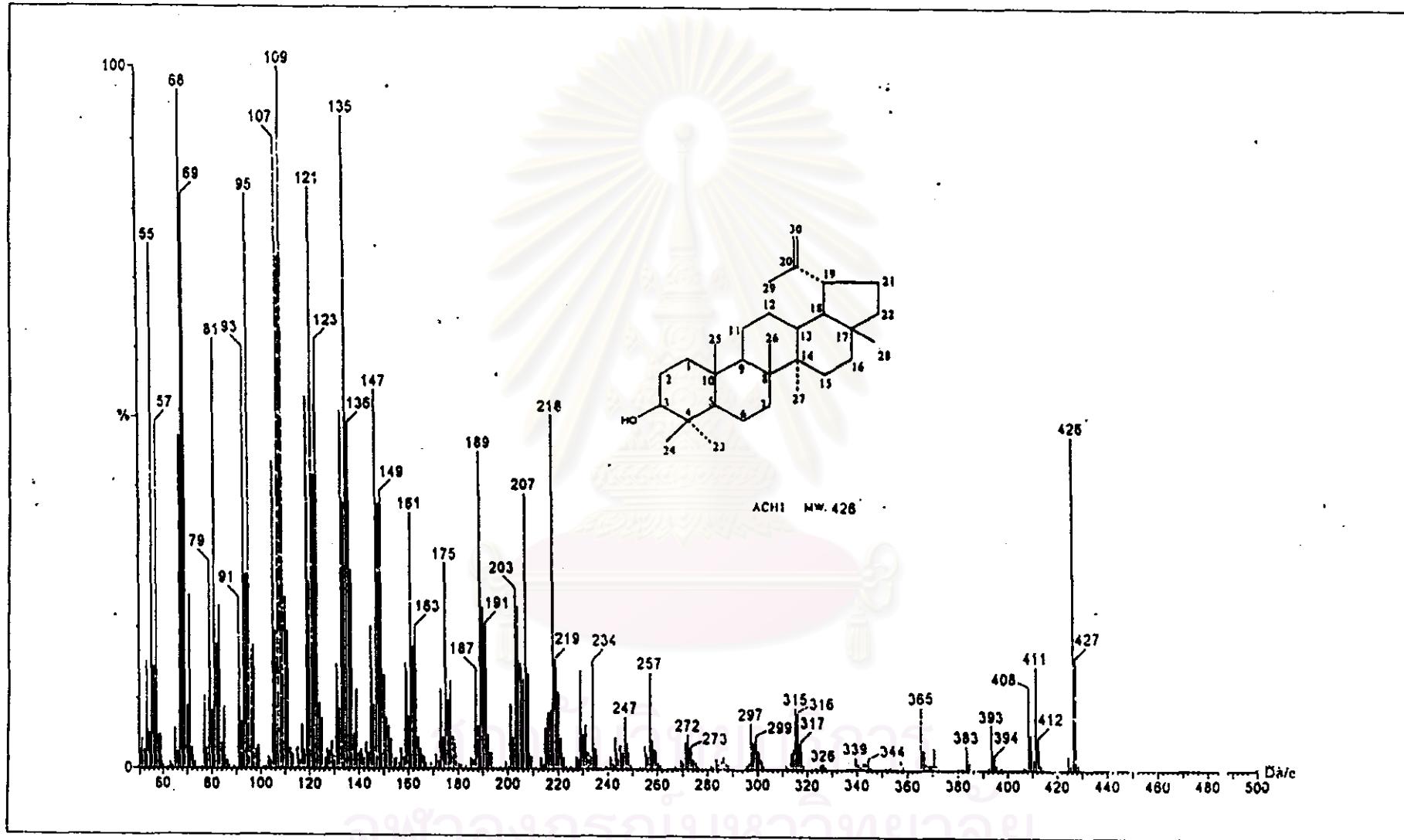


Figure 9 EIMS spectrum of compound ACH1

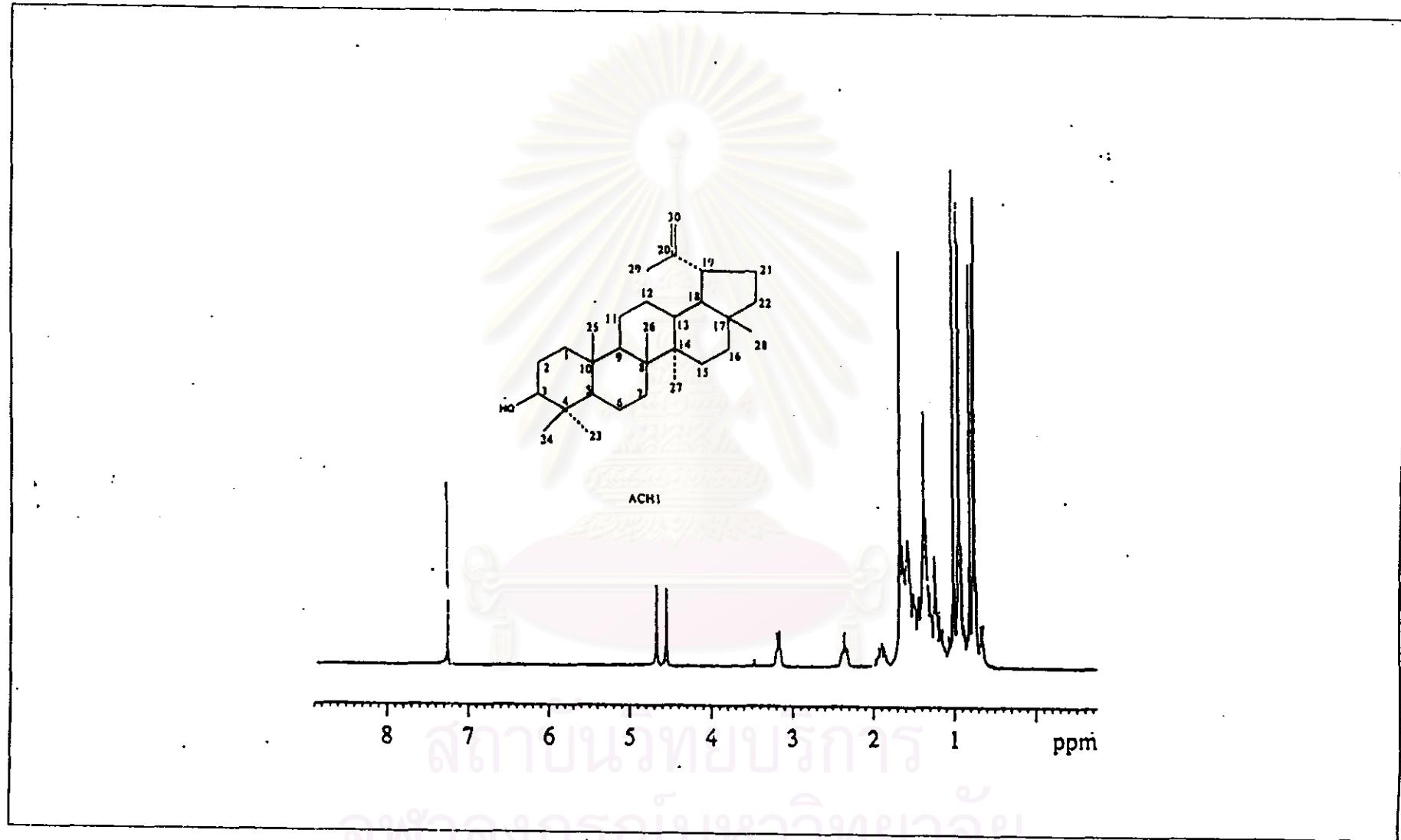


Figure 10 The 300 MHz  $^1\text{H}$  NMR spectrum of compound ACH1 (in  $\text{CDCl}_3$ )

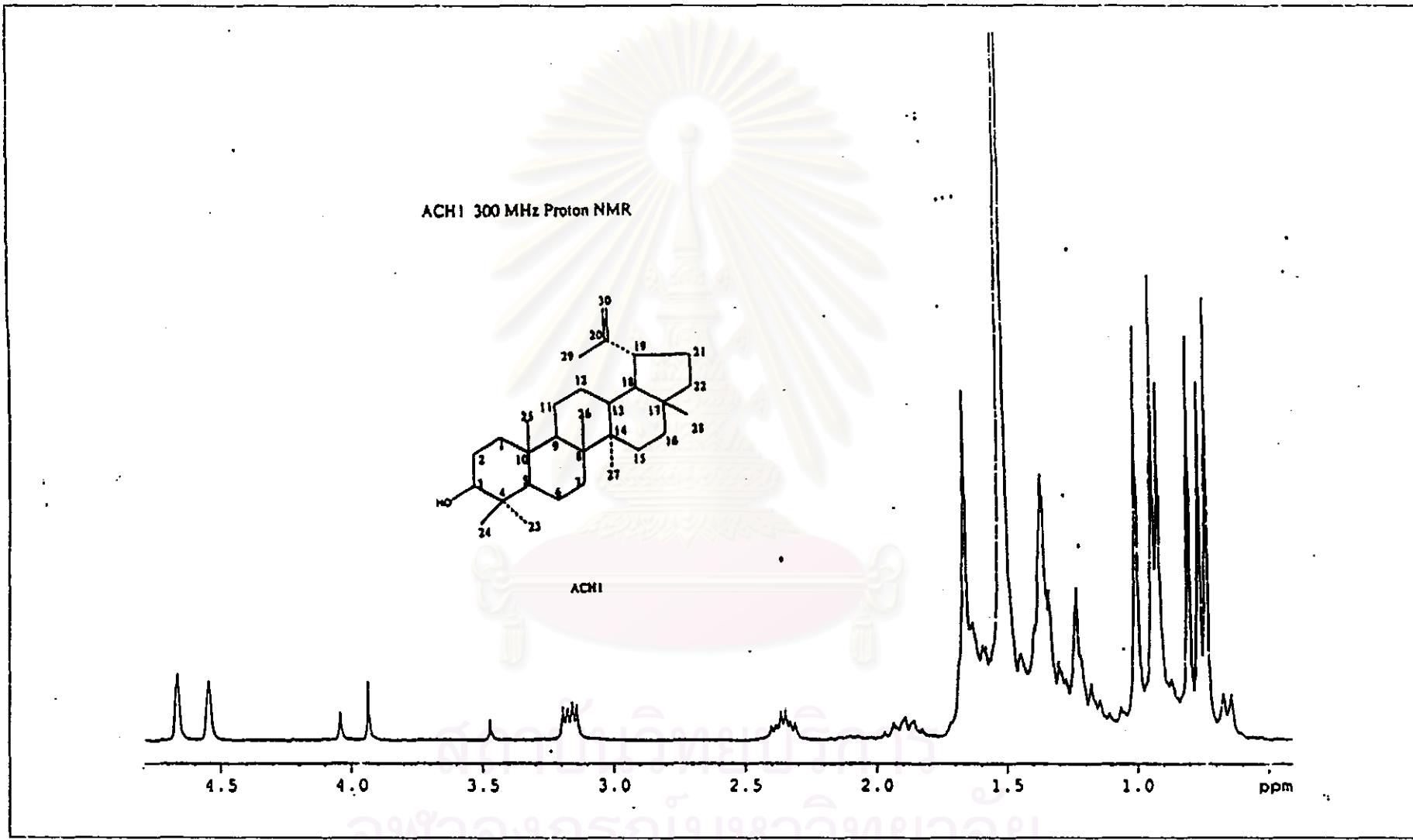


Figure 11 The 300 MHz <sup>1</sup>H NMR spectrum of compound ACH1 (in CDCl<sub>3</sub>) (expanded in the range of δ0-5ppm)

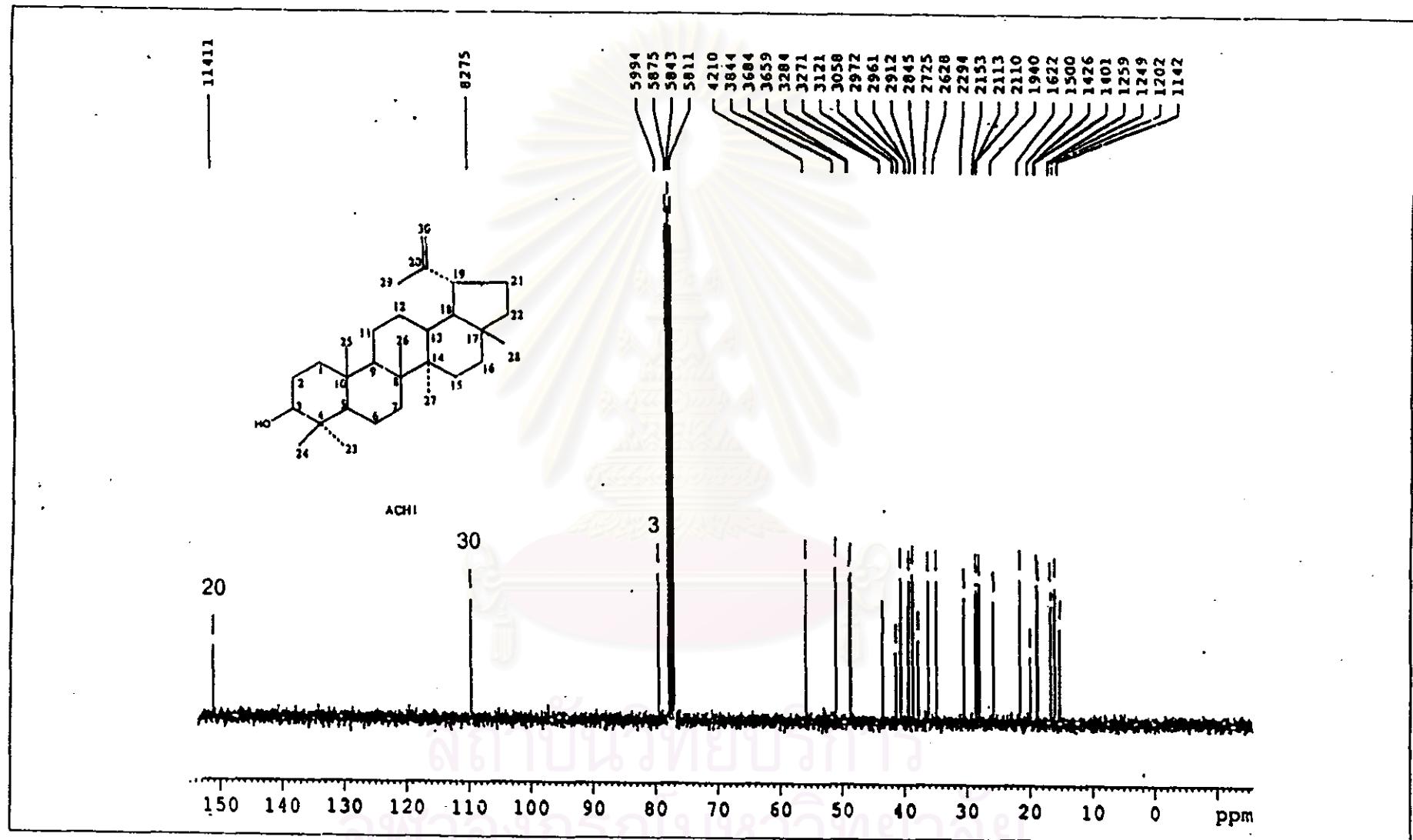


Figure 12 The 75 MHz  $^{13}\text{C}$  NMR spectrum of compound ACH1(in  $\text{CDCl}_3$ )

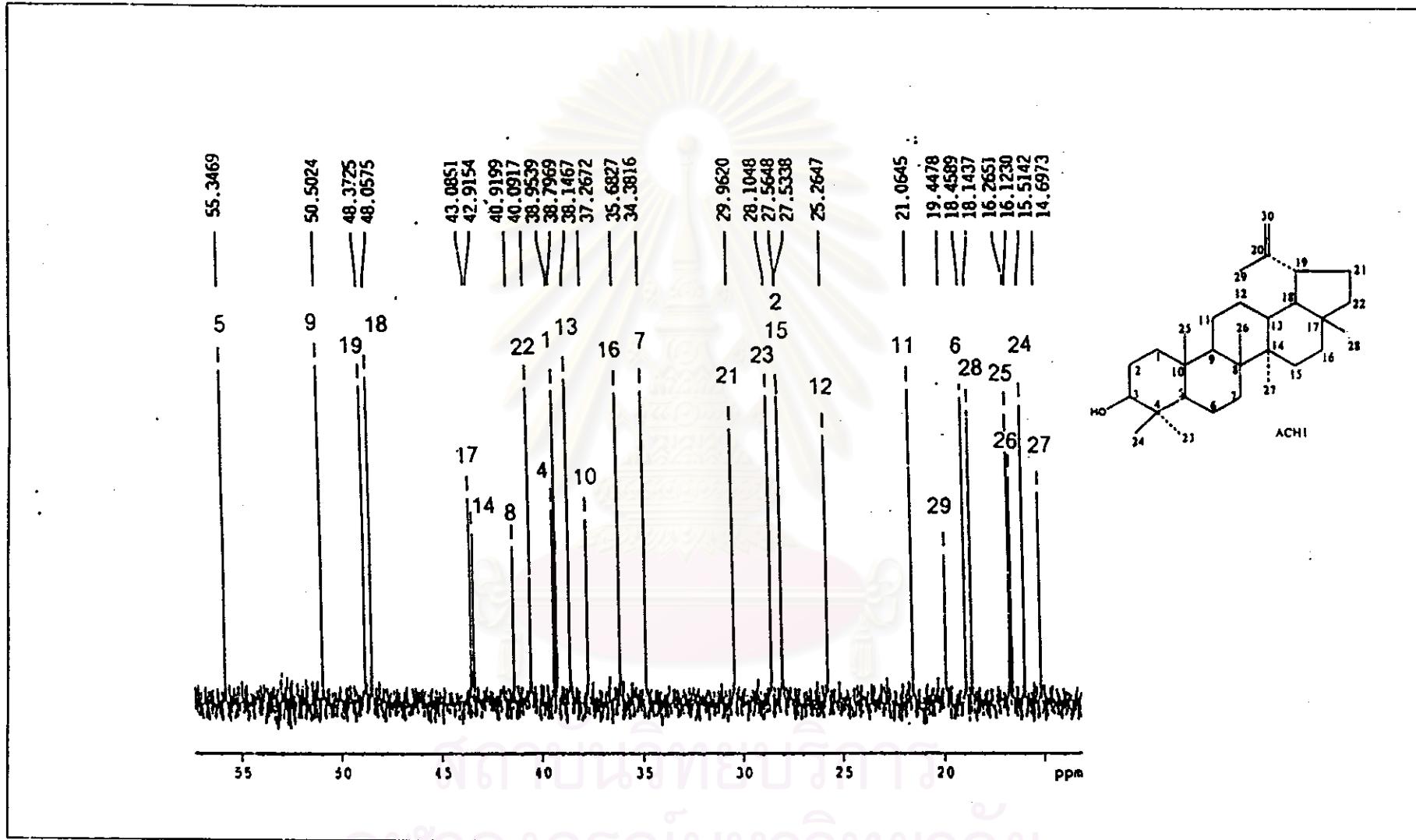
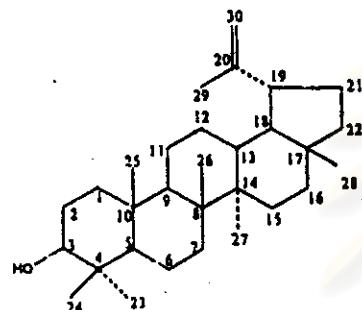


Figure 13 The 75 MHz  $^{13}\text{C}$  NMR spectrum of compound ACH1(in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  0-60 ppm)



ACH1

ACH 1  
DEPT135

145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 ppm

Figure 14 DEPT spectrum of compound ACH1(in CDCl<sub>3</sub>)

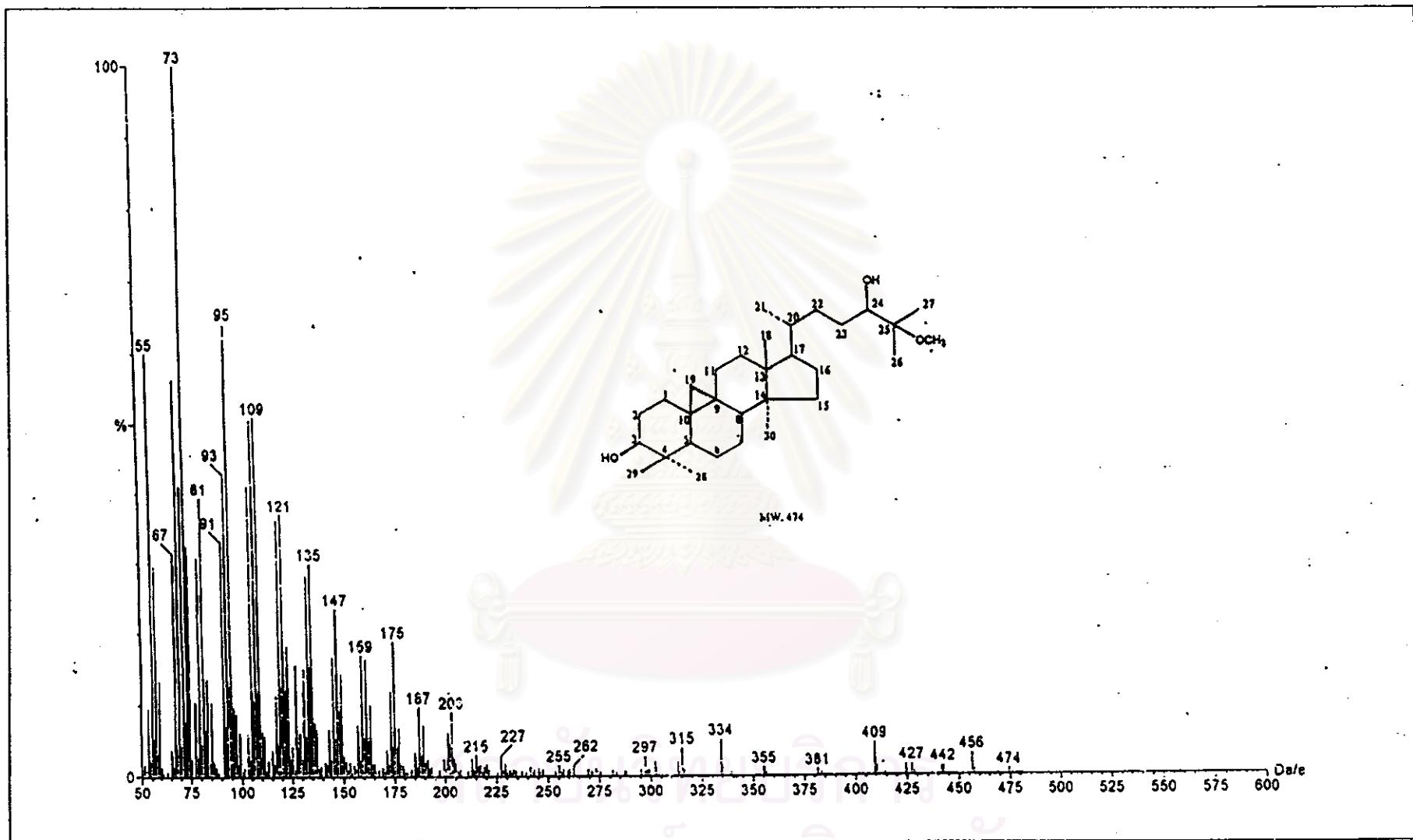


Figure 15 EIMS spectrum of compound ACH2

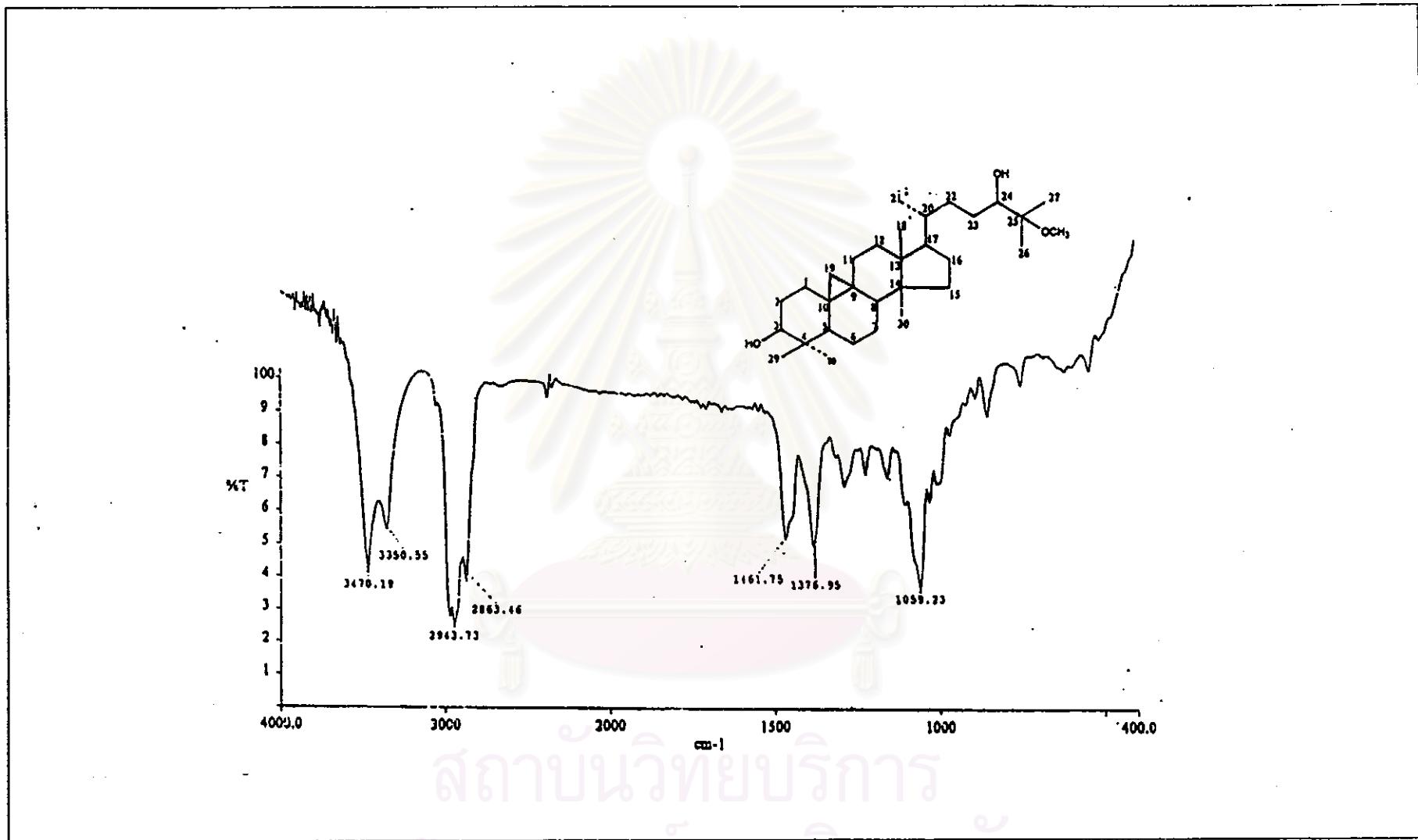


Figure 16 IR spectrum of compound ACH2 (KBr disc)

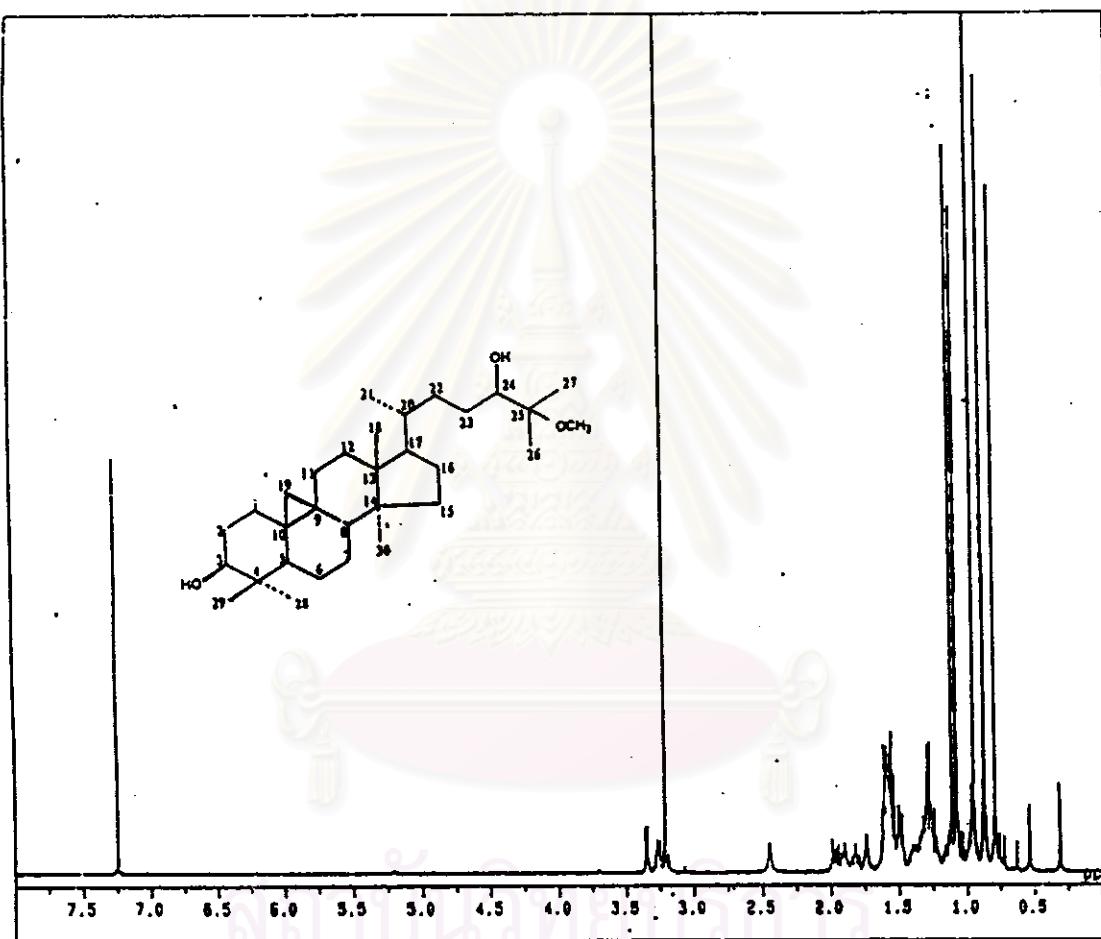


Figure 17 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ )

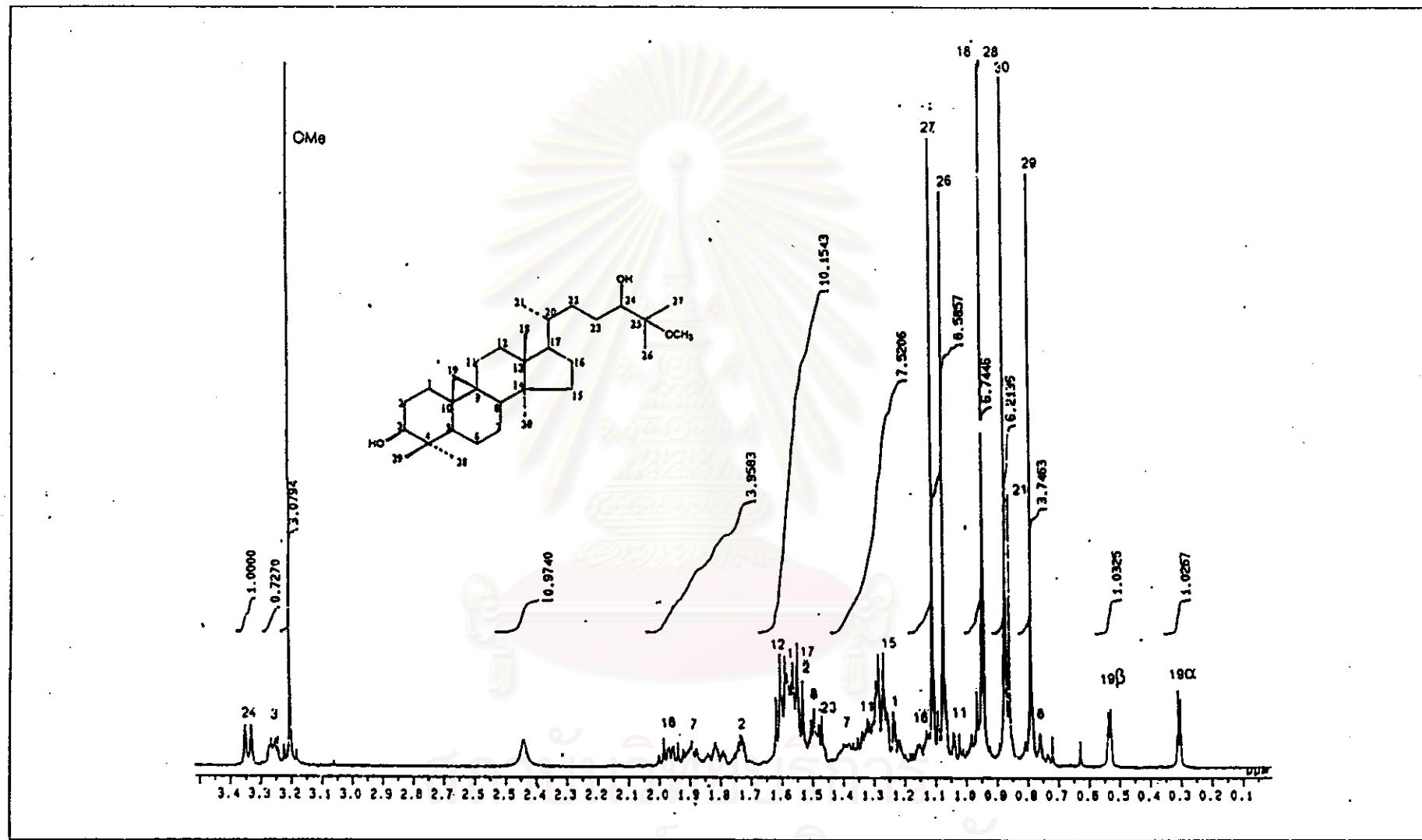


Figure 18 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  0–3.5 ppm)

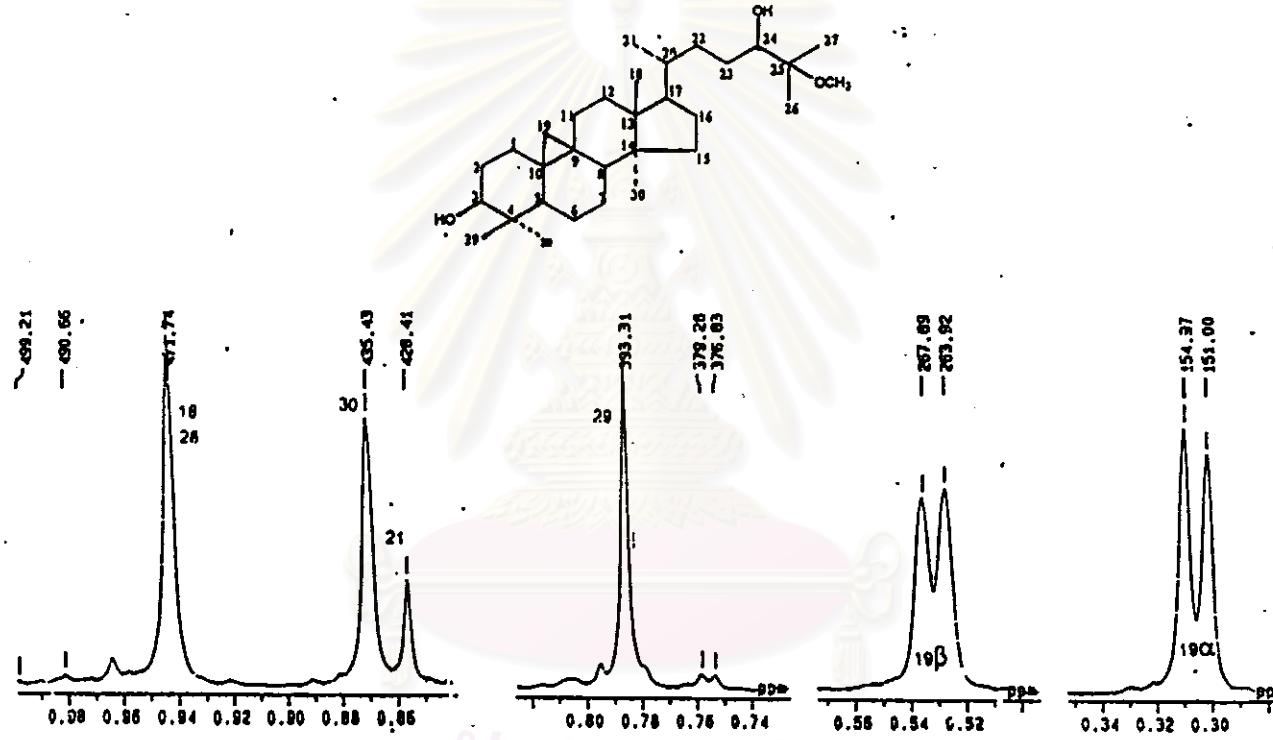


Figure 19 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  0.3-0.98 ppm)

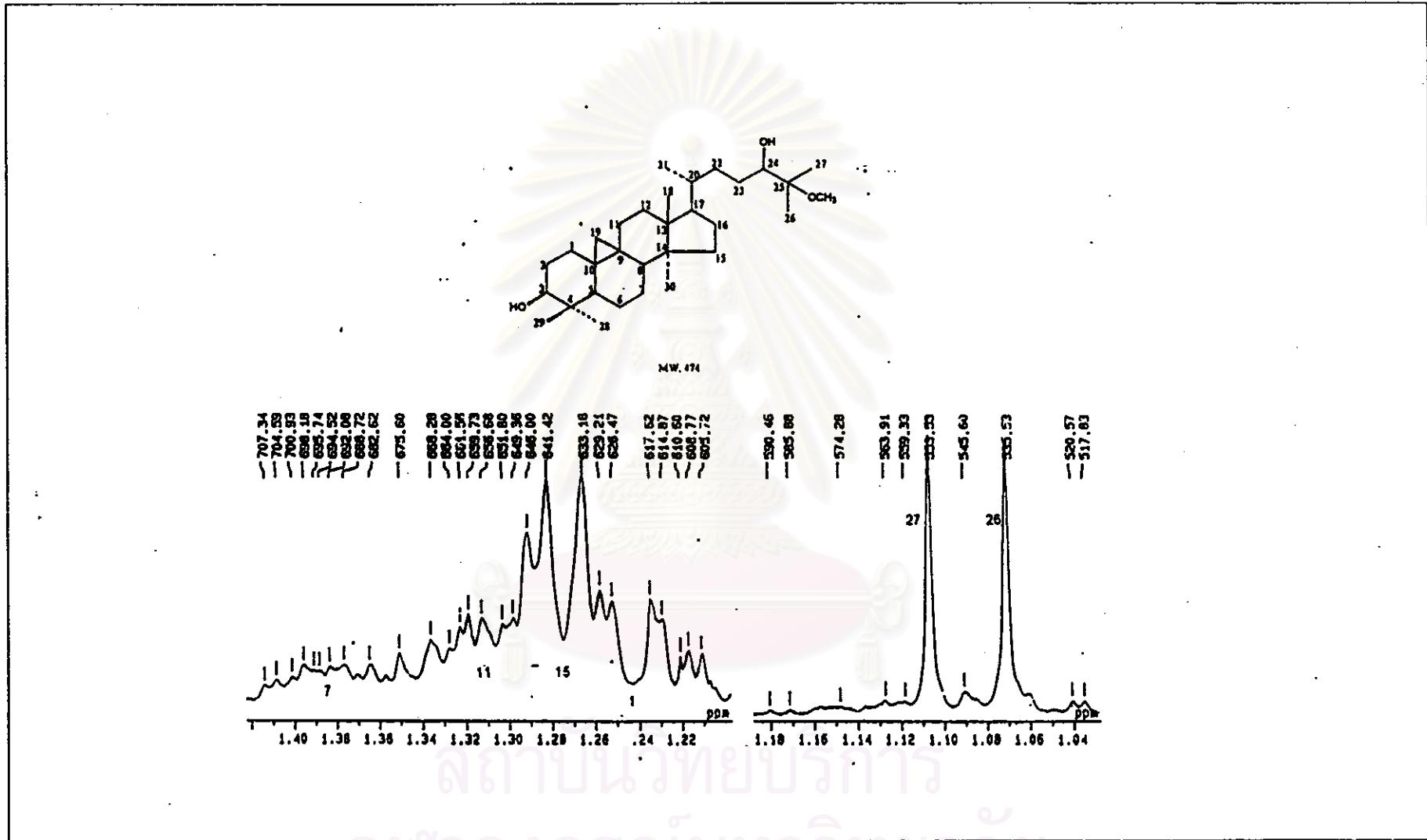


Figure 20 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  1.04-1.40 ppm)

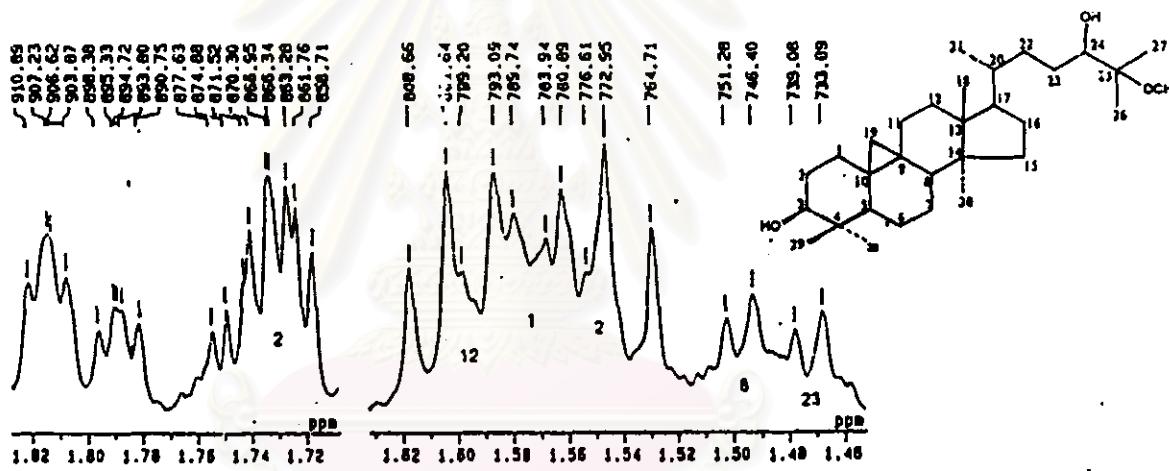


Figure 21 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  1.46-1.82 ppm)

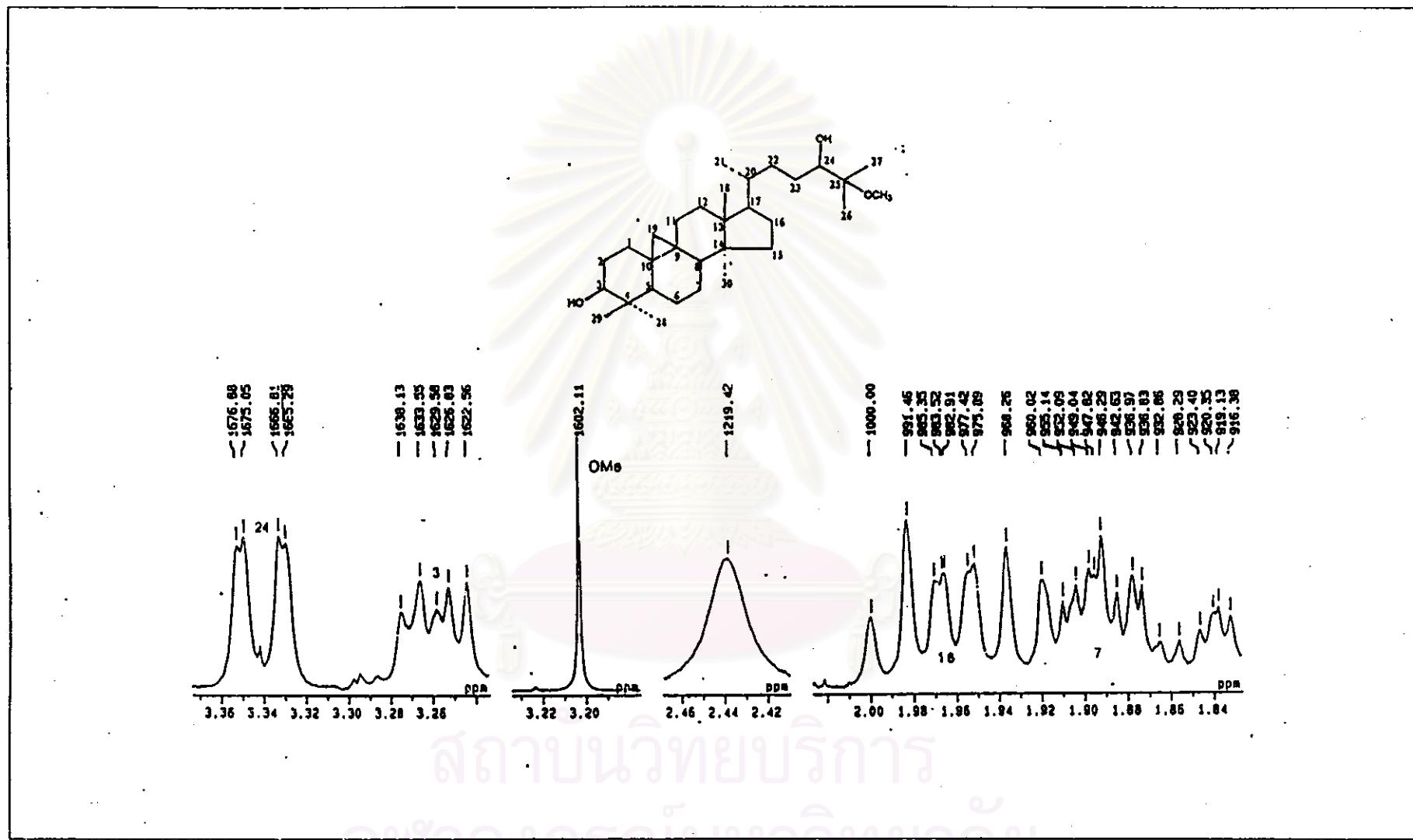


Figure 22 The 500 MHz <sup>1</sup>H NMR spectrum of compound ACH2 (in CDCl<sub>3</sub>) (expanded in the range of δ 1.84-3.36 ppm)

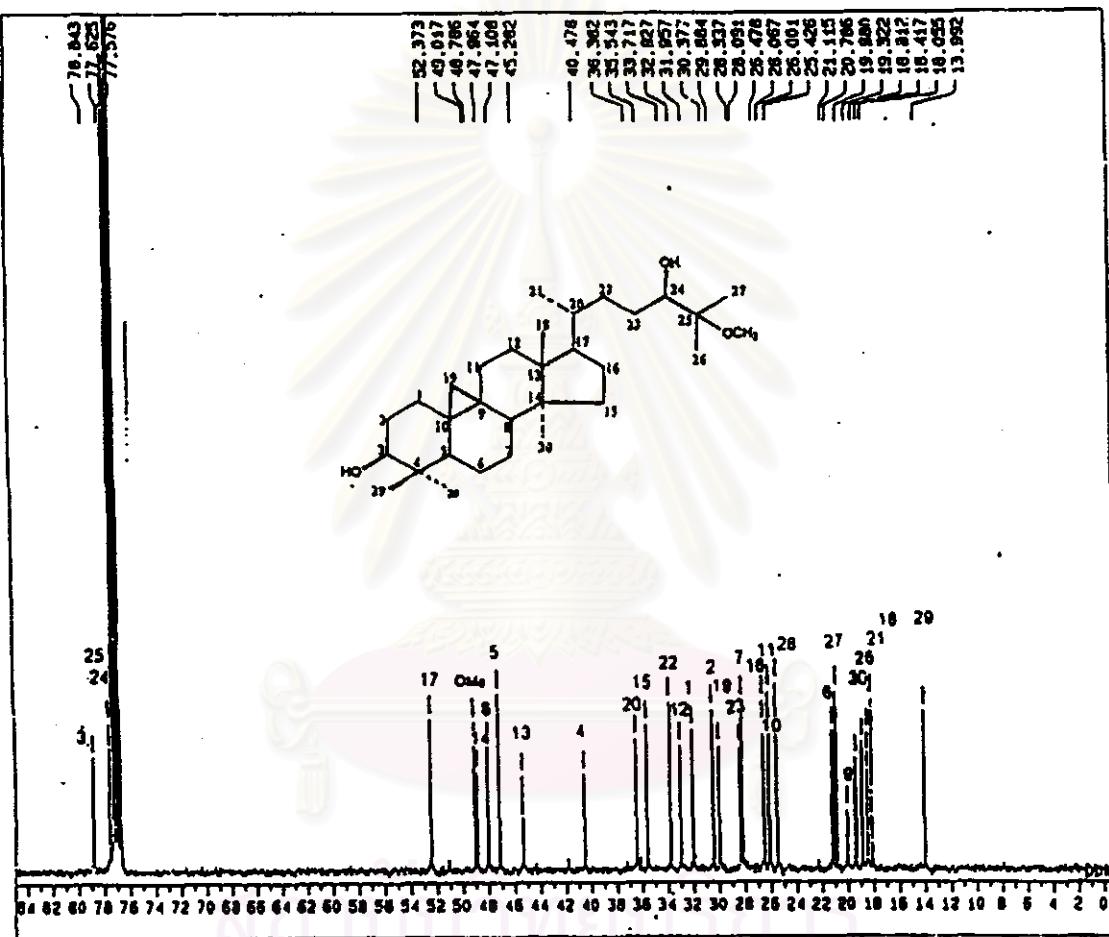


Figure 23 The 125 MHz  $^{13}\text{C}$  NMR spectrum of compound ACH2 (in  $\text{CDCl}_3$ )

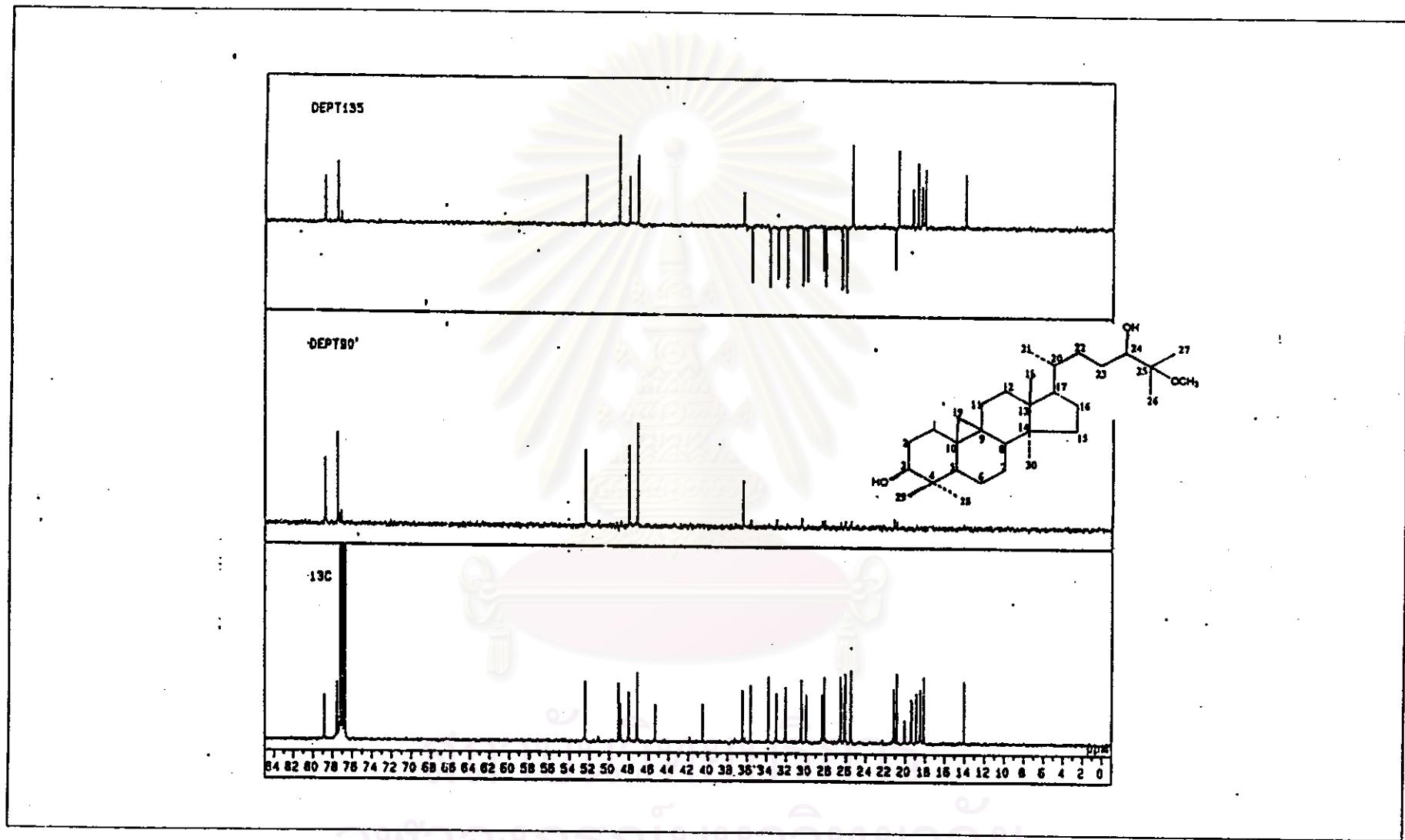


Figure 24 DEPT spectrum of compound ACH2 (in  $\text{CDCl}_3$ )

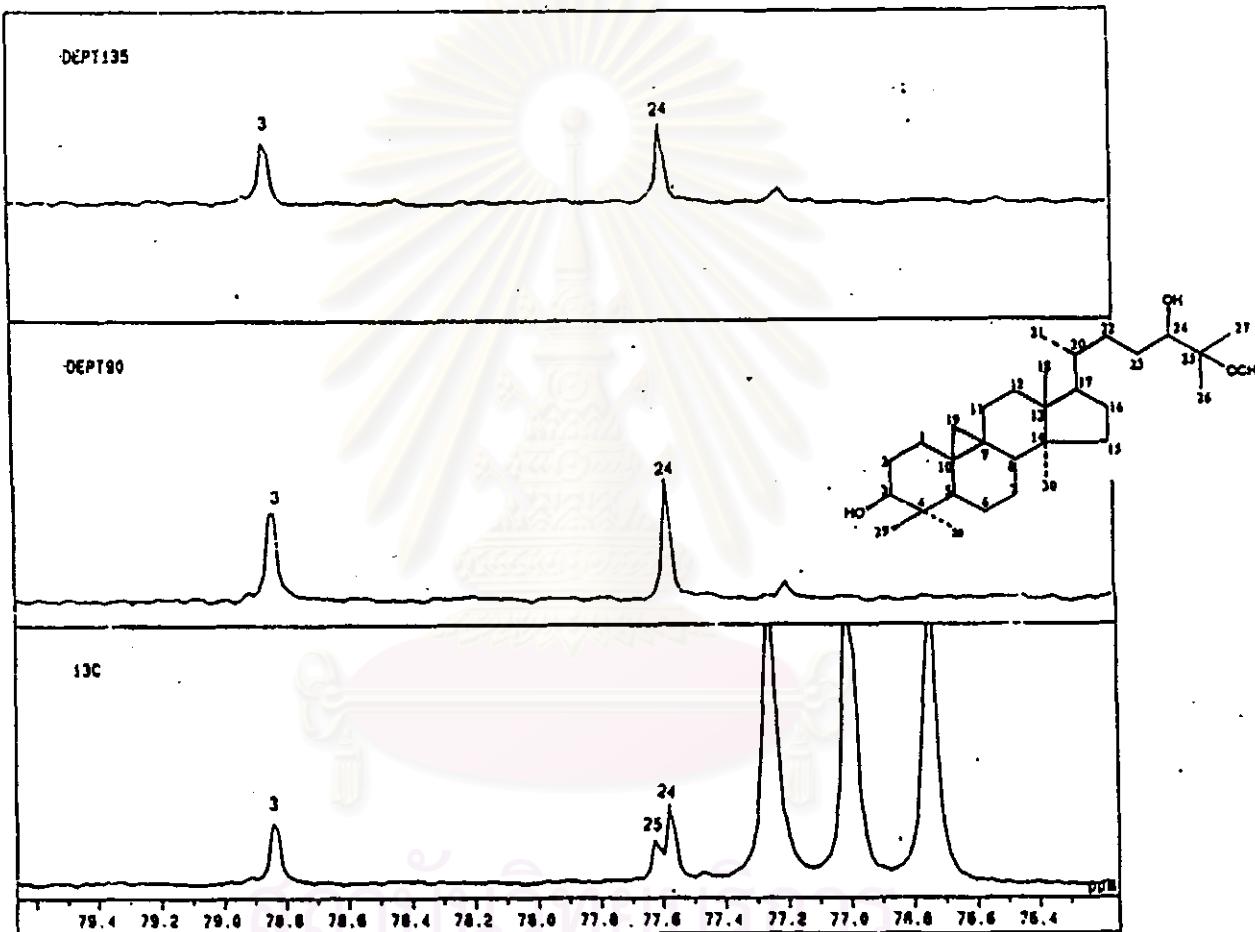


Figure 25 DEPT spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  76.4-79.4 ppm)

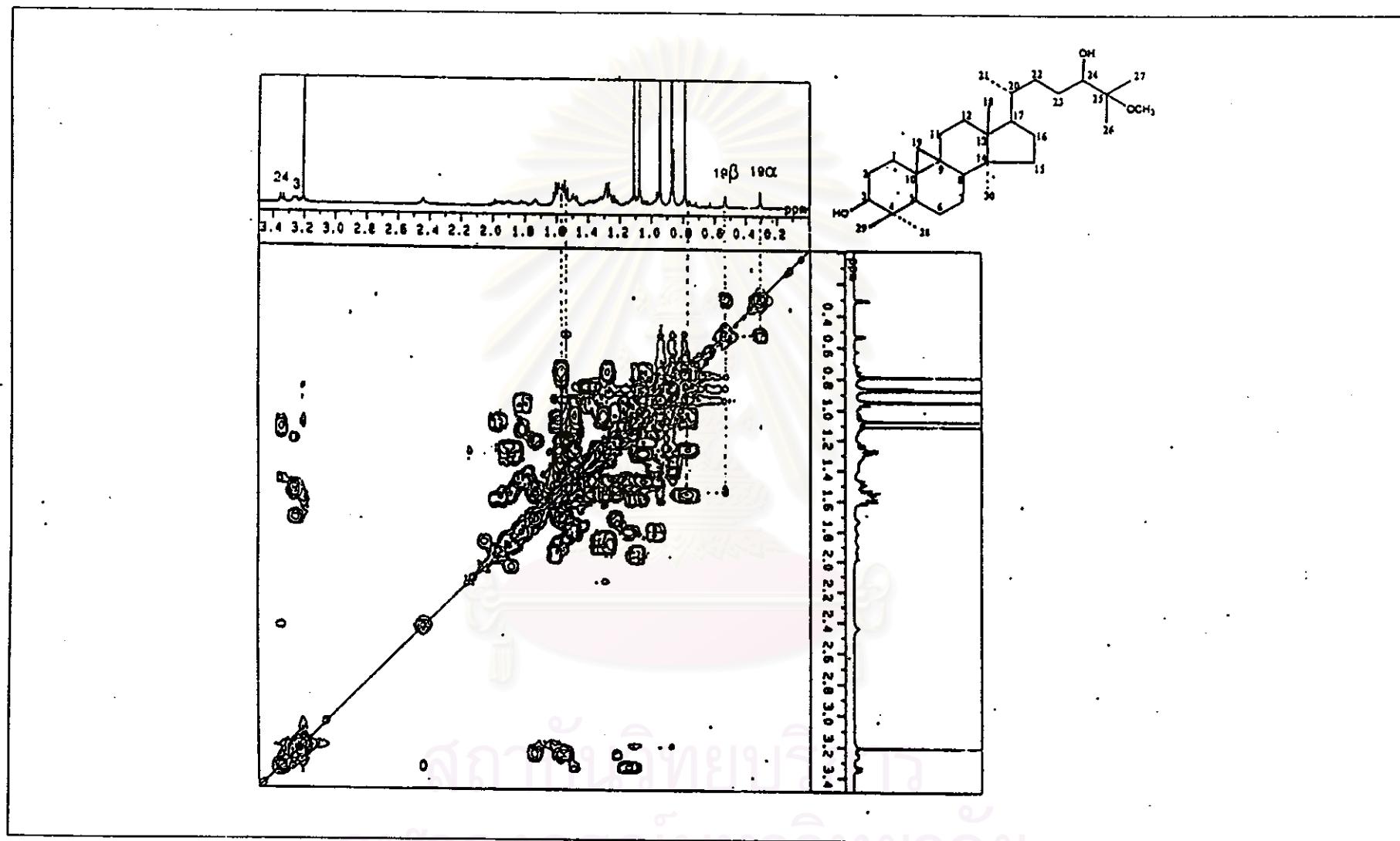


Figure 26  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-3.4ppm and  $\delta^1\text{H}$  0-3.4ppm)

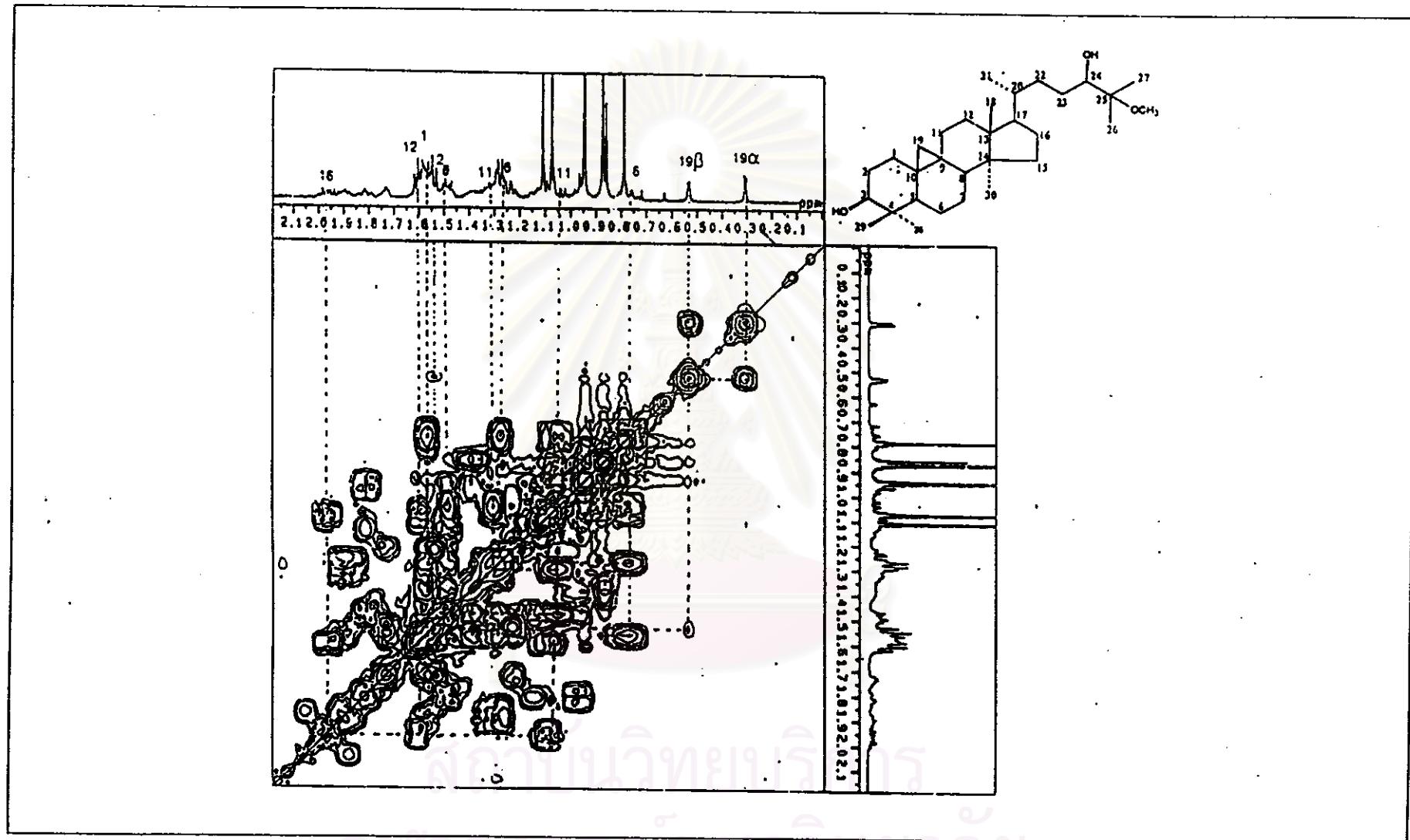


Figure 27  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.2ppm and  $\delta^1\text{H}$  0-2.2ppm)

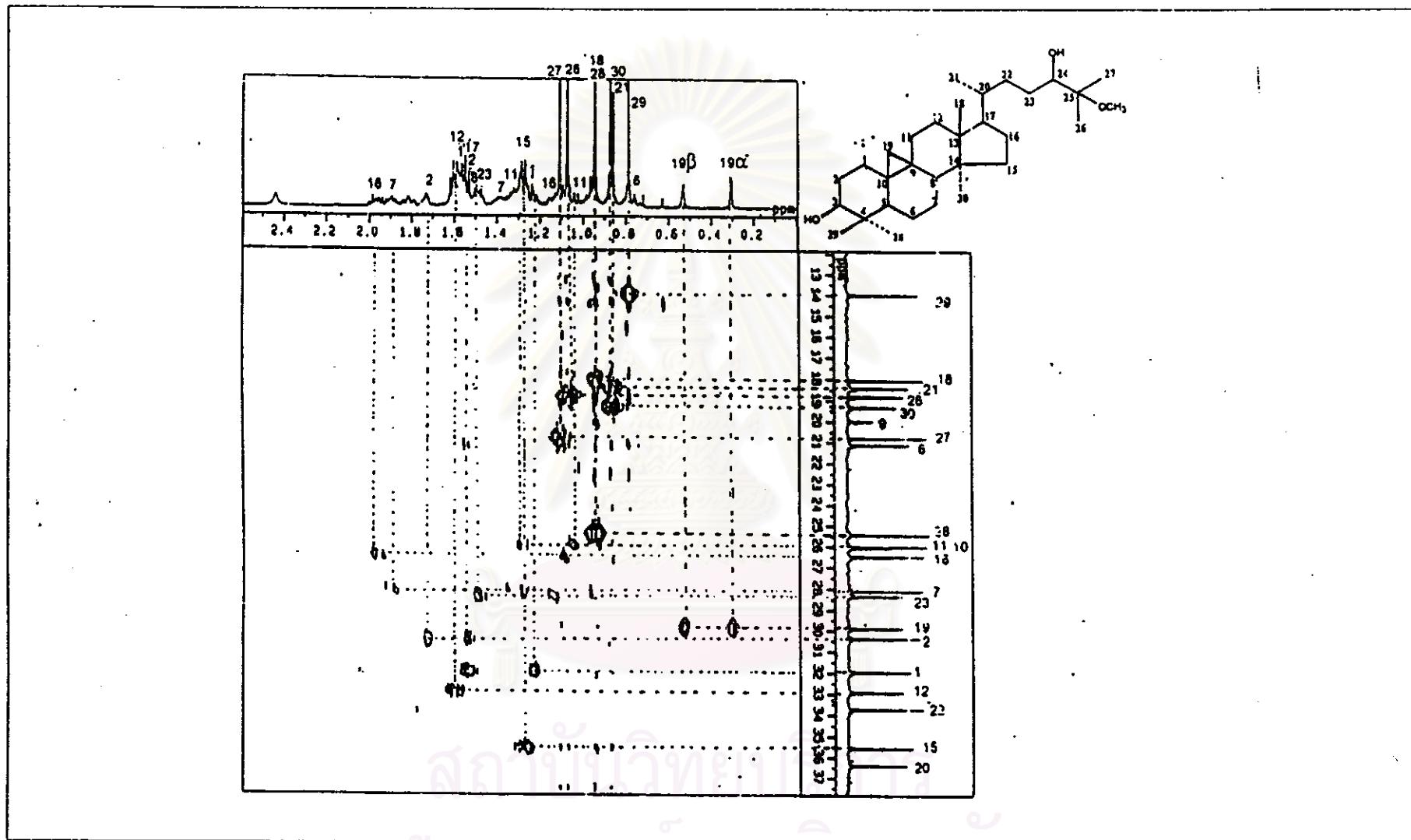


Figure 28  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  0-2.4 ppm and  $\delta$   $^{13}\text{C}$  12-38 ppm)

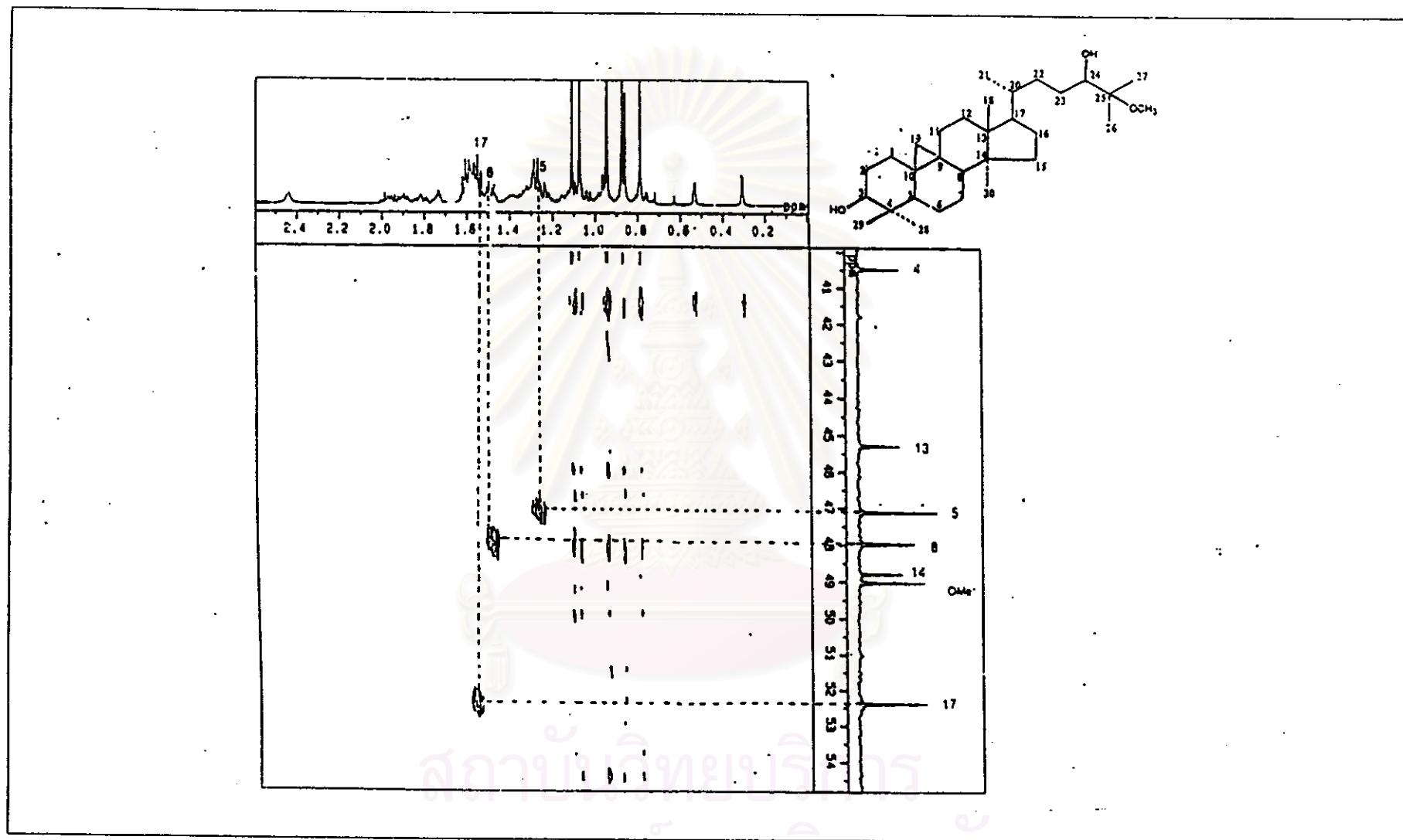


Figure 29  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2(in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.4 ppm and  $\delta^{13}\text{C}$  40-55 ppm)

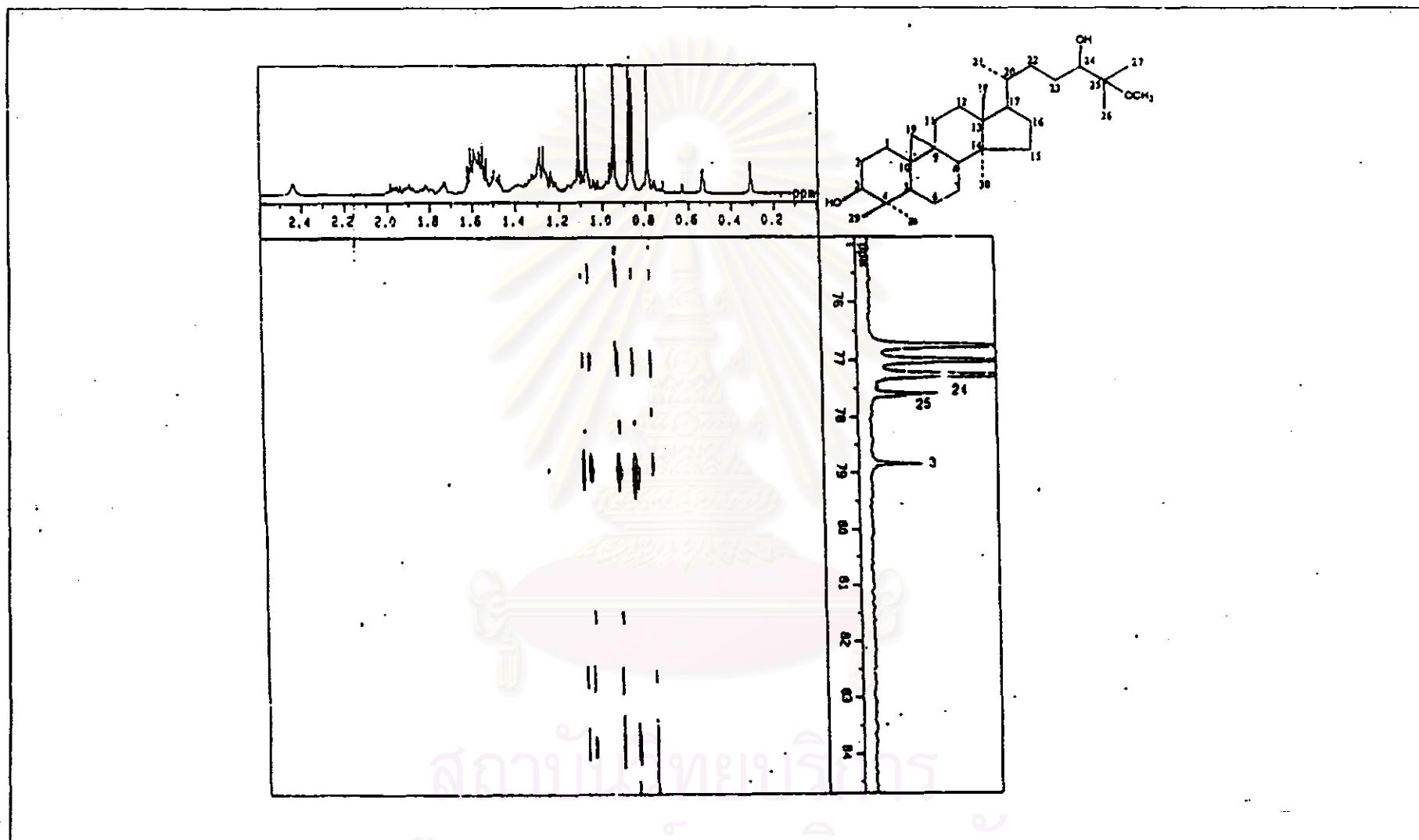


Figure 30  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.4 ppm and  $\delta^{13}\text{C}$  75-84 ppm)

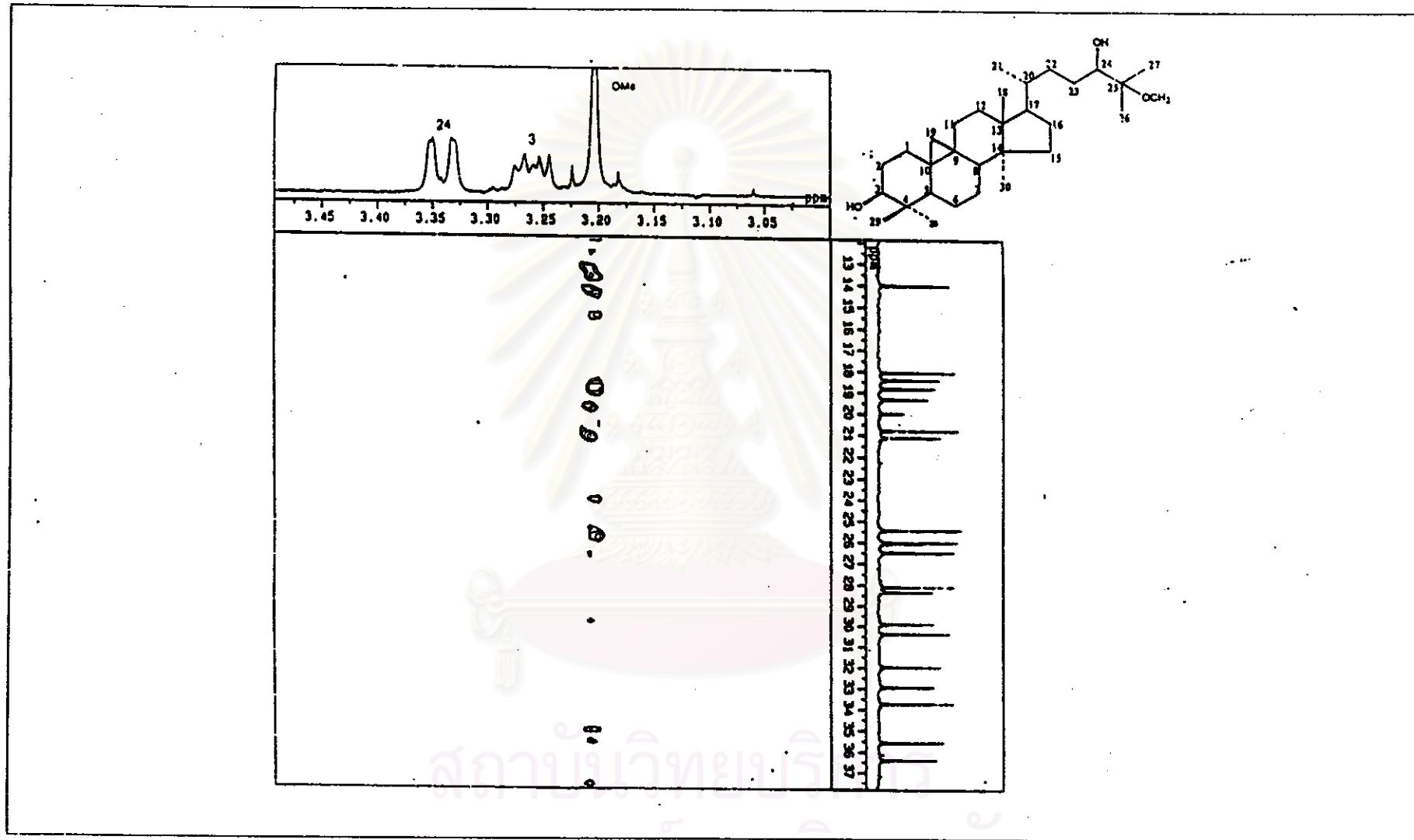


Figure 31  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  3.05-3.45 ppm and  $\delta^{13}\text{C}$  12-38 ppm)

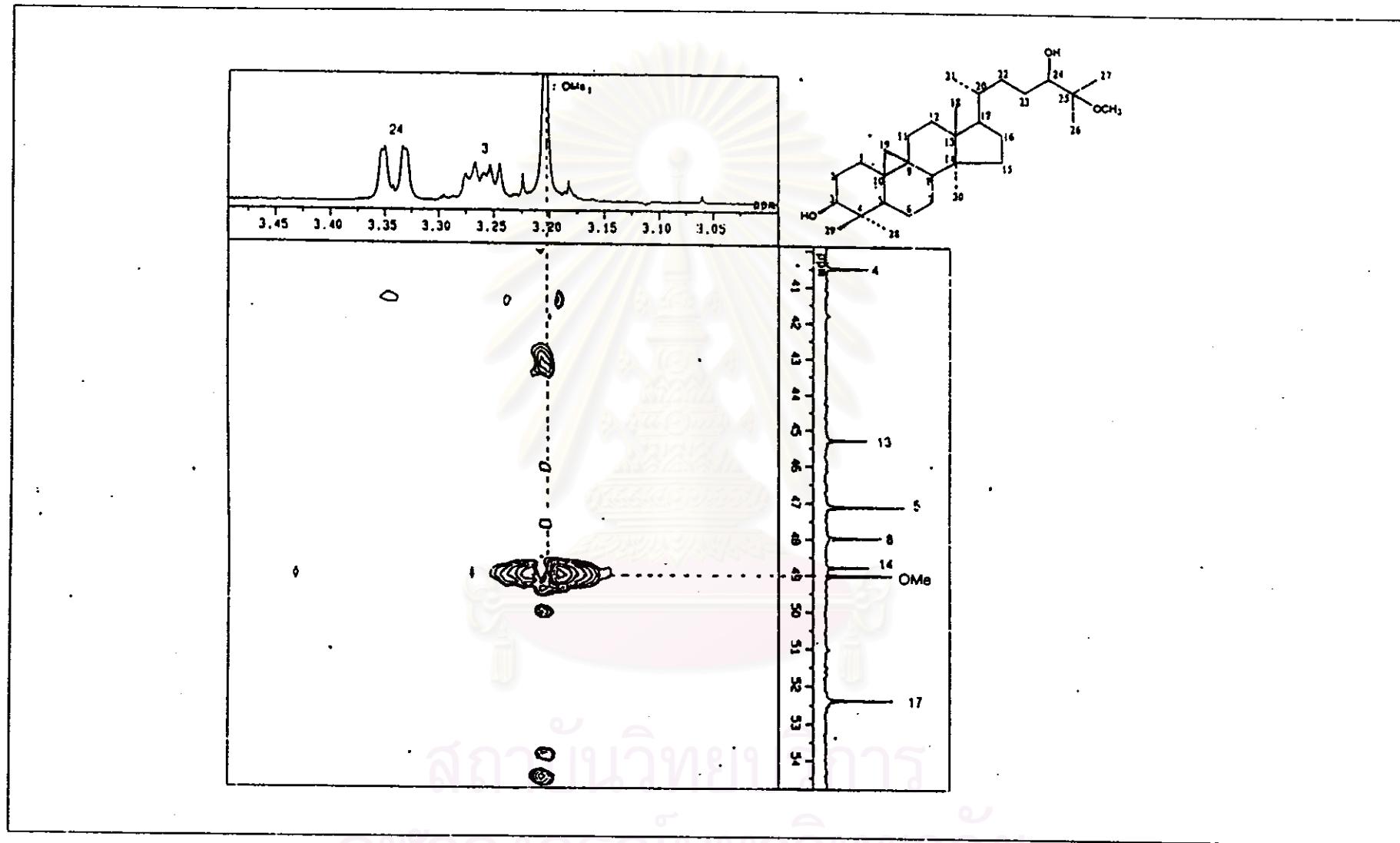


Figure 32  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  3.05-3.45 ppm and  $\delta$   $^{13}\text{C}$  40-55 ppm)

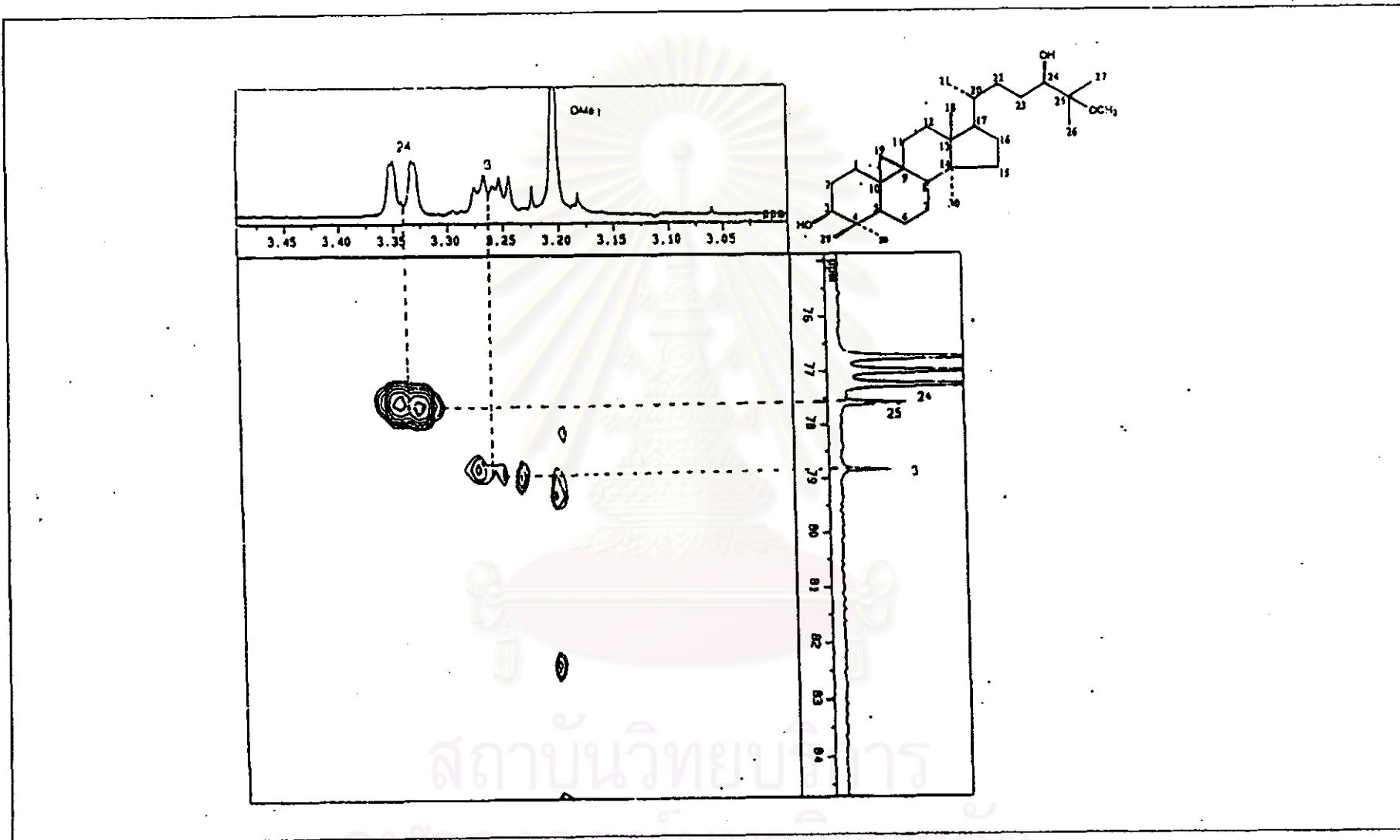


Figure 33  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  3.05-3.45 ppm and  $\delta^{13}\text{C}$  75-85 ppm)

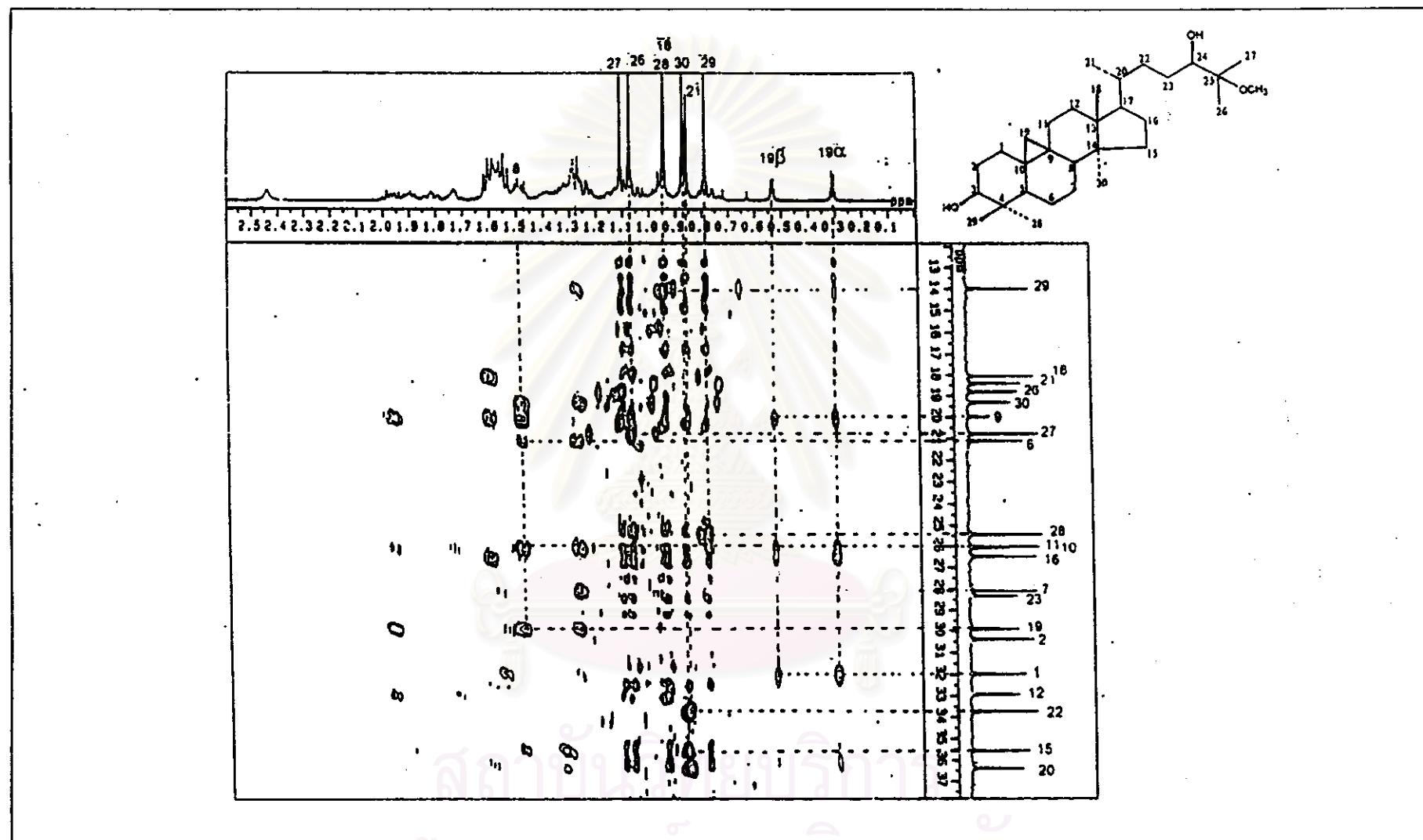


Figure 34  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  0-2.6 ppm and  $\delta$   $^{13}\text{C}$  12-38 ppm)

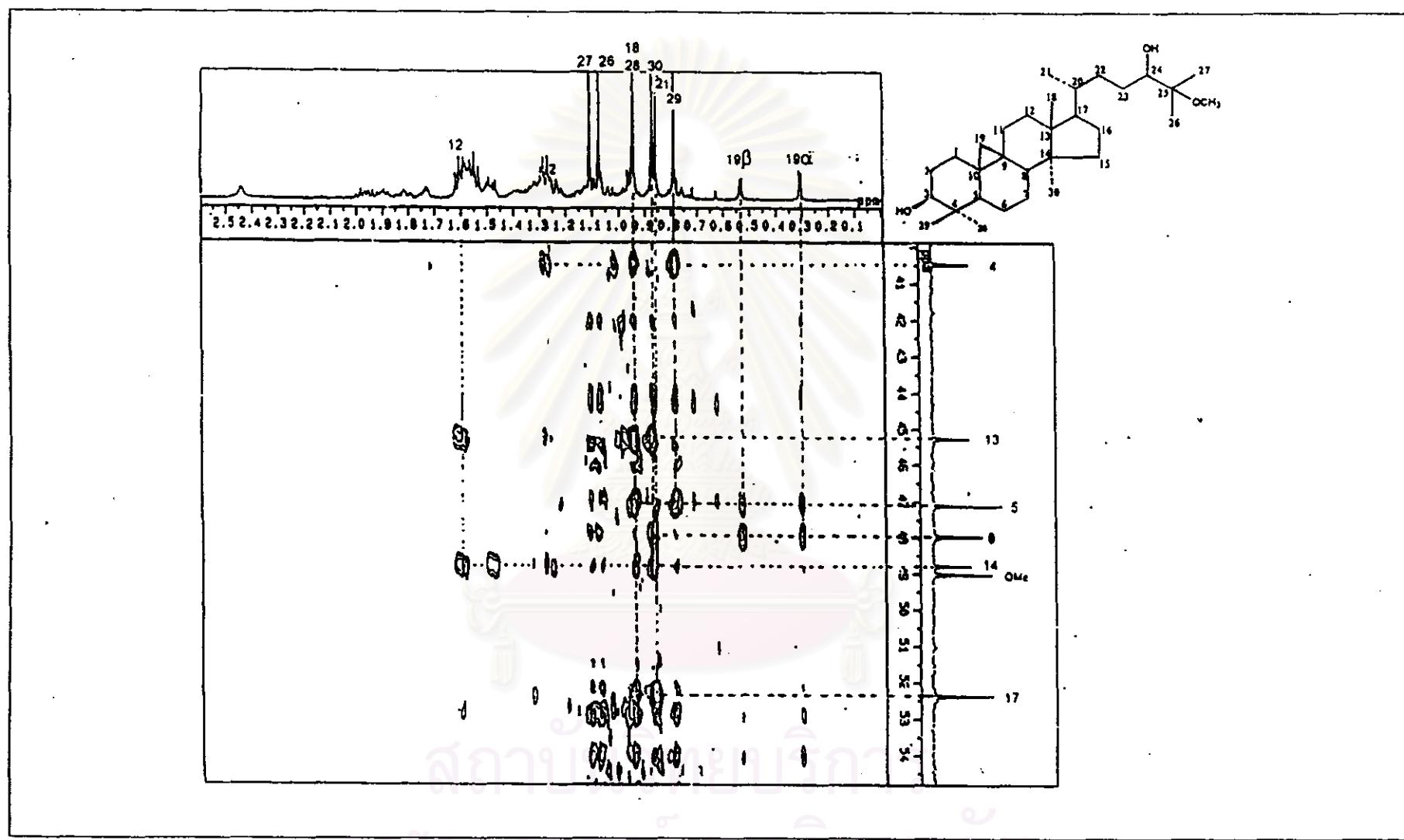


Figure 35  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  0-2.6 ppm and  $\delta$   $^{13}\text{C}$  40-55 ppm)

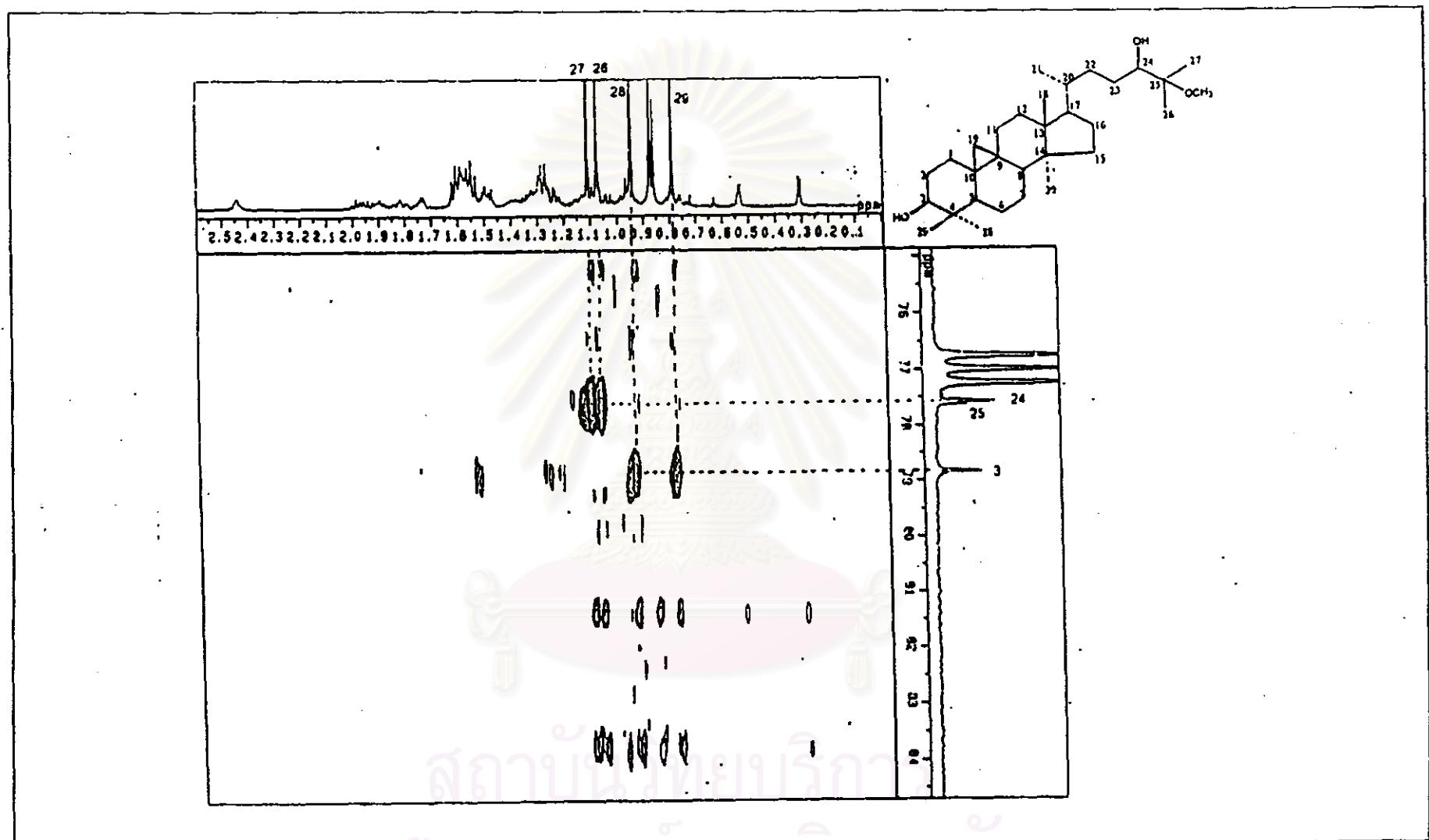


Figure 36  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.5 ppm and  $\delta^{13}\text{C}$  70-85 ppm)

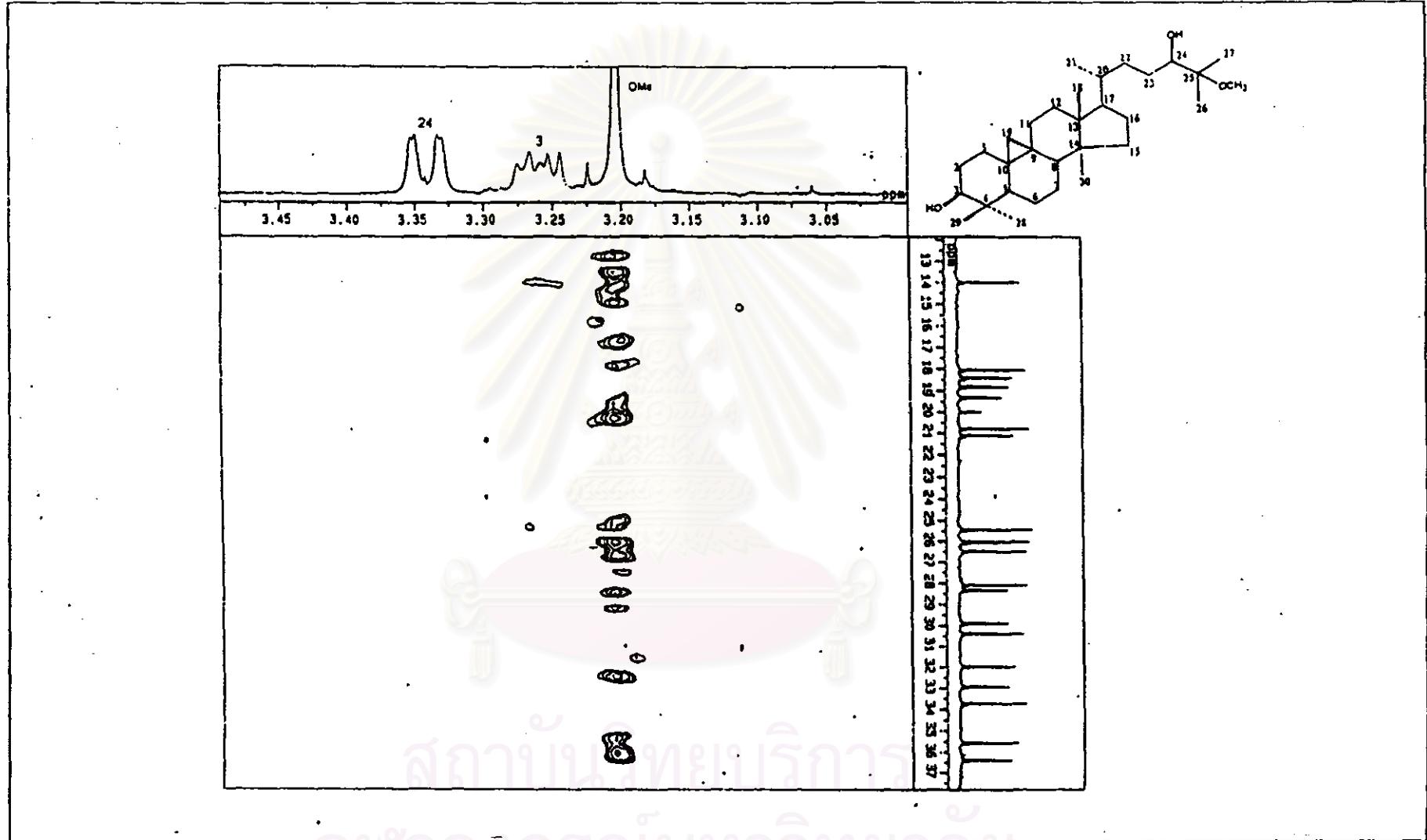


Figure 37  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  3.05-3.45 ppm and  $\delta^{13}\text{C}$  12-37 ppm)

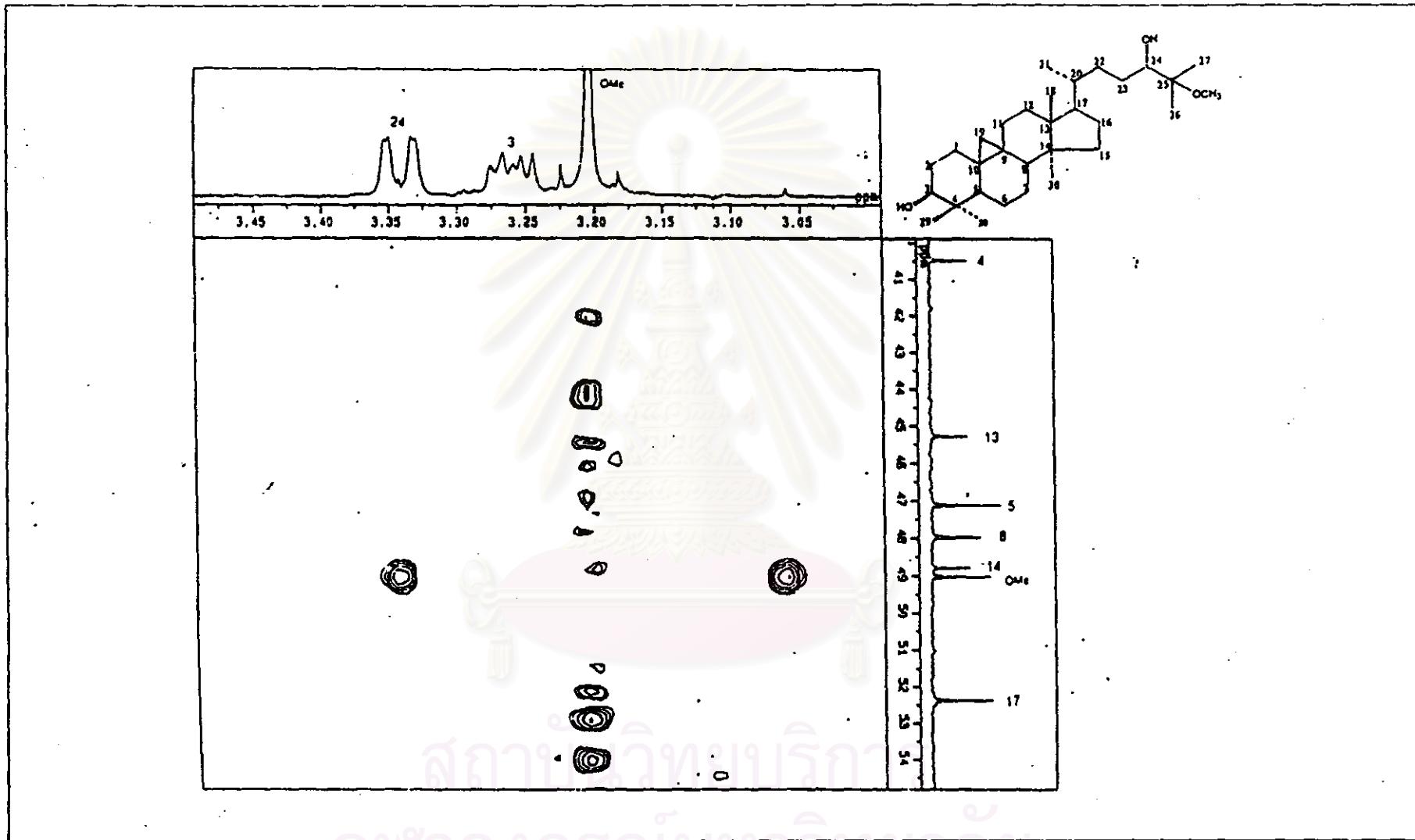


Figure 38  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  3.05-3.45 ppm and  $\delta$   $^{13}\text{C}$  40-55 ppm)

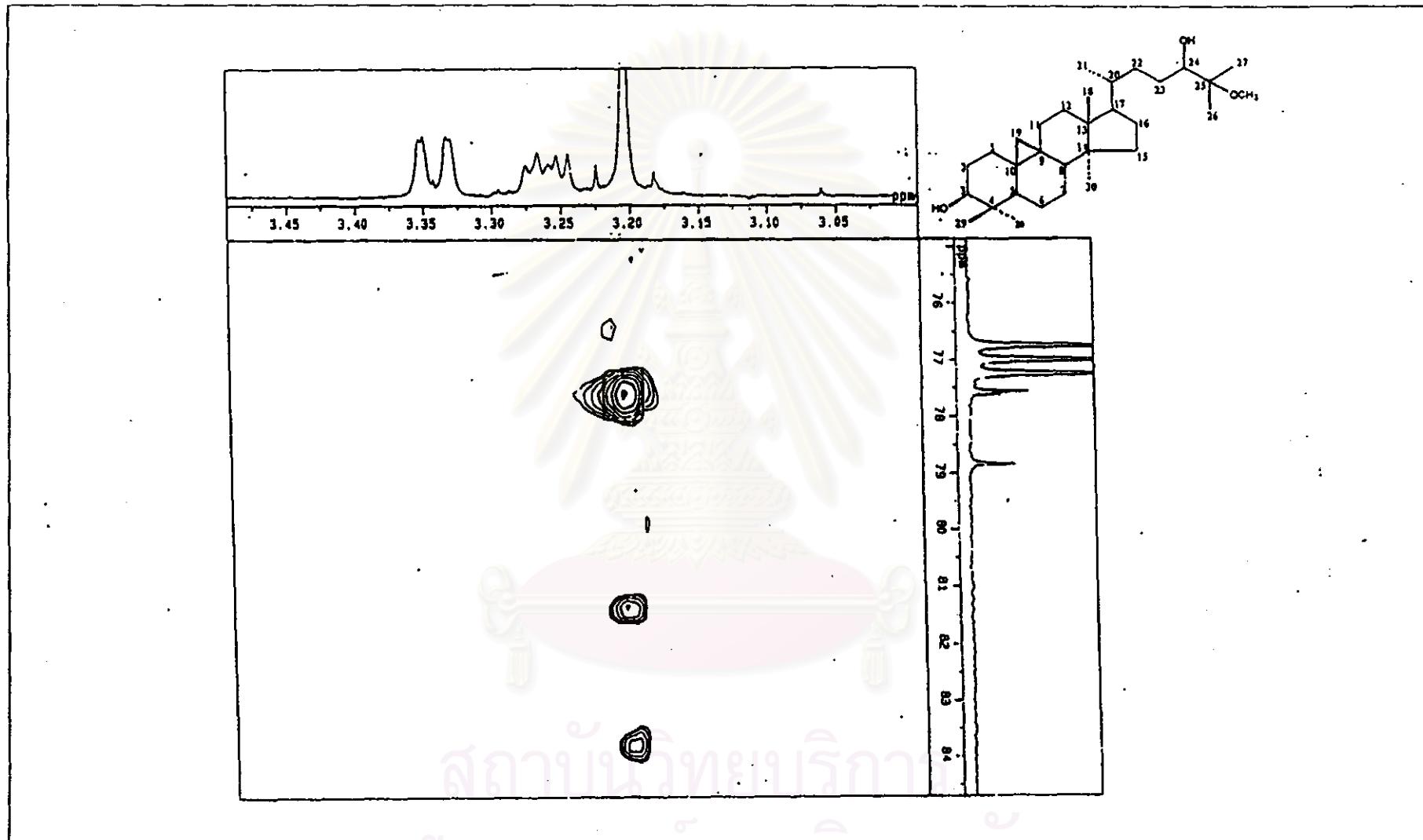


Figure 39  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH2 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  3.05-3.45 ppm and  $\delta^{13}\text{C}$  75-85 ppm)

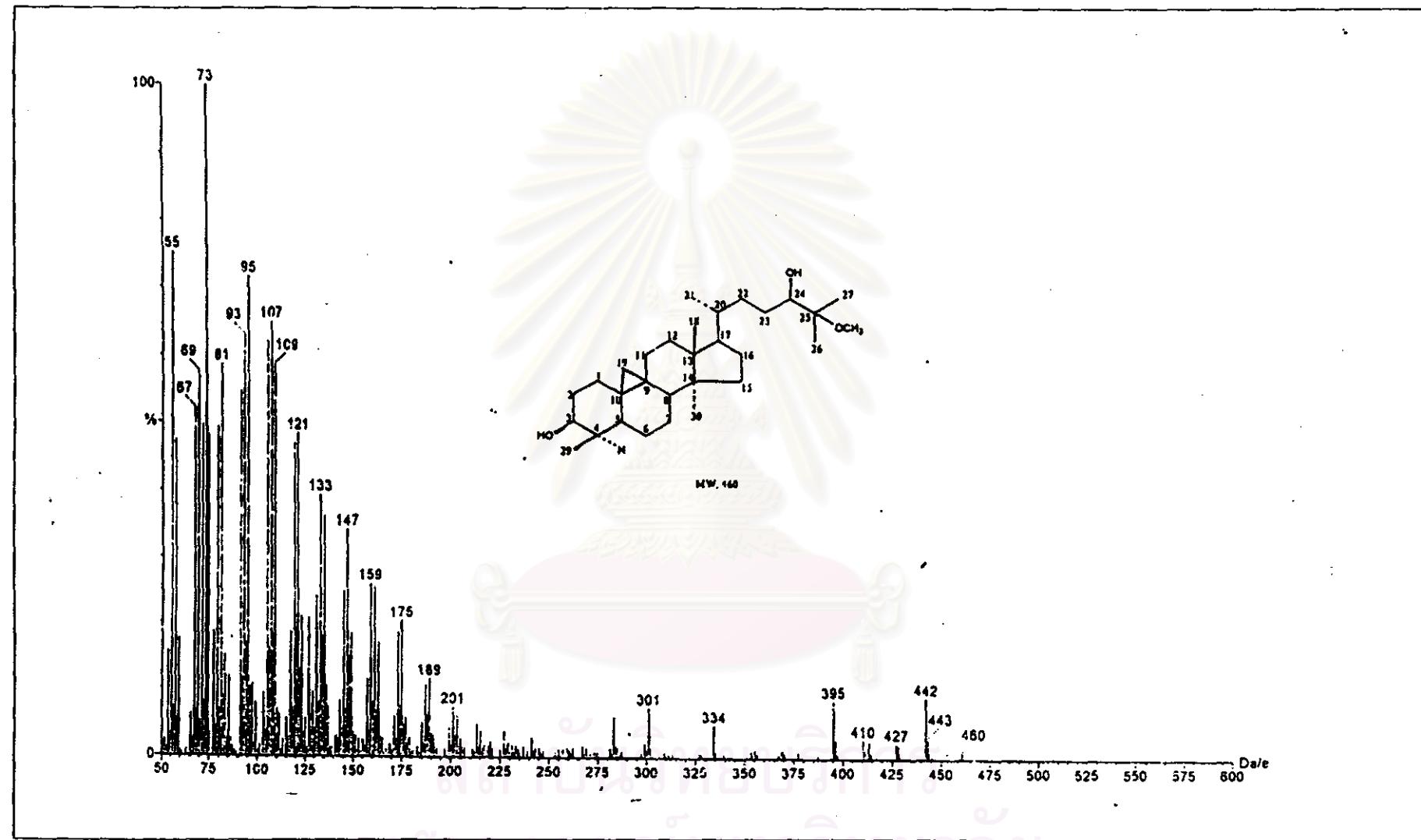


Figure 40 EIMS spectrum of compound ACH3

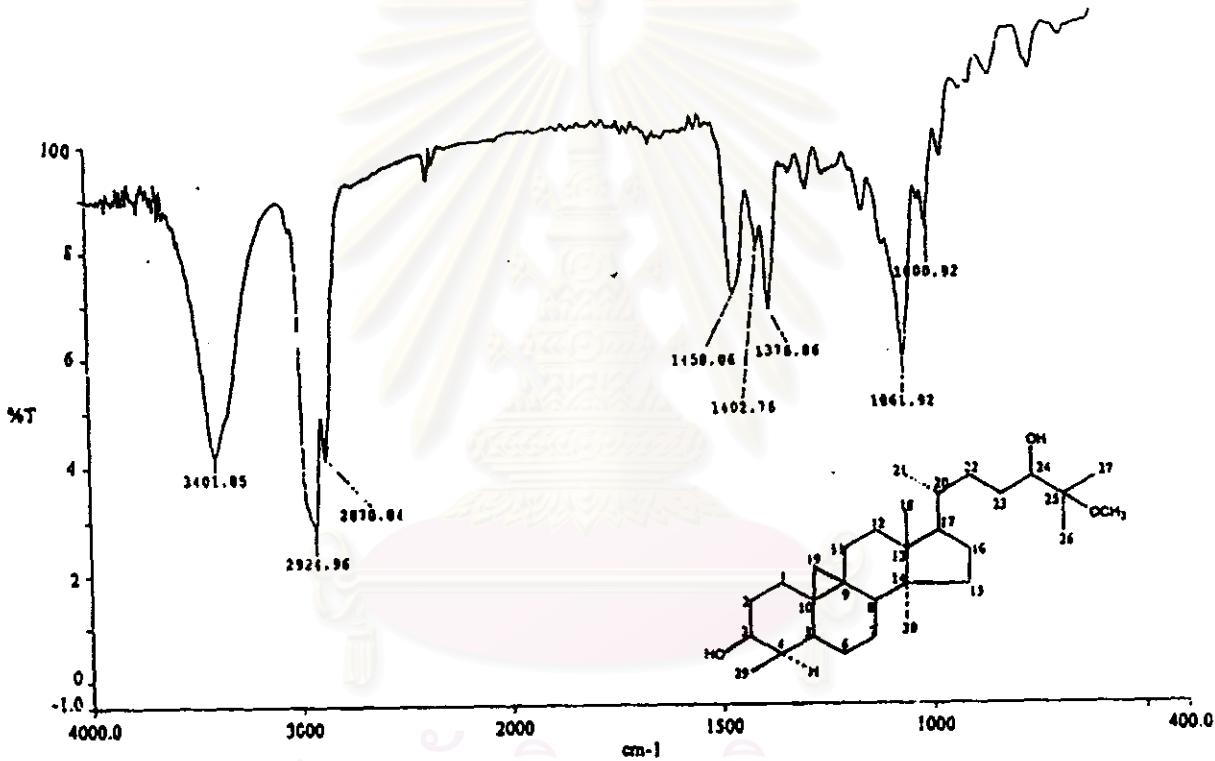


Figure 41 IR spectrum of compound ACH3 (KBr disc)

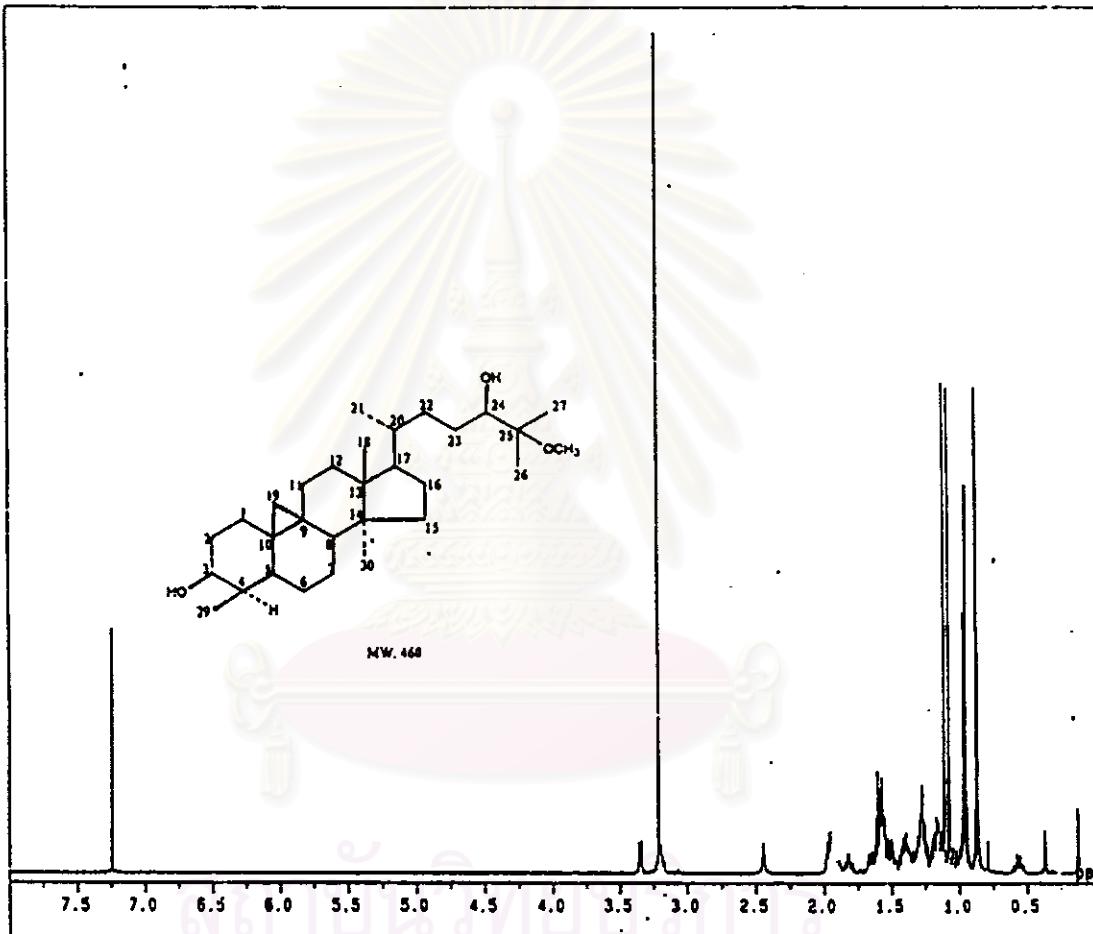


Figure 42 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ )

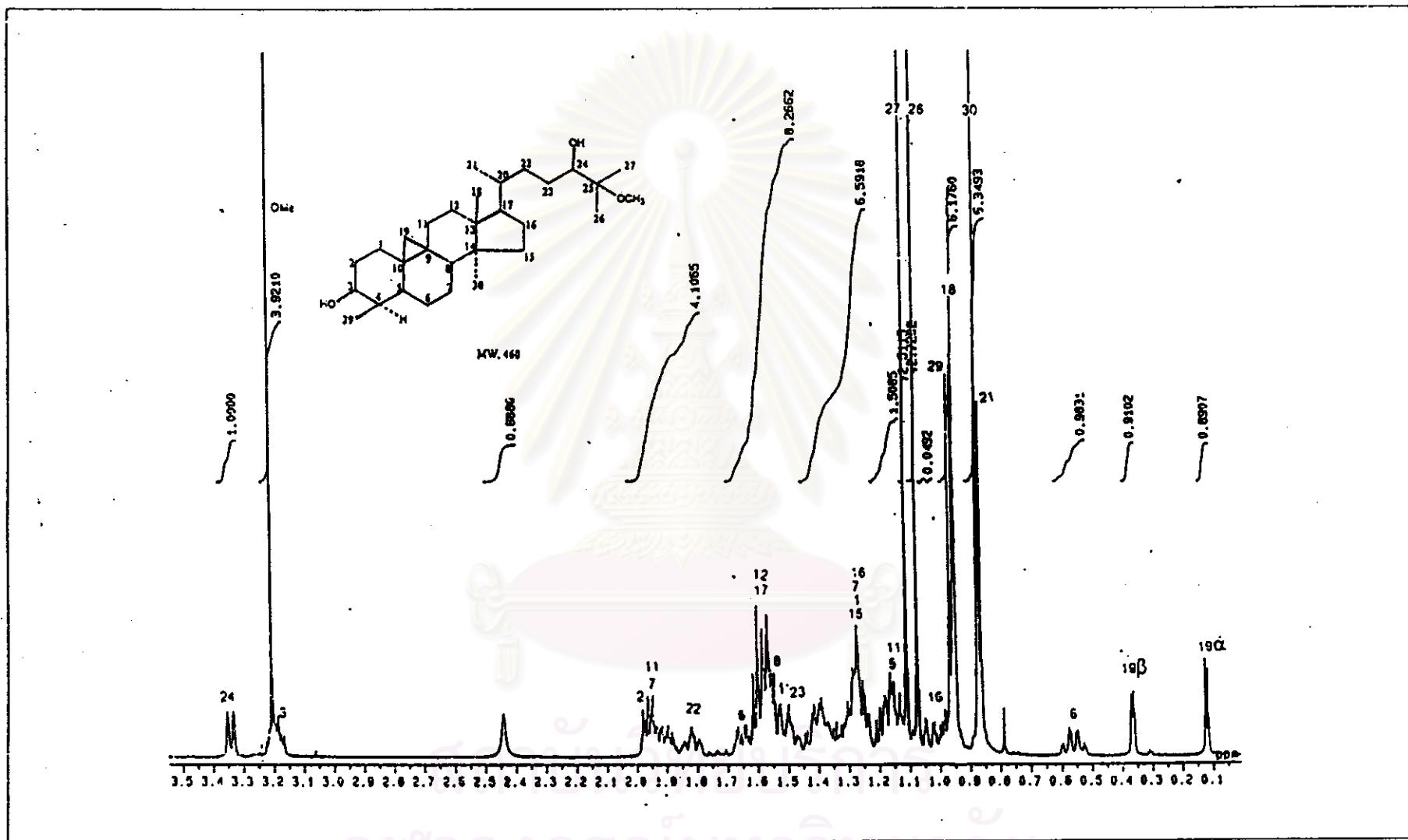


Figure 43 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  0-3.5 ppm)

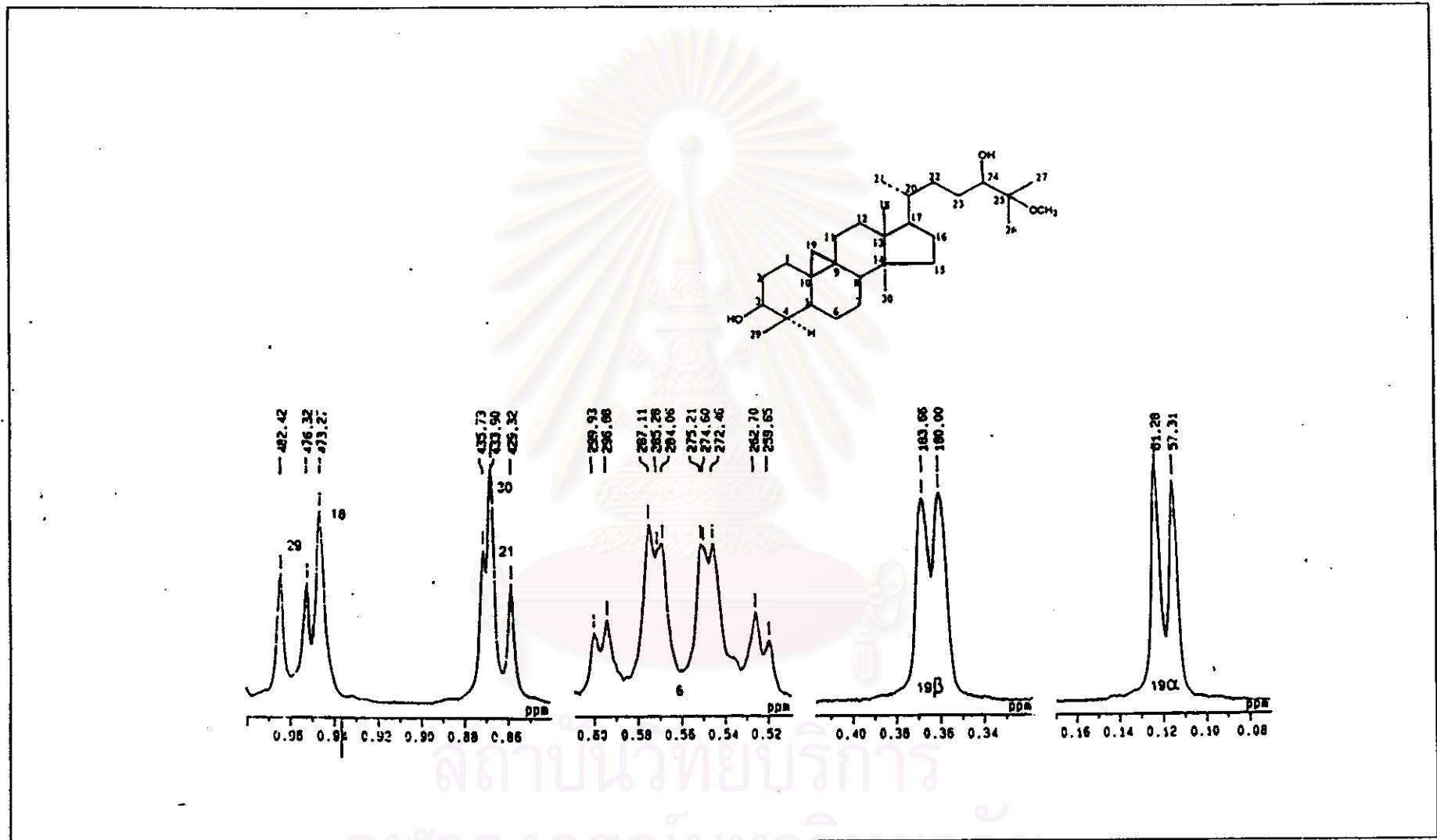


Figure 44 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$ 0.08-0.98ppm)

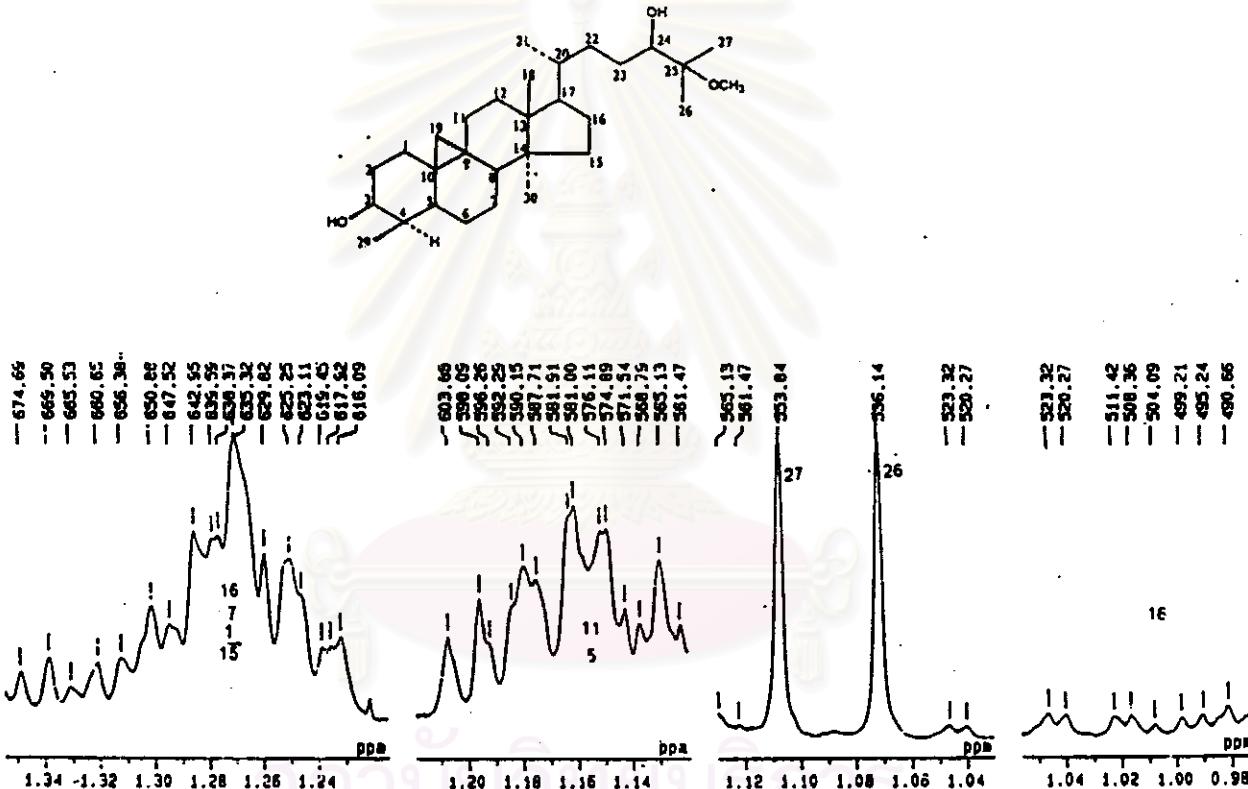


Figure 45 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$ 0.98-1.35ppm)

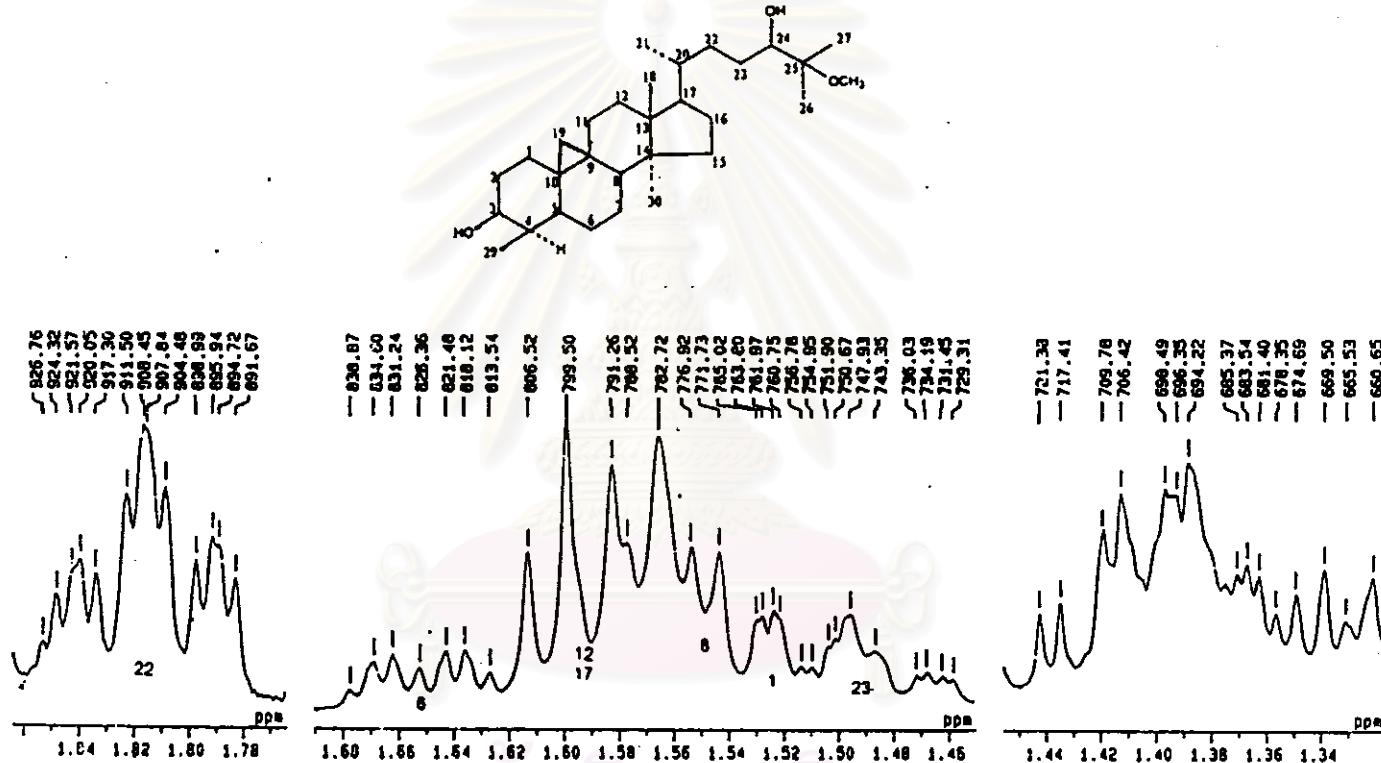


Figure 46 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  1.34-1.85 ppm)

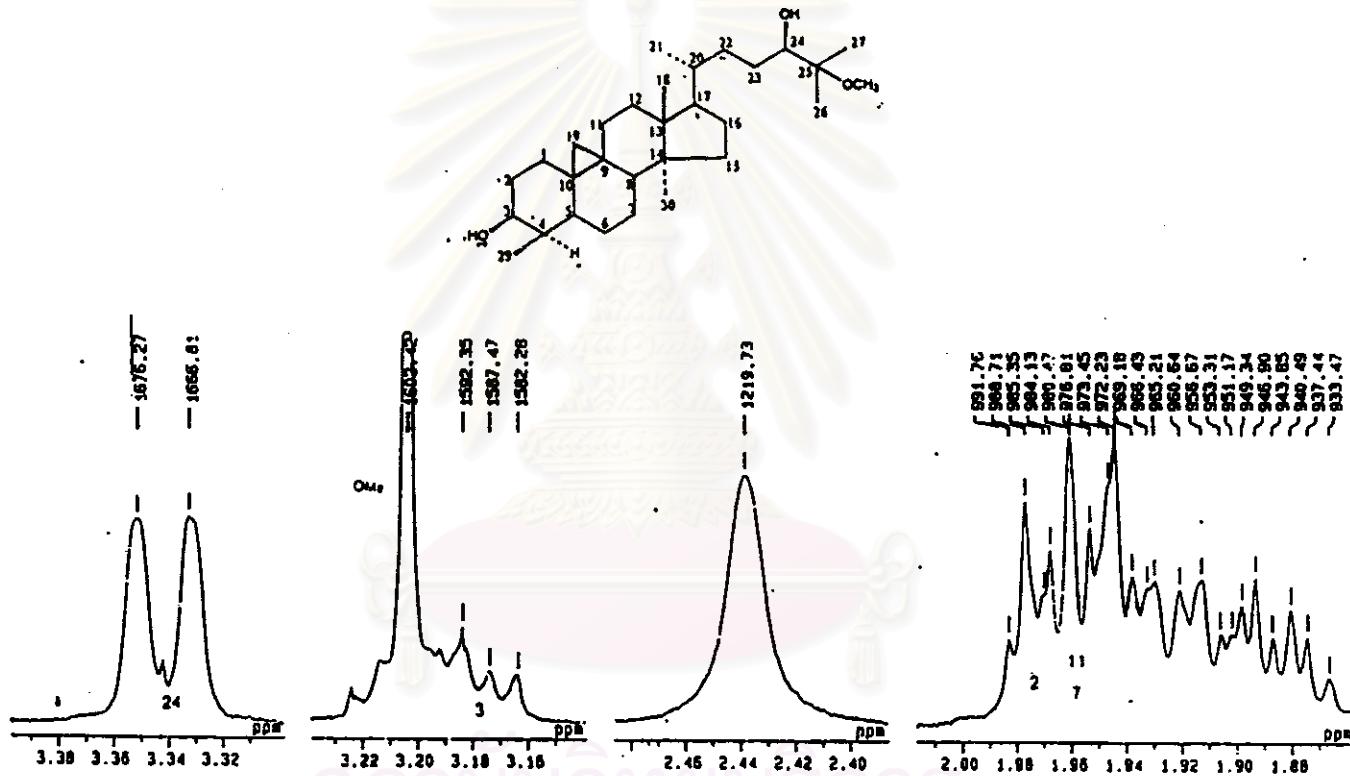


Figure 47 The 500 MHz  $^1\text{H}$  NMR spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  1.88-3.38 ppm)

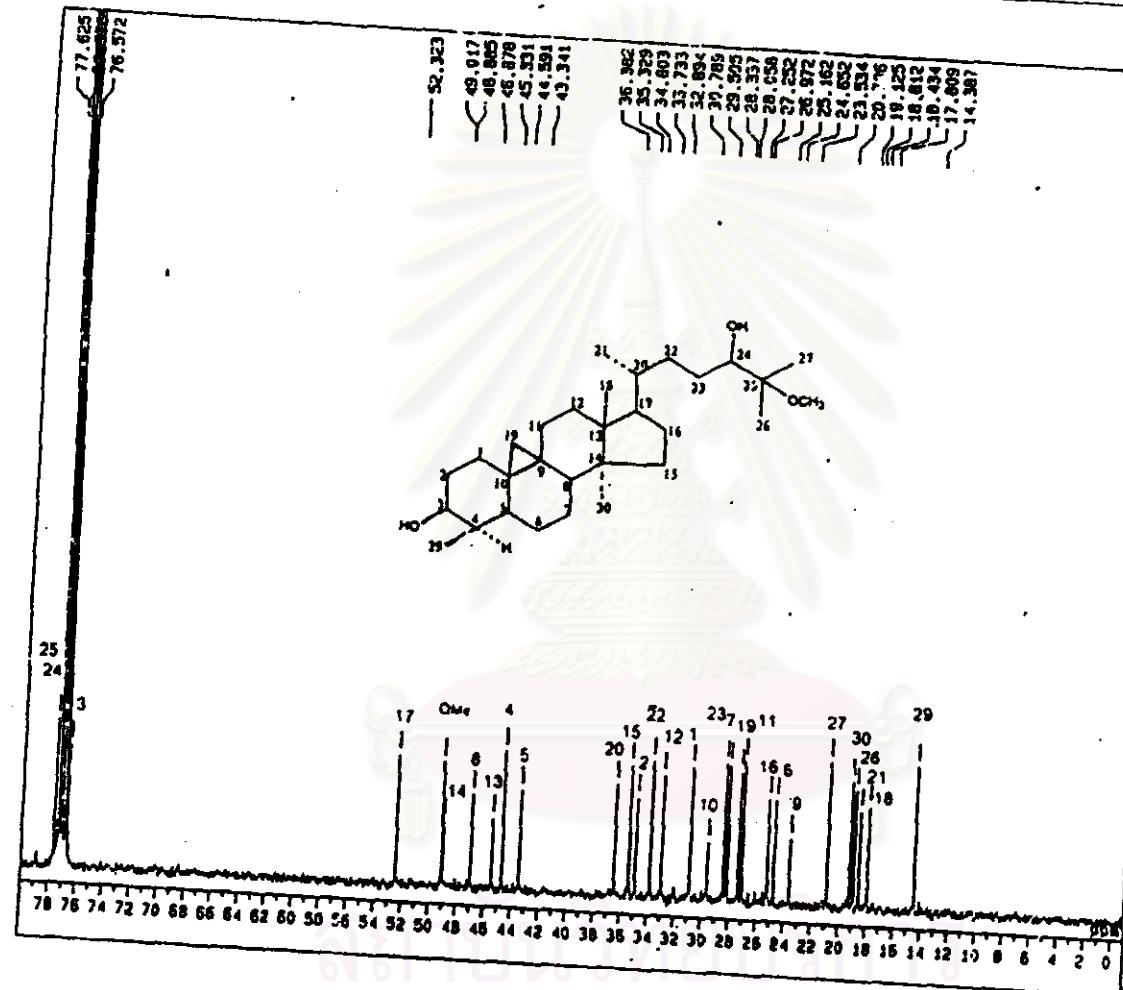


Figure 48 The  $125\text{ MHz} ^{13}\text{C}$  NMR spectrum of compound ACH3(in  $\text{CDCl}_3$ )

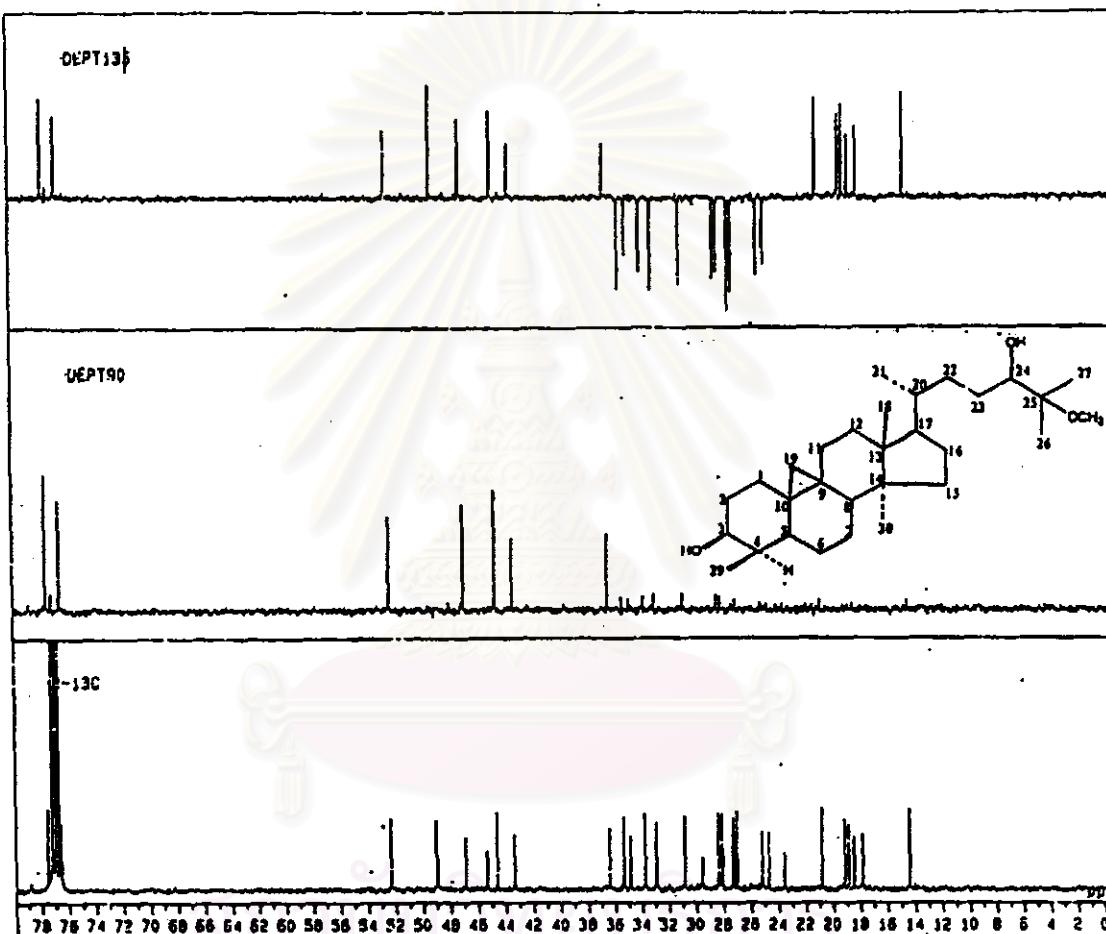


Figure 49 DEPT spectrum of compound ACH3 (in  $\text{CDCl}_3$ )

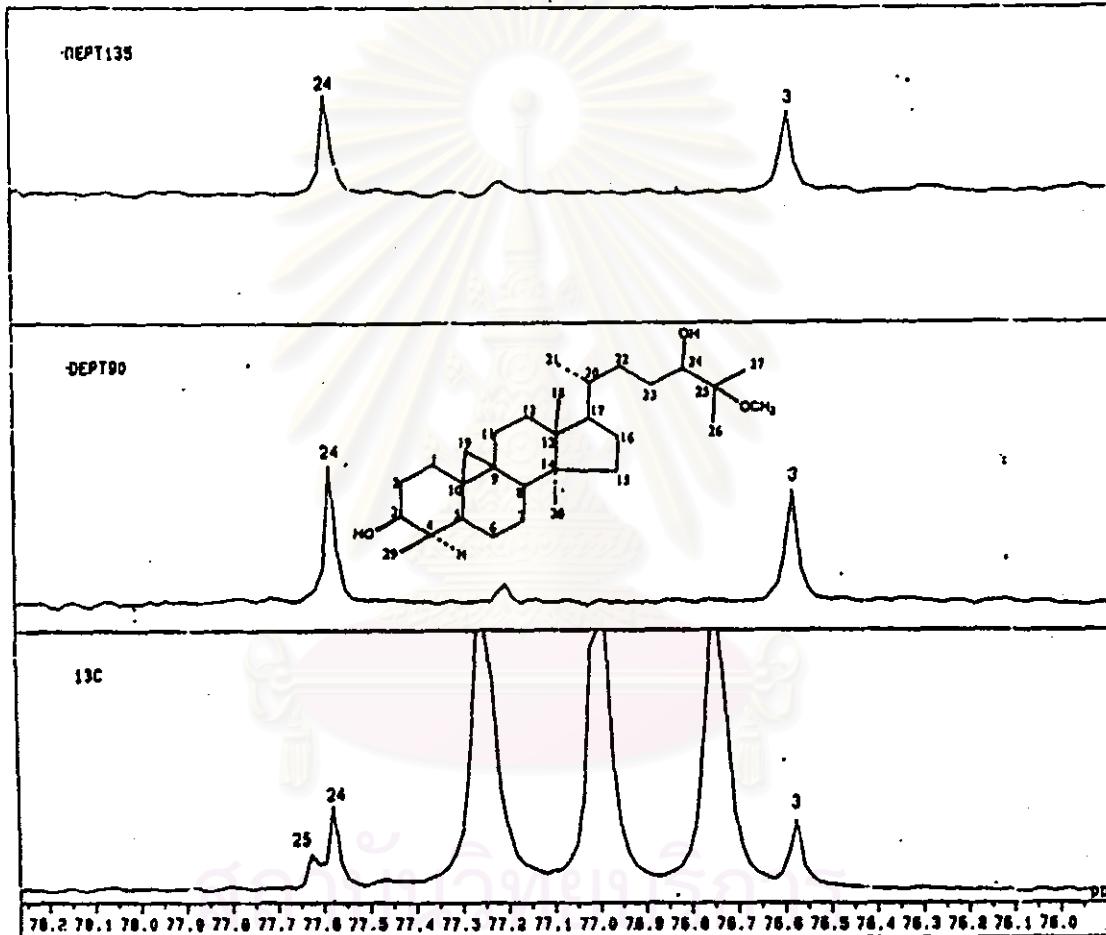


Figure 50 DEPT spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$  76.0-78.2 ppm)

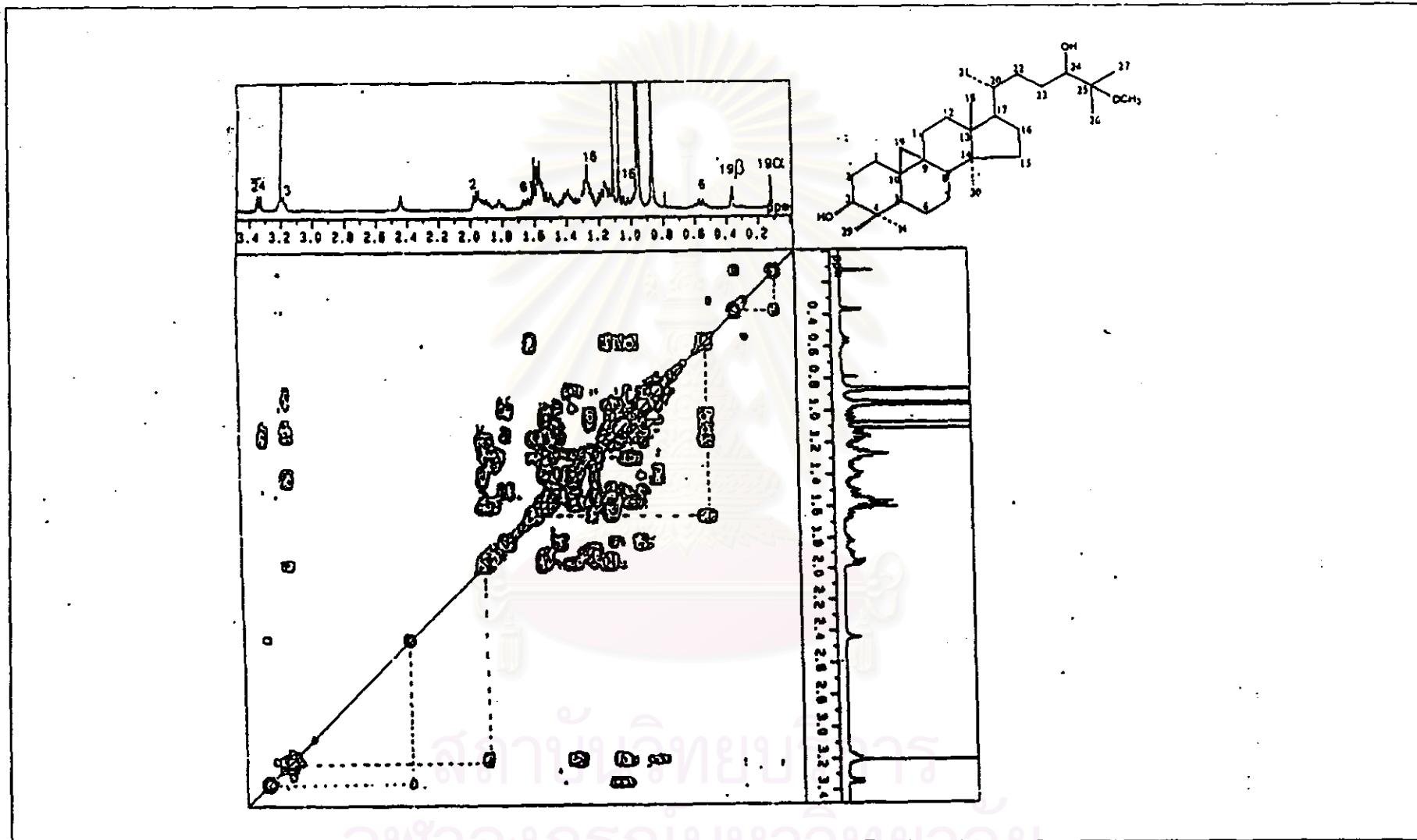


Figure 51  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-3.4ppm and  $\delta^1\text{H}$  0-3.4ppm)

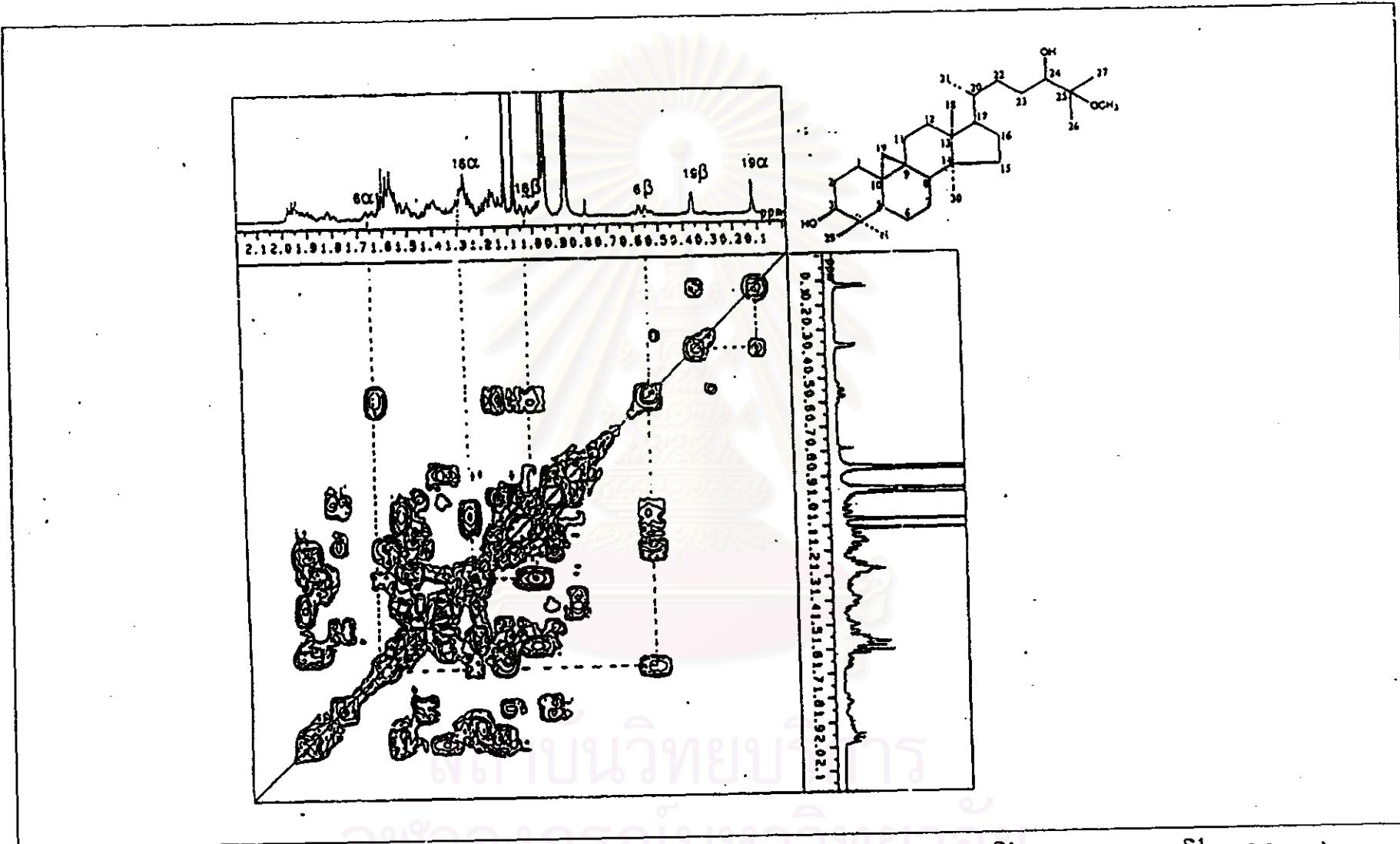


Figure 52  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.2ppm and  $\delta^1\text{H}$  0-2.2ppm)

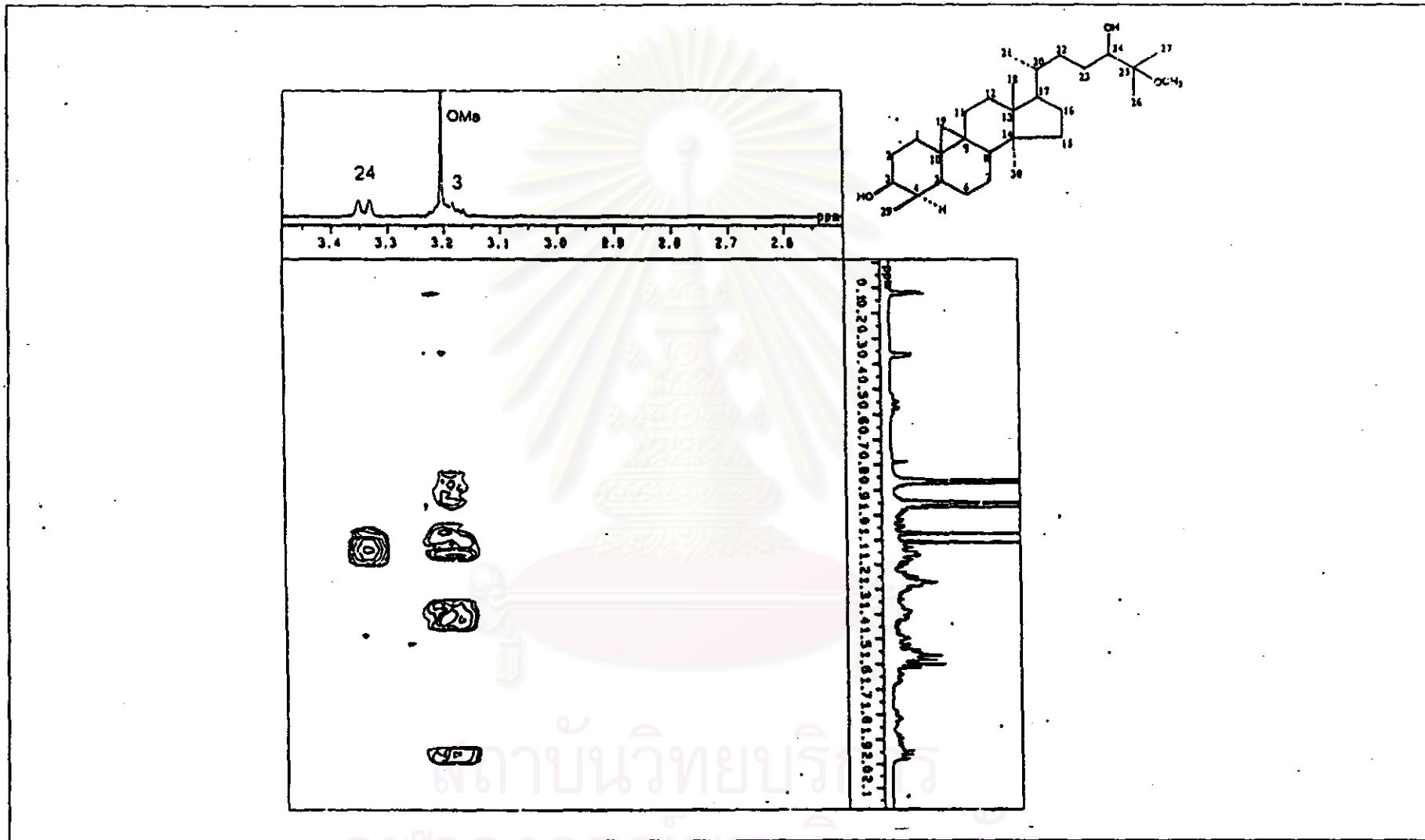


Figure 53  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  2.5-3.5 ppm and  $\delta^1\text{H}$  0-2.2ppm)

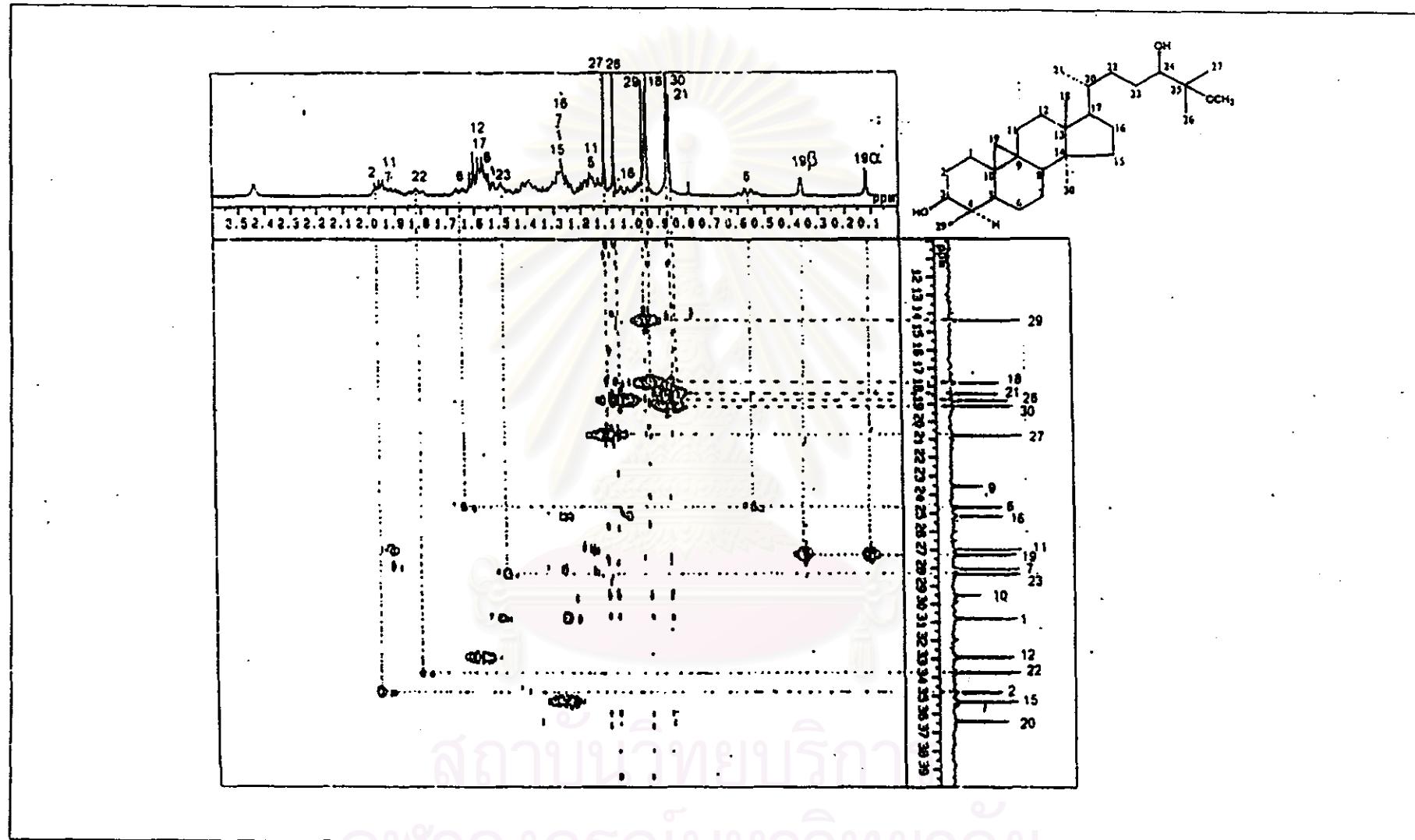


Figure 54  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.6 ppm and  $\delta^{13}\text{C}$  11-40 ppm)

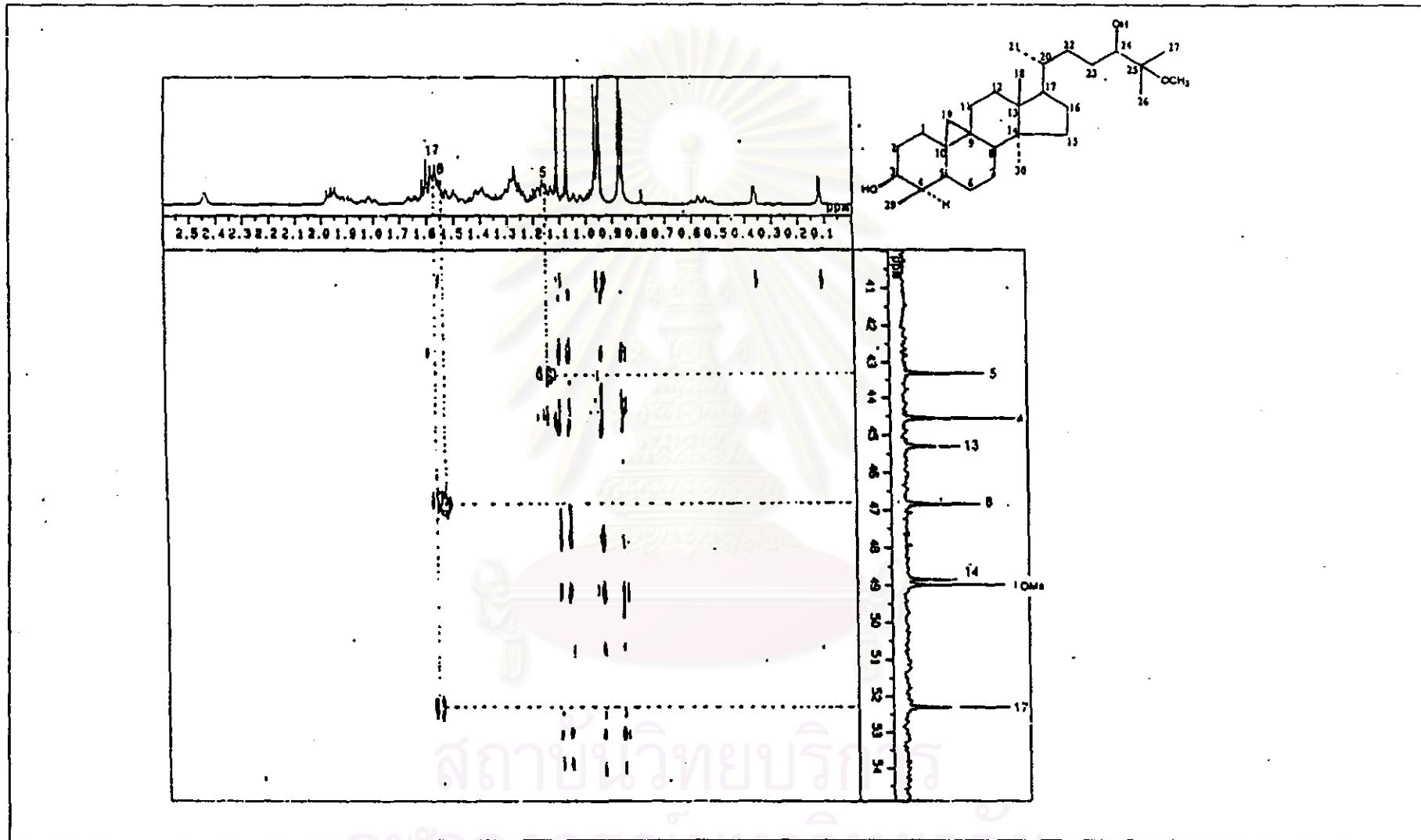


Figure 55  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.6 ppm and  $\delta^{13}\text{C}$  40-55 ppm)

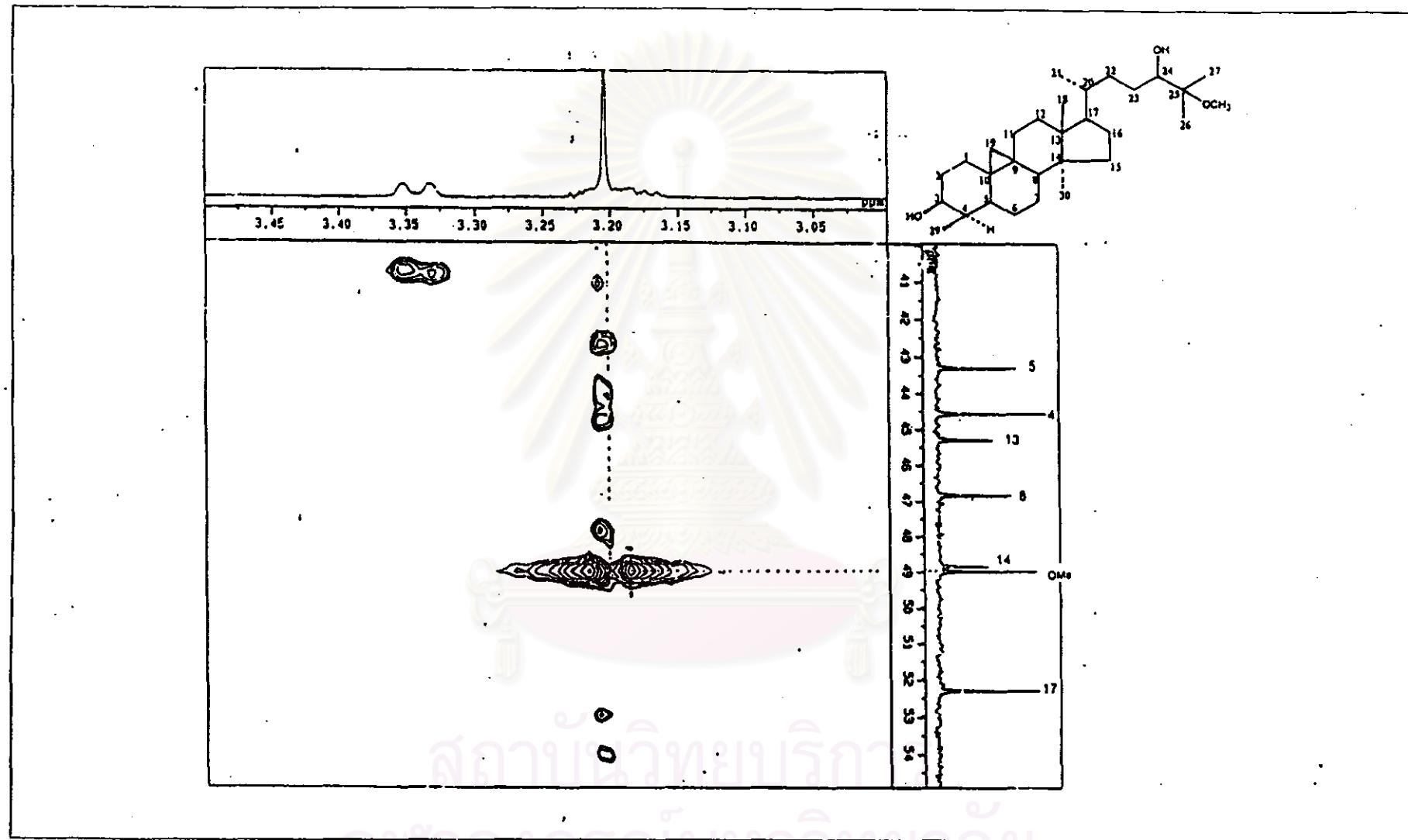


Figure 56  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  3.0-3.5 ppm and  $\delta^{13}\text{C}$  40-55 ppm)

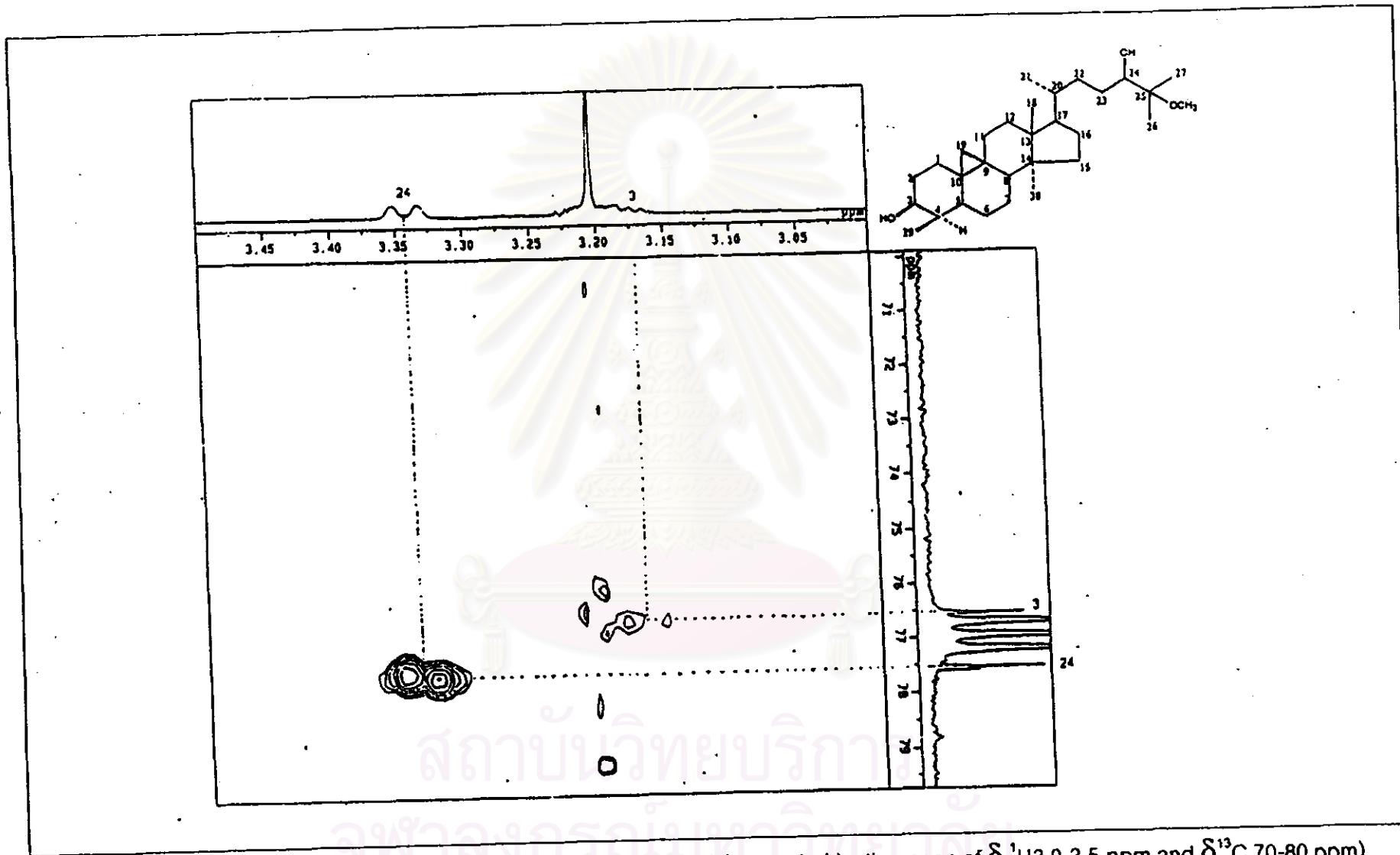


Figure 57  $^1\text{H}$ - $^{13}\text{C}$  HMQC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H} 3.0-3.5 \text{ ppm}$  and  $\delta^{13}\text{C} 70-80 \text{ ppm}$ )

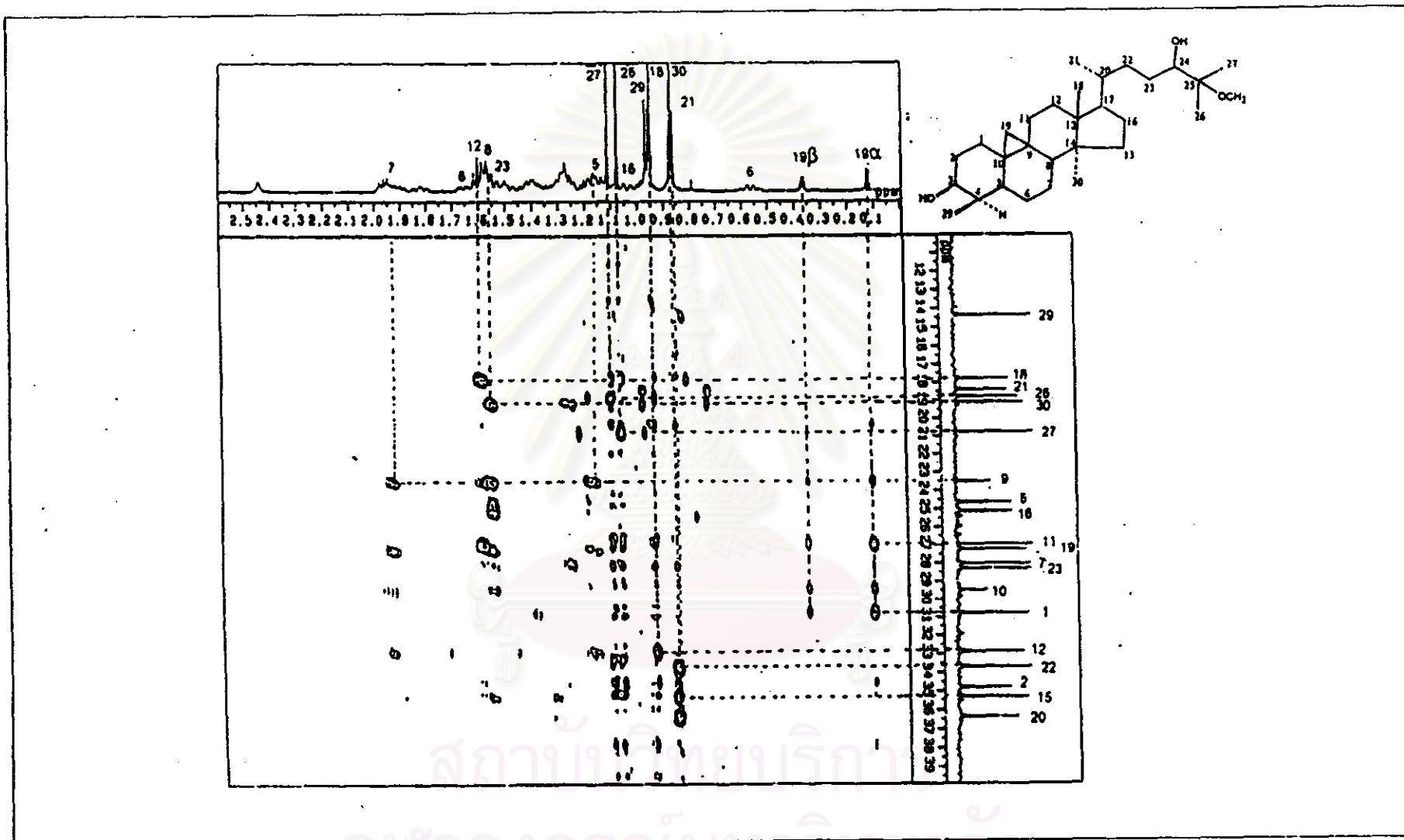


Figure 58  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  0-2.6 ppm and  $\delta$   $^{13}\text{C}$  11-40 ppm)

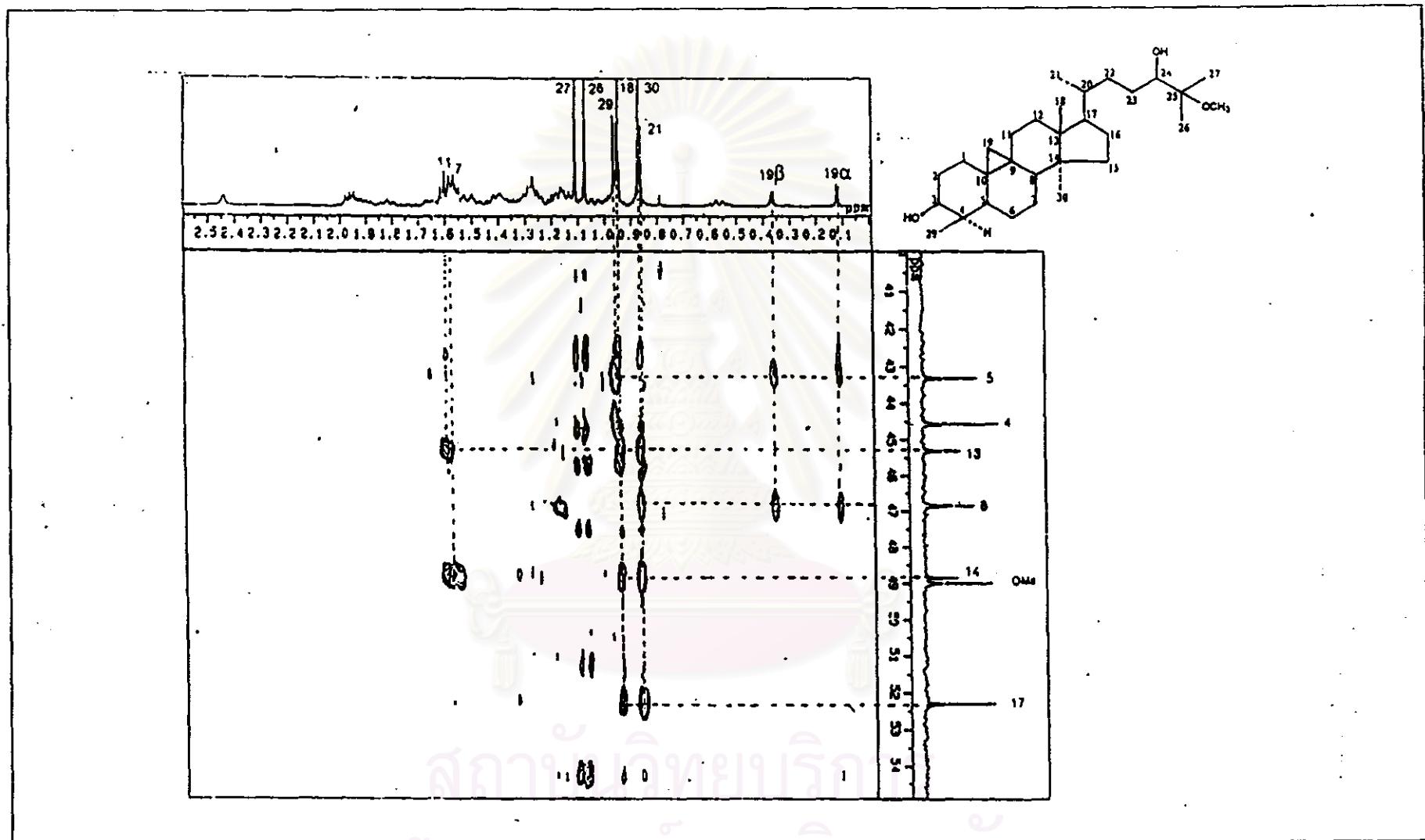


Figure 59  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta^1\text{H}$  0-2.6 ppm and  $\delta^{13}\text{C}$  40-55 ppm)

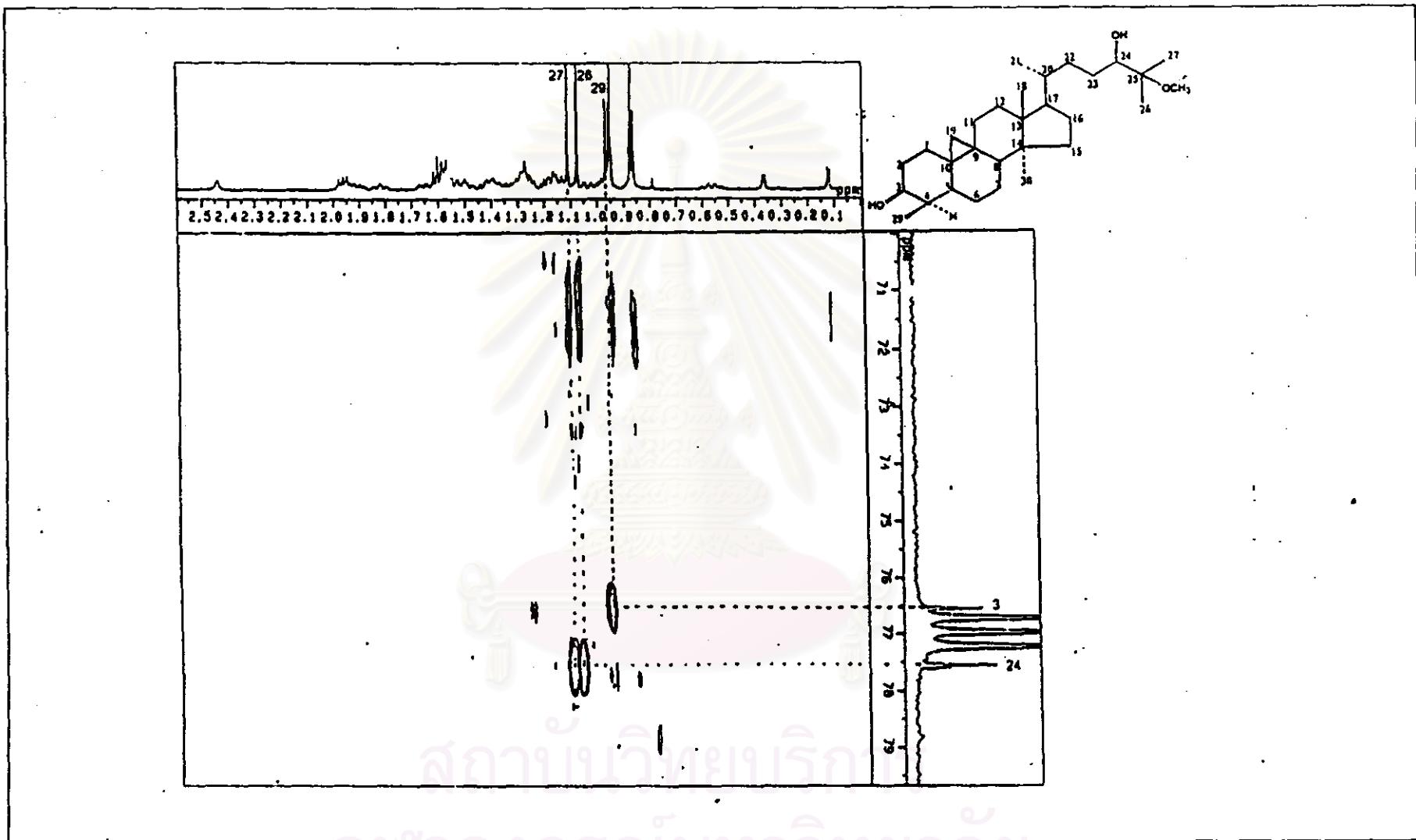


Figure 60  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  0-2.6 ppm and  $\delta$   $^{13}\text{C}$  70-80 ppm)

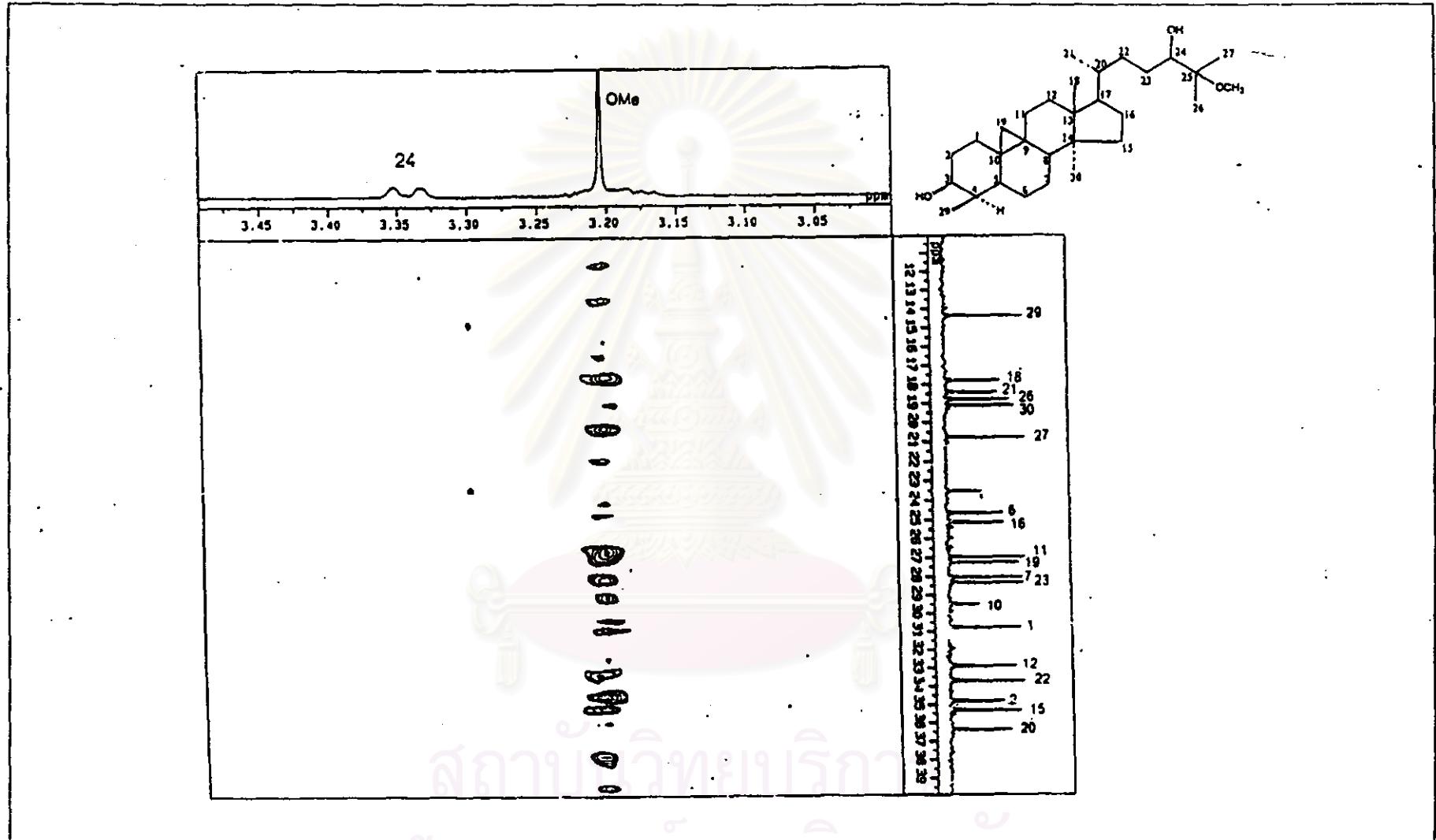


Figure 61  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  3.0-3.5 ppm and  $\delta$   $^{13}\text{C}$  11-40 ppm)

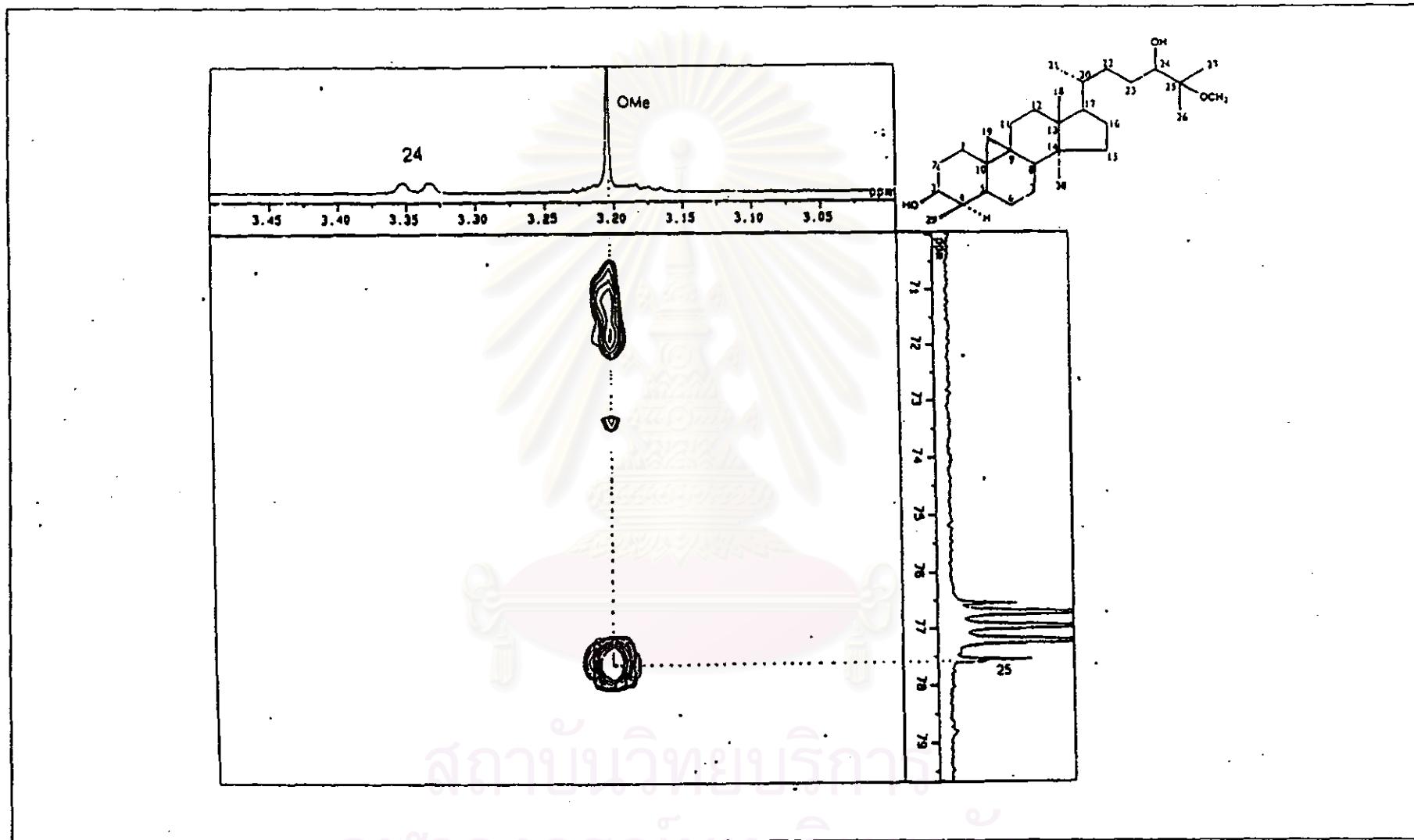


Figure 62  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound ACH3 (in  $\text{CDCl}_3$ ) (expanded in the range of  $\delta$   $^1\text{H}$  3.0-3.5 ppm and  $\delta$   $^{13}\text{C}$  70-80 ppm)

## VITA

Mrs. Rhapeepon Girdwichai was born on January 16, 1965 in Petchburi, Thailand. She received her Bachelor of Sciences in Pharmacy in 1989 from the Faculty of Pharmaceutical Sciences, Chulalongkorn University.

She is now working as a pharmacist at Nakompathom Hospital.



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