

Antiviral Activity of Newly Synthesized Pyrazole Derivatives Against Newcastle Disease Virus

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Spectral data:

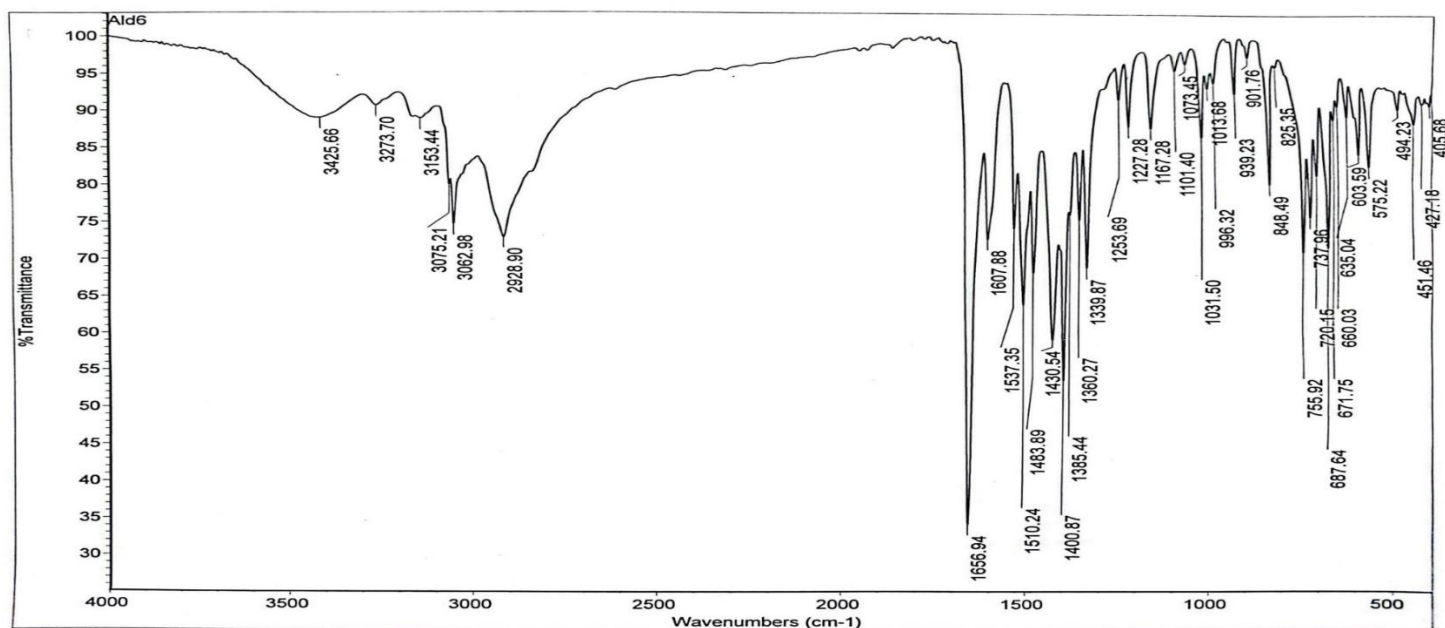


Fig. S12. IR spectrum of compound 2

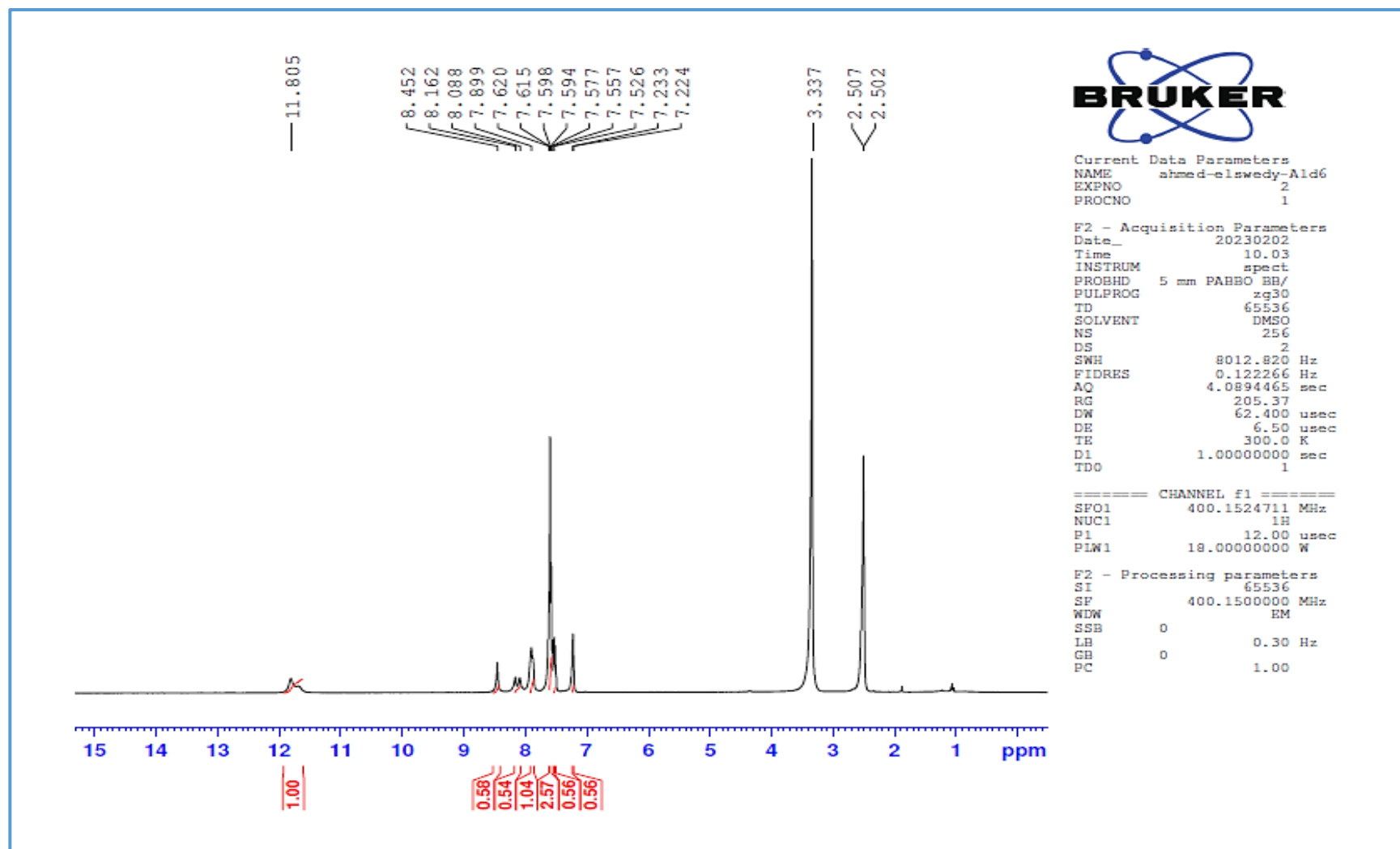


Fig. S13. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 2

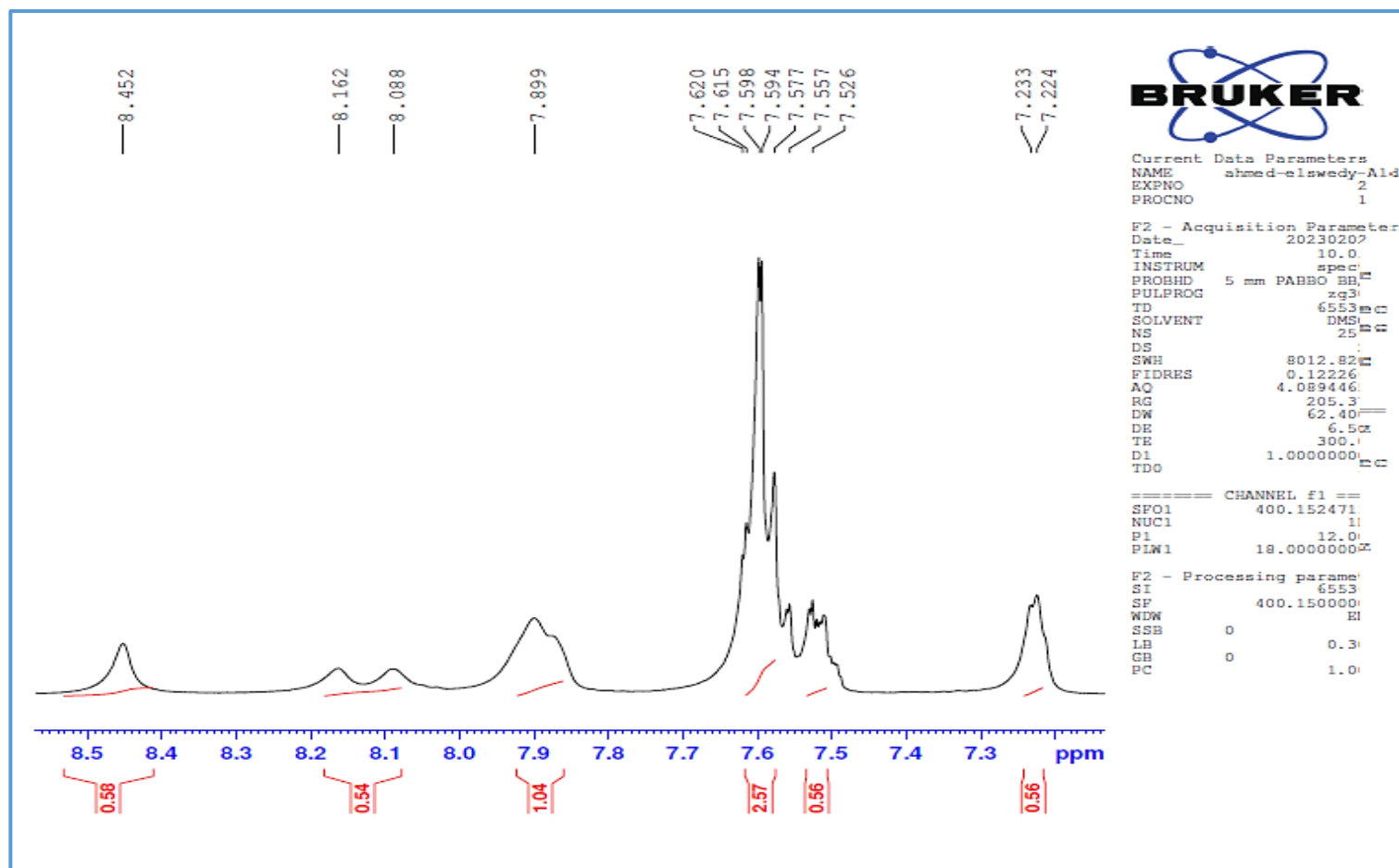


Fig. S14. Cont. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 2

ahmed-2 #286-302 RT: 4.80-5.07 AV: 17 SB: 2 3.82 , 3.53 NL: 9.91E1
T: {0,0} + c EI Full ms [40.00-1000.00]

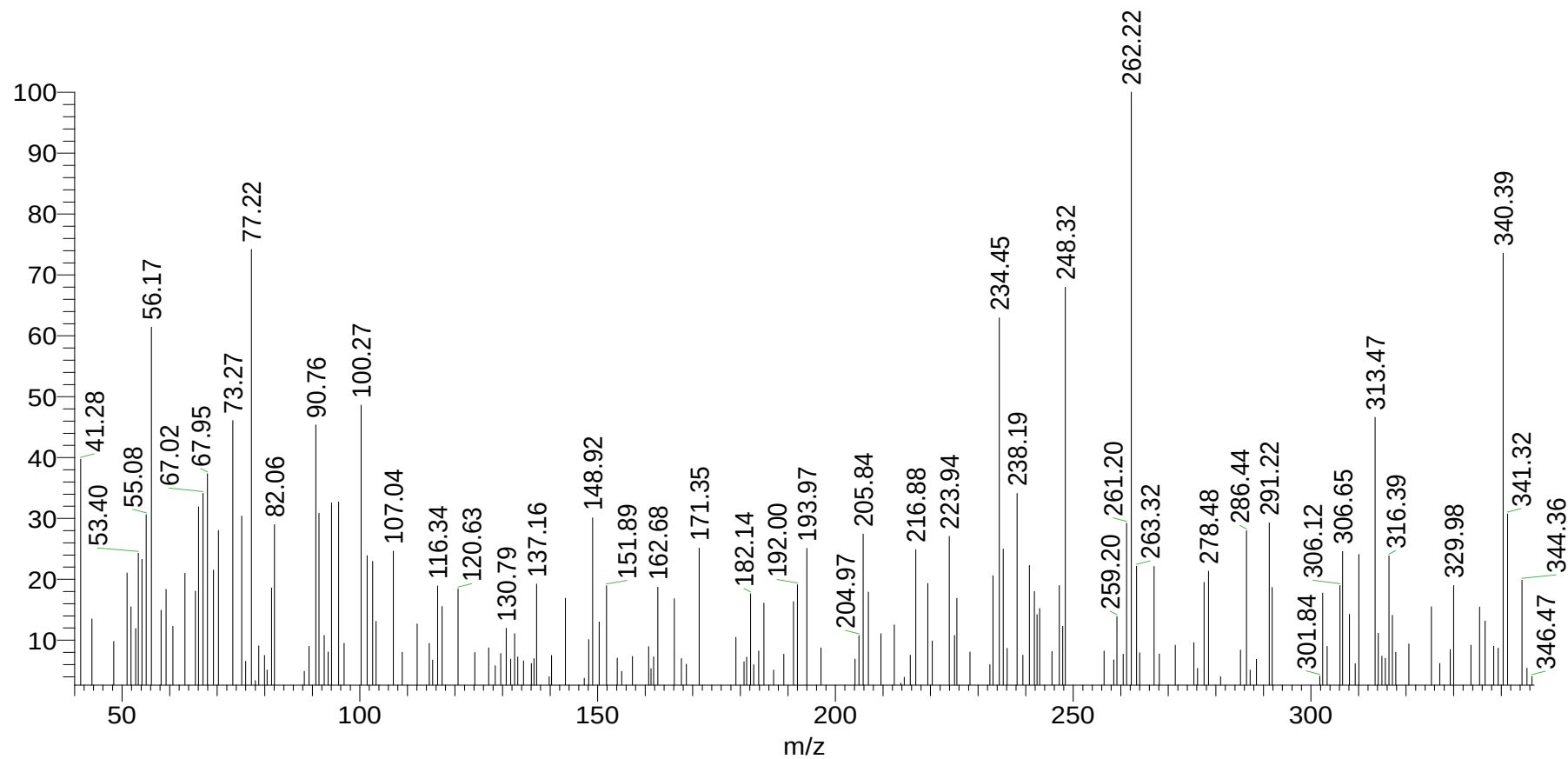


Fig. S15. EI-Mass spectrum of compound 2

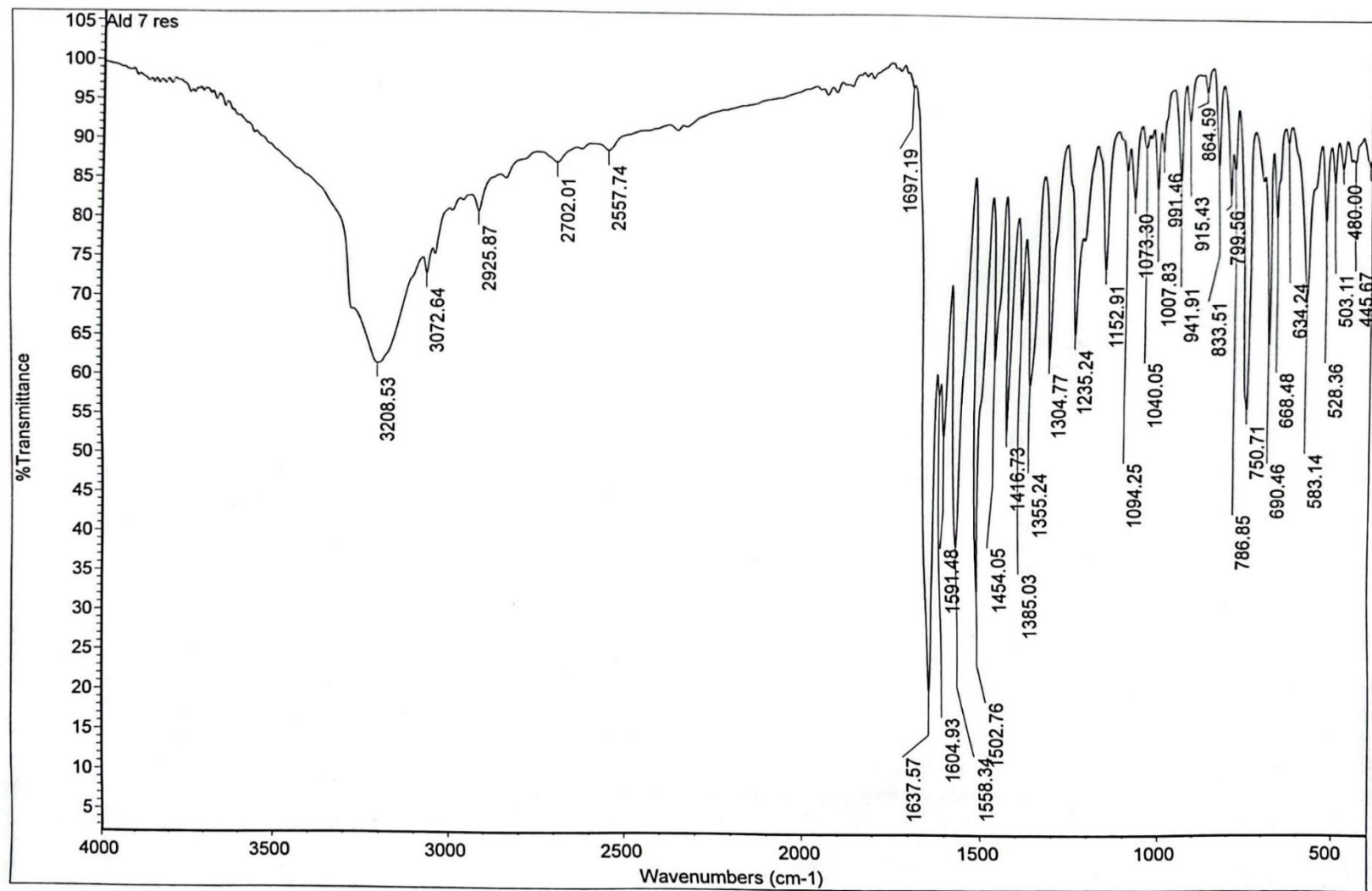


Fig. S16. IR spectrum of compound 3

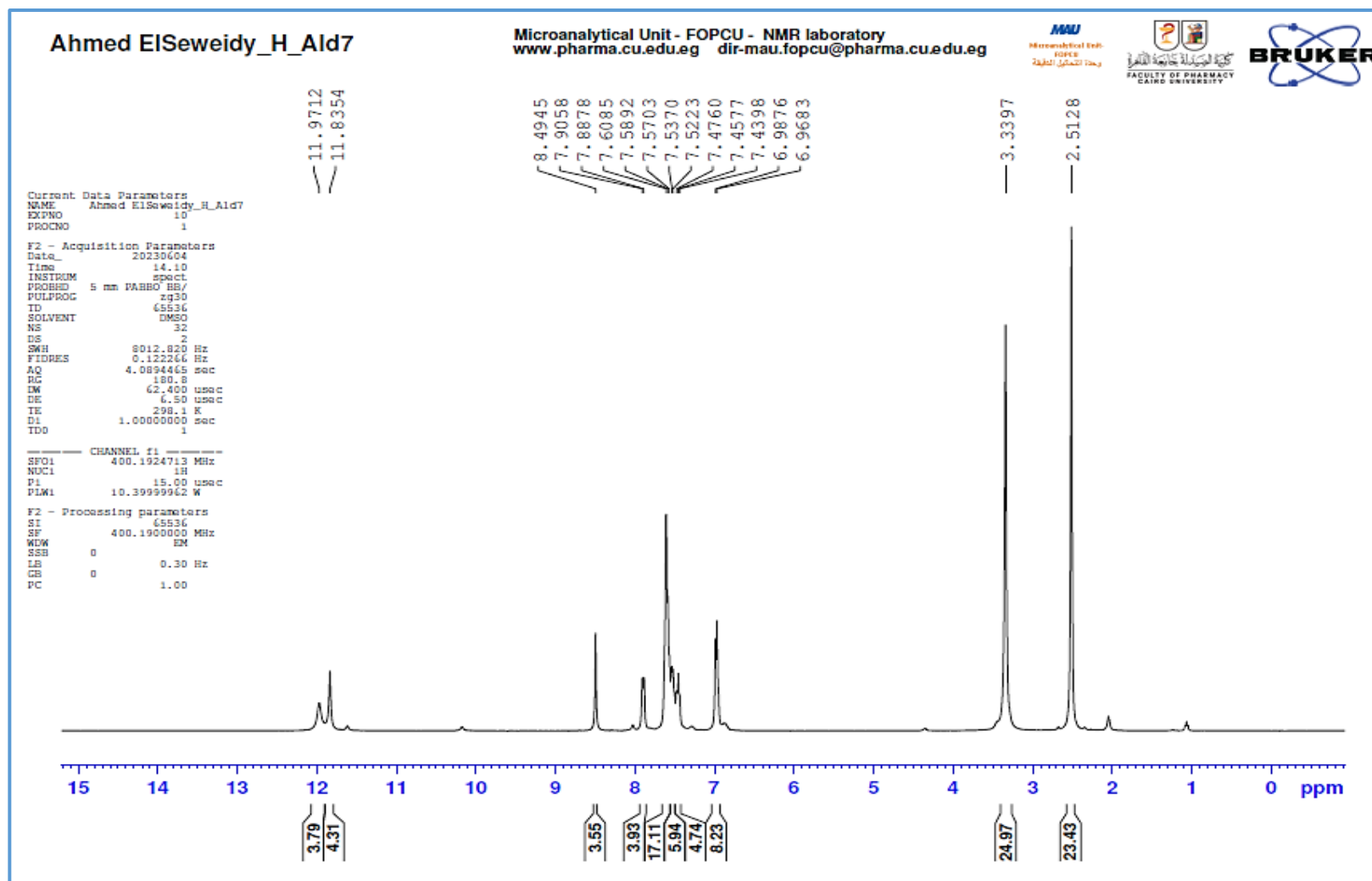


Fig. S17. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 3

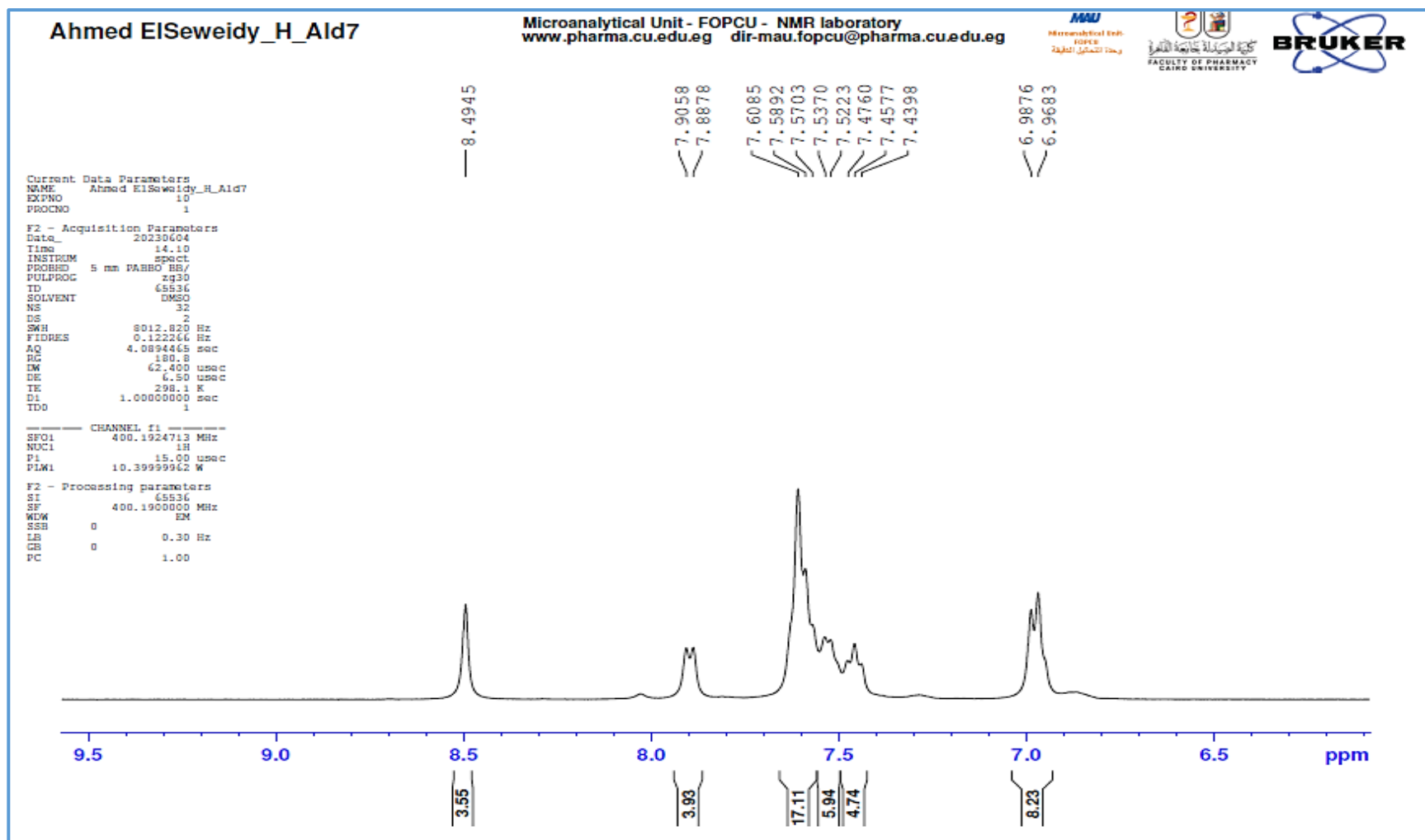


Fig. S18. Cont. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 3

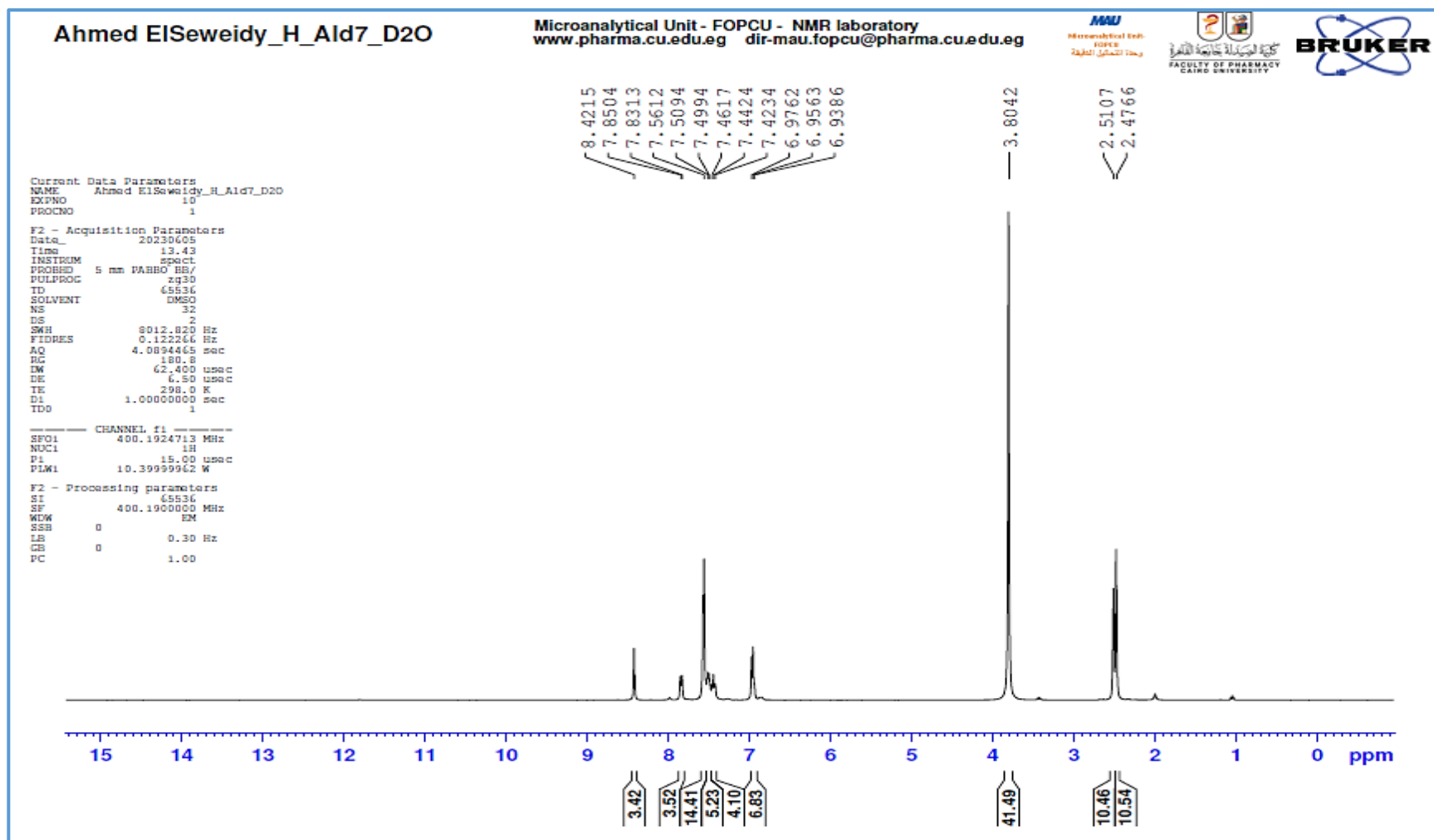


Fig. S19. ^1H NMR spectrum ($\text{DMSO-}d_6 + \text{D}_2\text{O}$) of compound 3

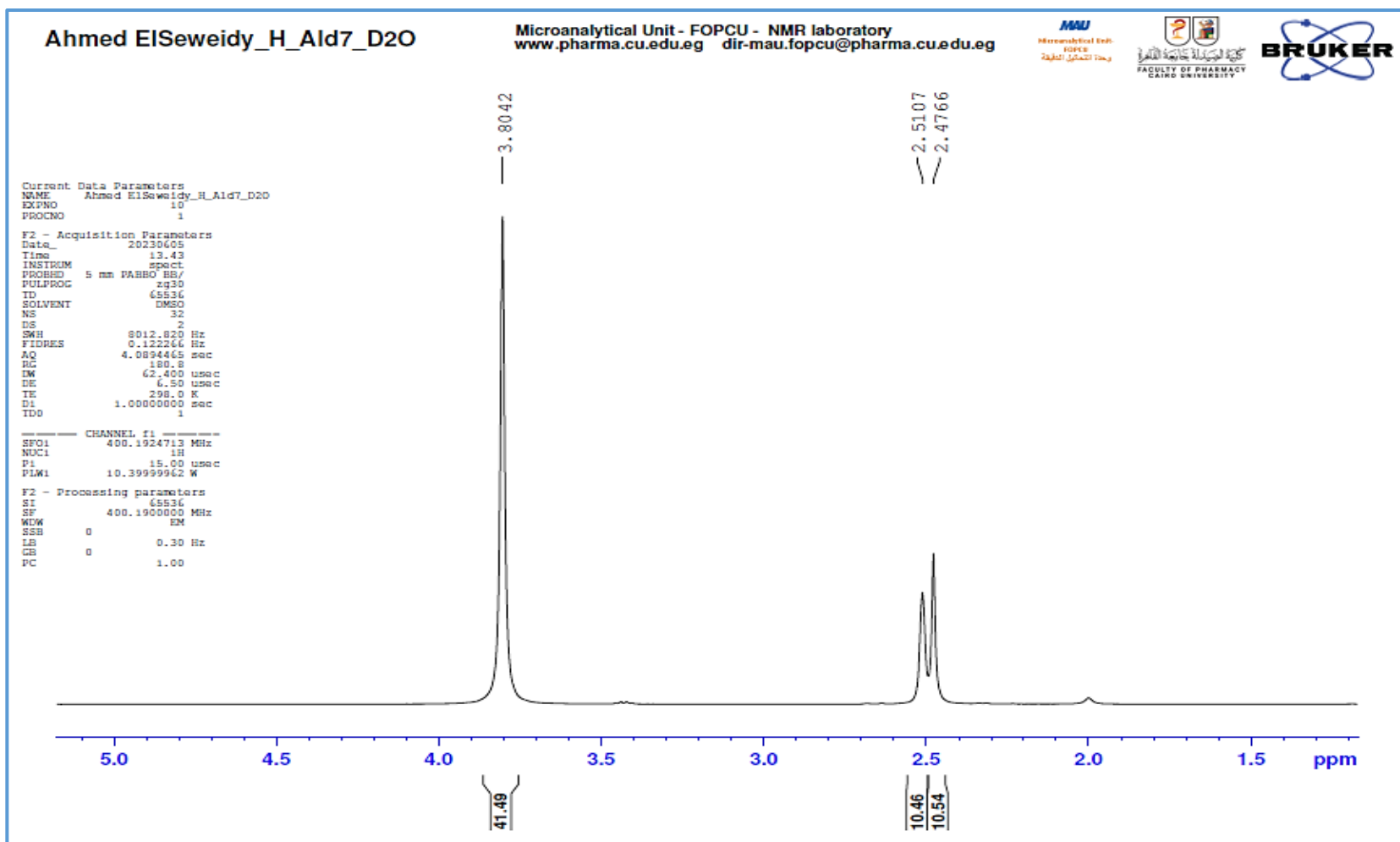


Fig. S20. Cont. ^1H NMR spectrum ($\text{DMSO-}d_6 + \text{D}_2\text{O}$) of compound 3

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BRUKER

Current Data Parameters
NAME Ahmed ElSeweid_H_Ald7_D2O
EXPNO 10
PROCNO 1

F2 - Acquisition Parameters
Date_ 20230605
Time 13.43
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PULPROG zg30
TD 65536
SOLVENT DMSO
NS 32
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 180.8
DM 62.400 usec
DE 6.50 usec
TE 298.0 K
D1 1.00000000 sec
TD0 1

CHANNEL f1
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NUC1 1H
P1 15.00 usec
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F2 - Processing parameters
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PC 1.00

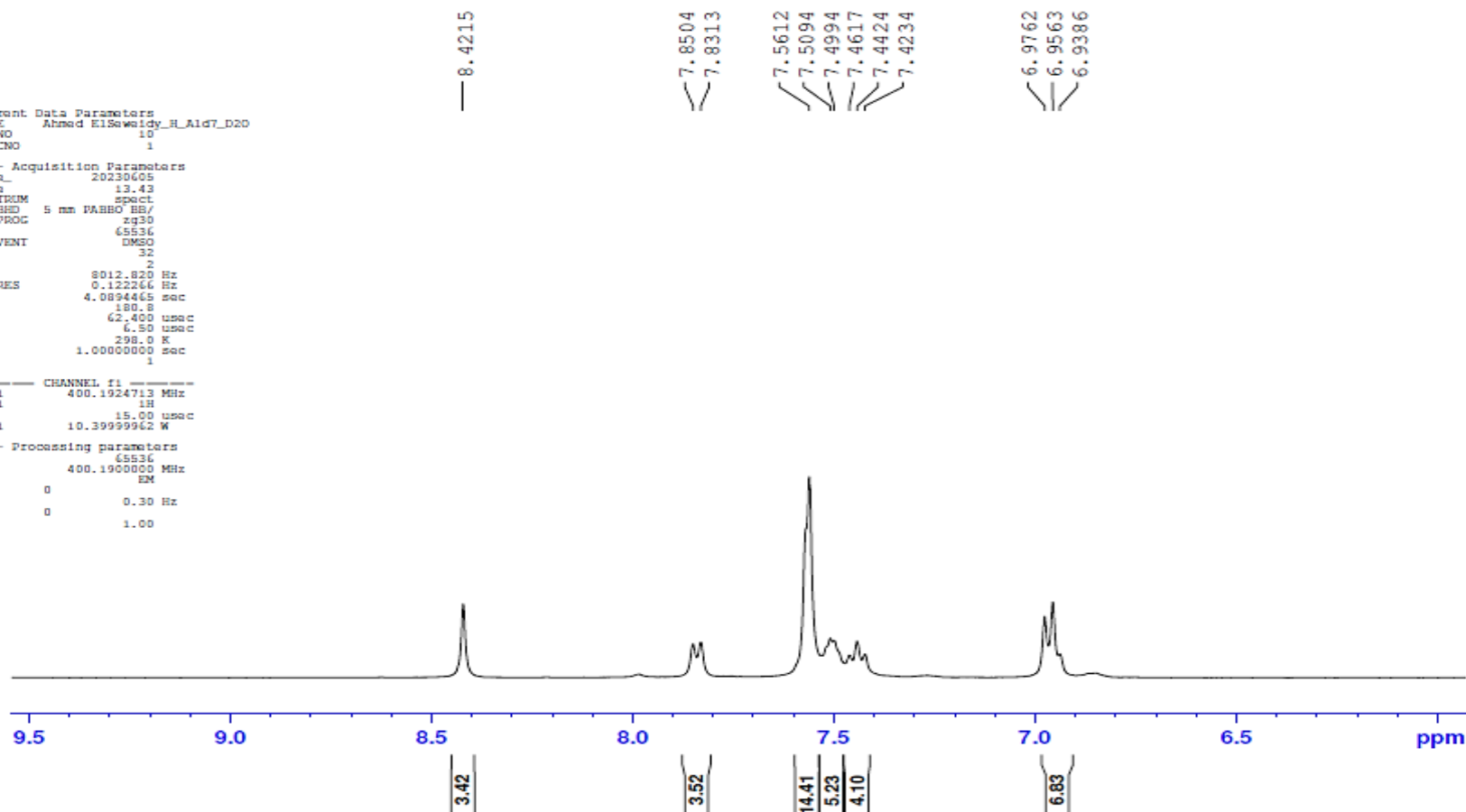


Fig. S21. Cont. ¹H NMR spectrum (DMSO-*d*₆+D₂O) of compound 3

ahmed-3 #101-105 RT: 1.71-1.77 AV: 5 SB: 2 3.82 , 3.53 NL: 1.64E2
T: {0,0} + c EI Full ms [40.00-1000.00]

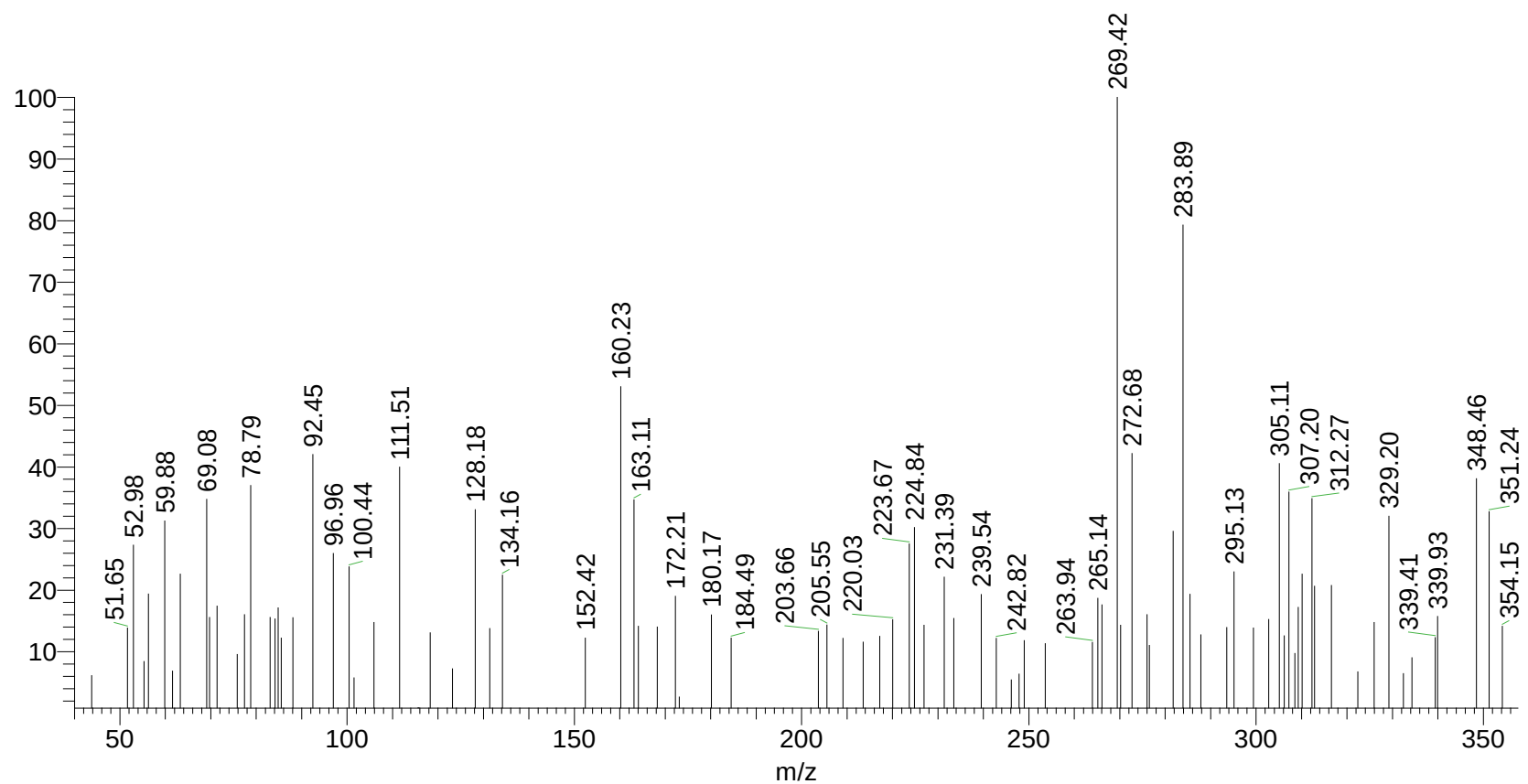


Fig. S22. EI-Mass spectrum of compound 3

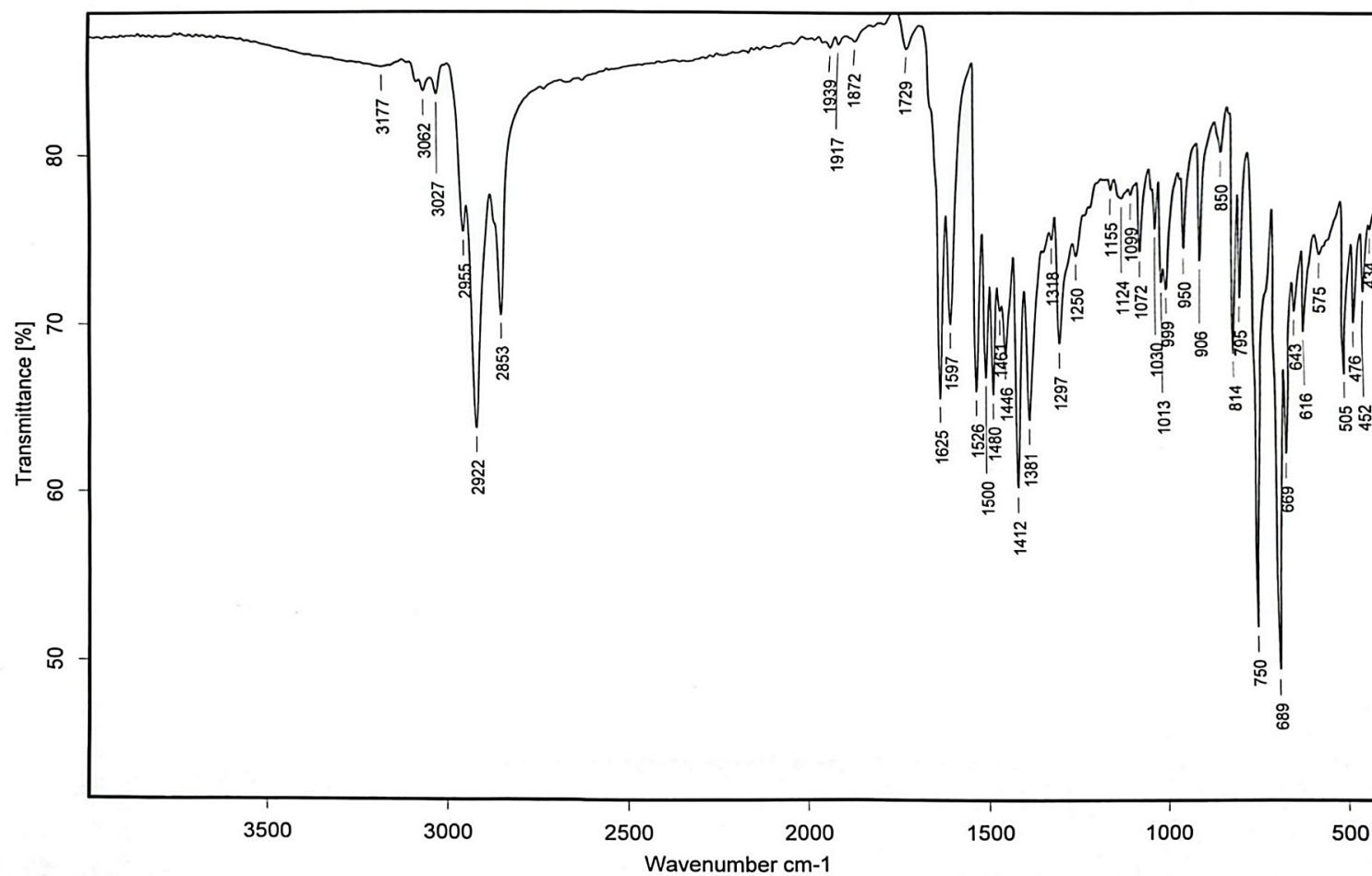


Fig. S23. IR spectrum of compound 4

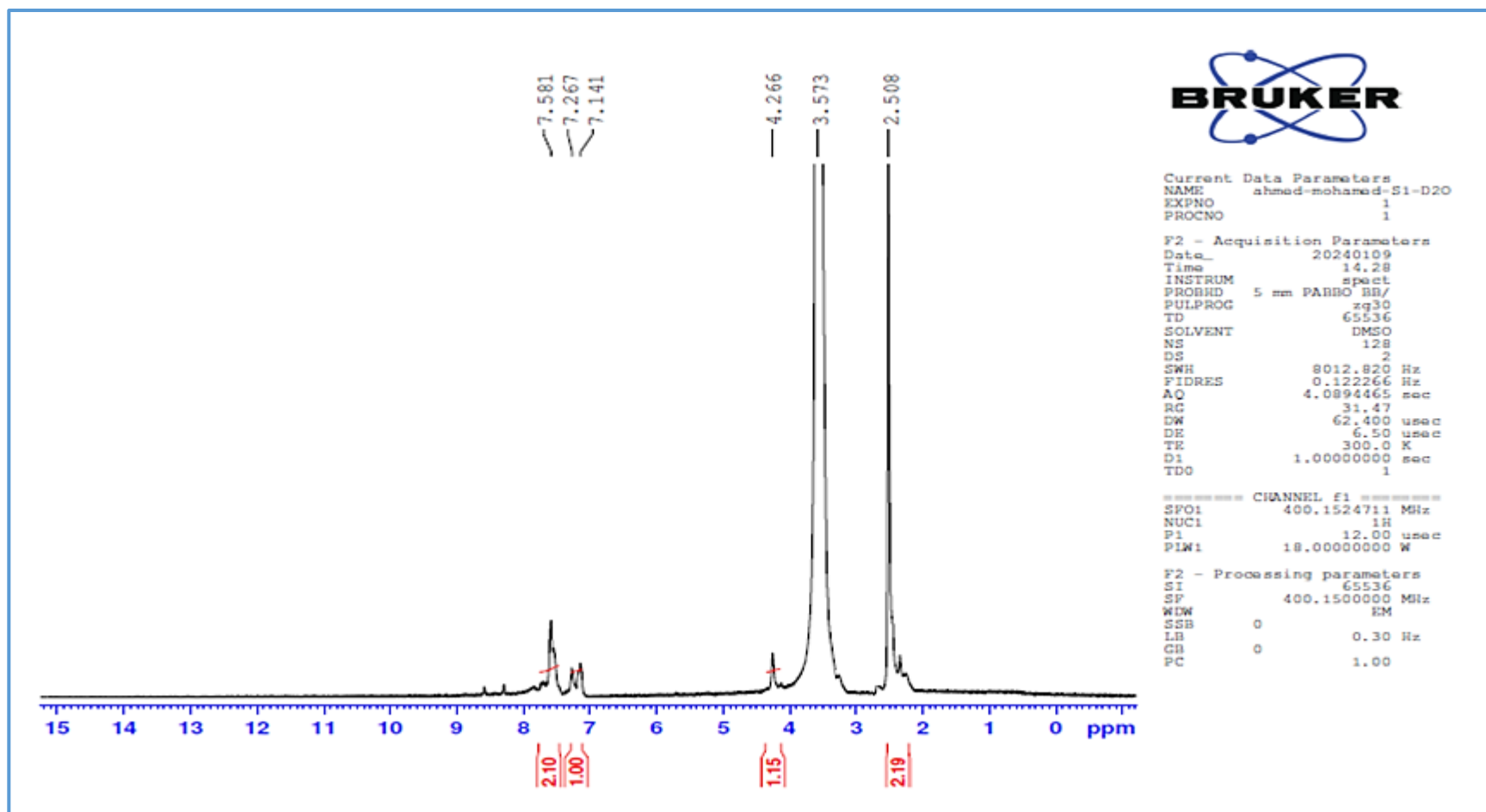


Fig. S24. ^1H NMR spectrum ($\text{DMSO-}d_6$) of compound 4

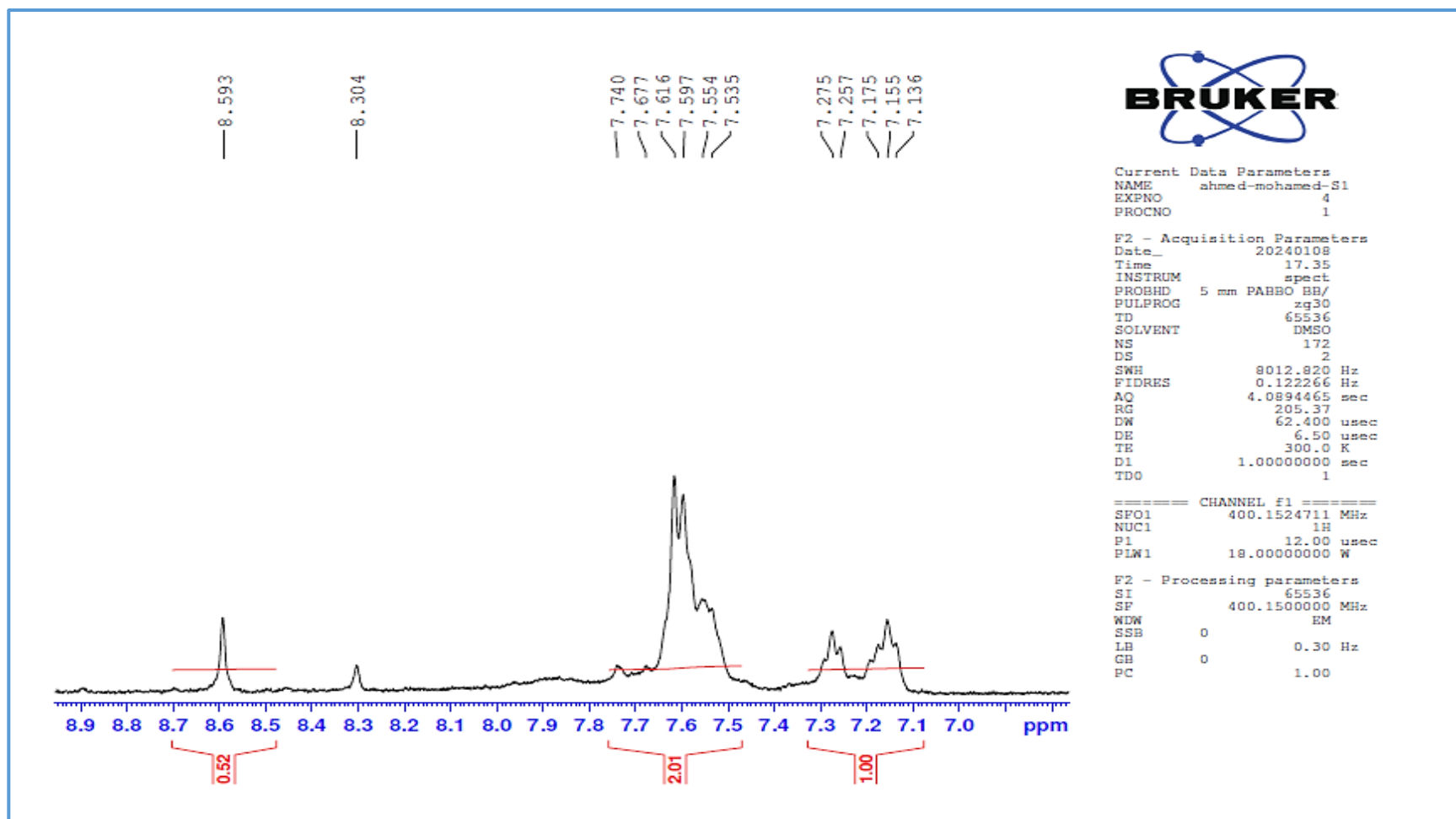


Fig. S25. Cont. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **4**

ahmed-4 #185 RT: 3.11 AV: 1 SB: 2 3.82 , 3.53 NL: 9.46E2
T: {0,0} + c EI Full ms [40.00-1000.00]

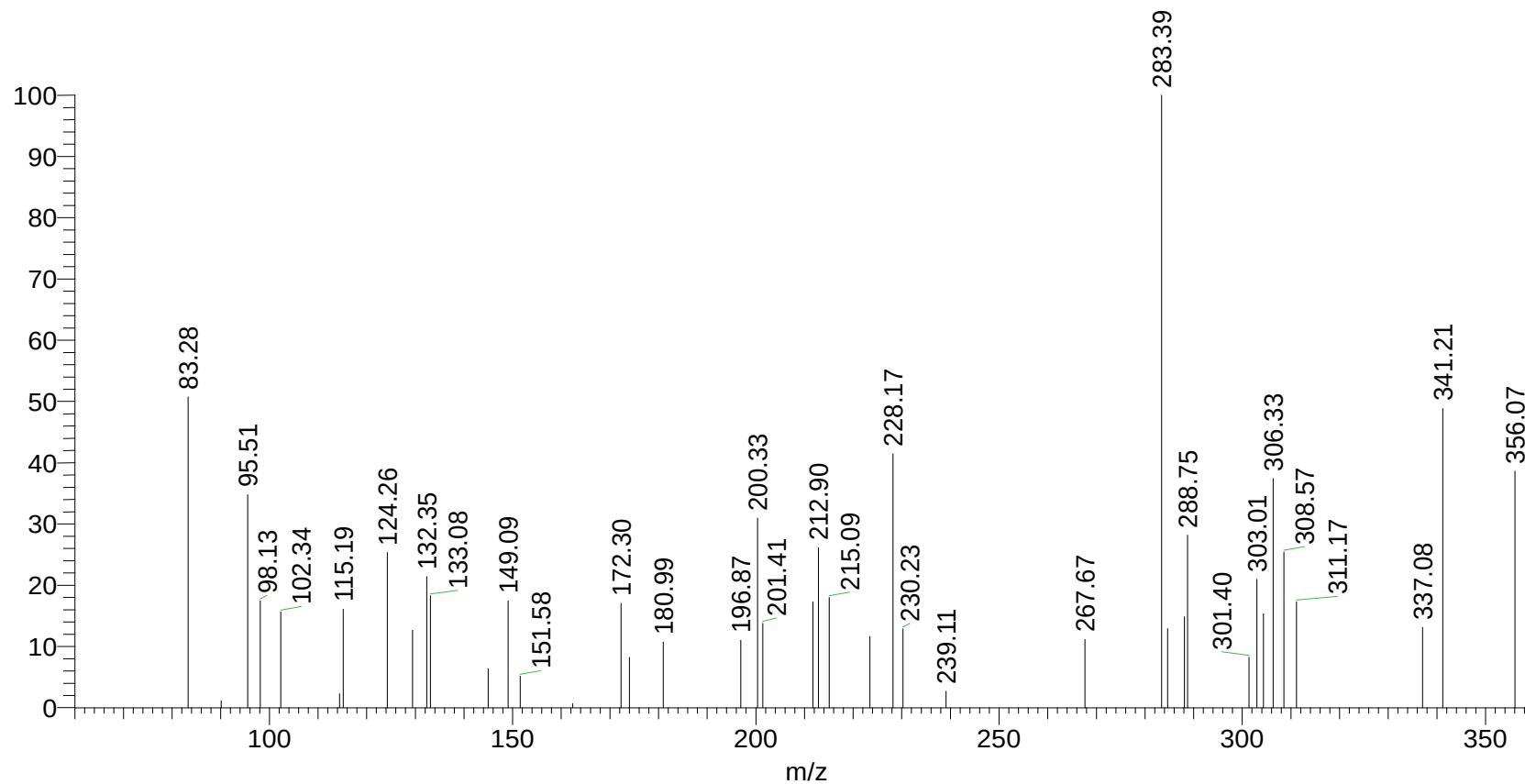


Fig. S26. EI-Mass spectrum of compound 4

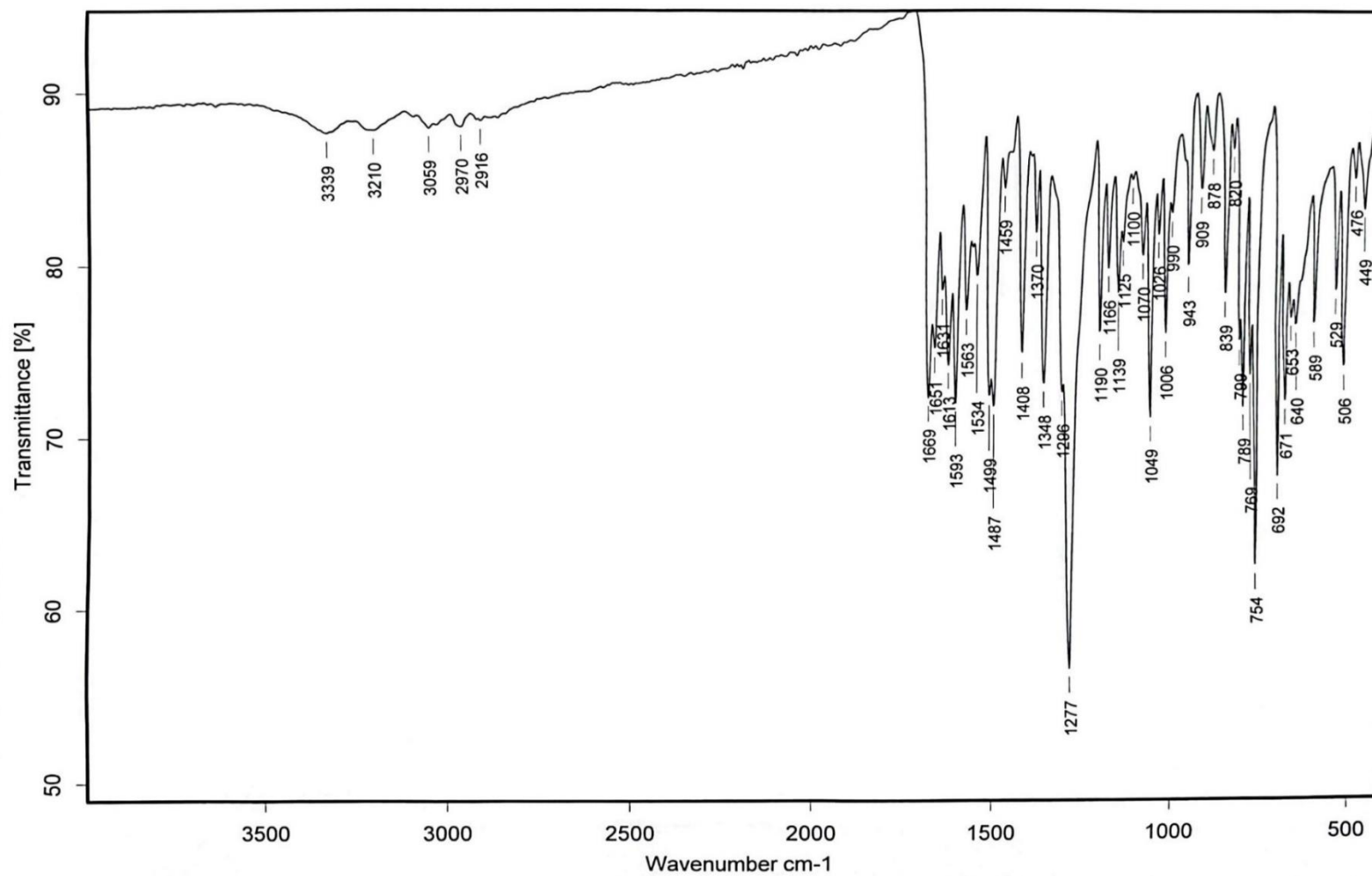


Fig. S27. IR spectrum of compound 6

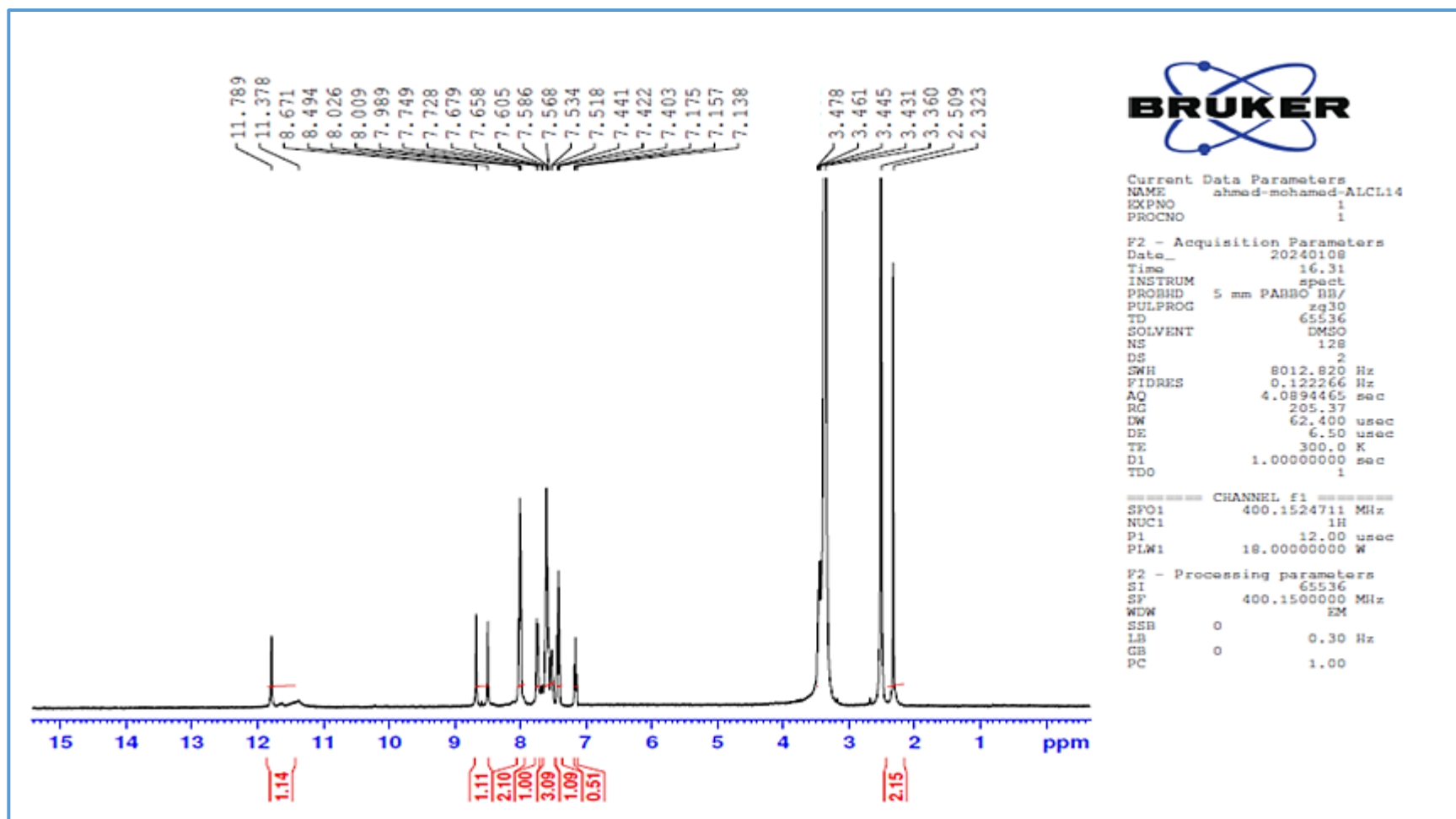


Fig. S28. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 6

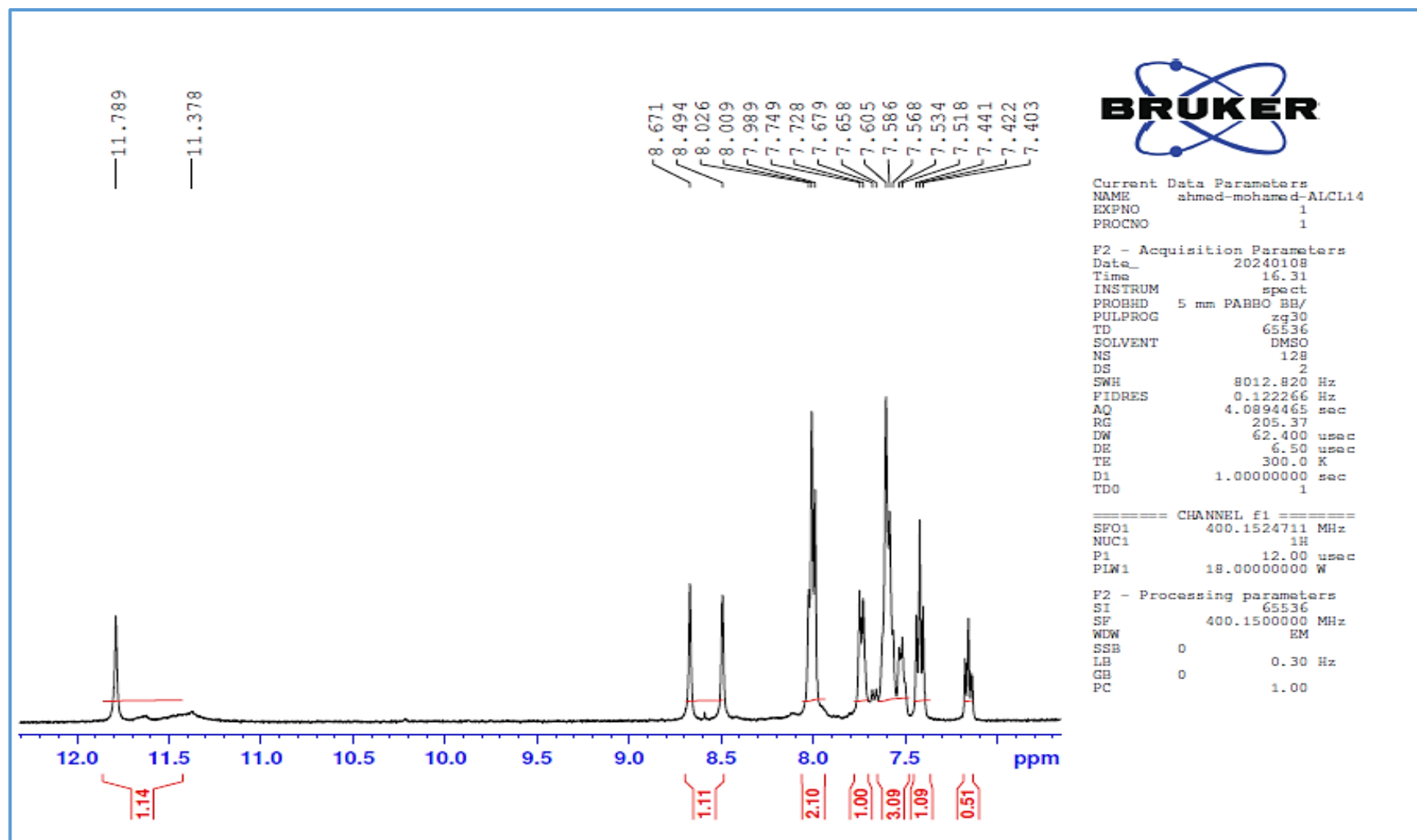


Fig. S29. Cont. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **6**

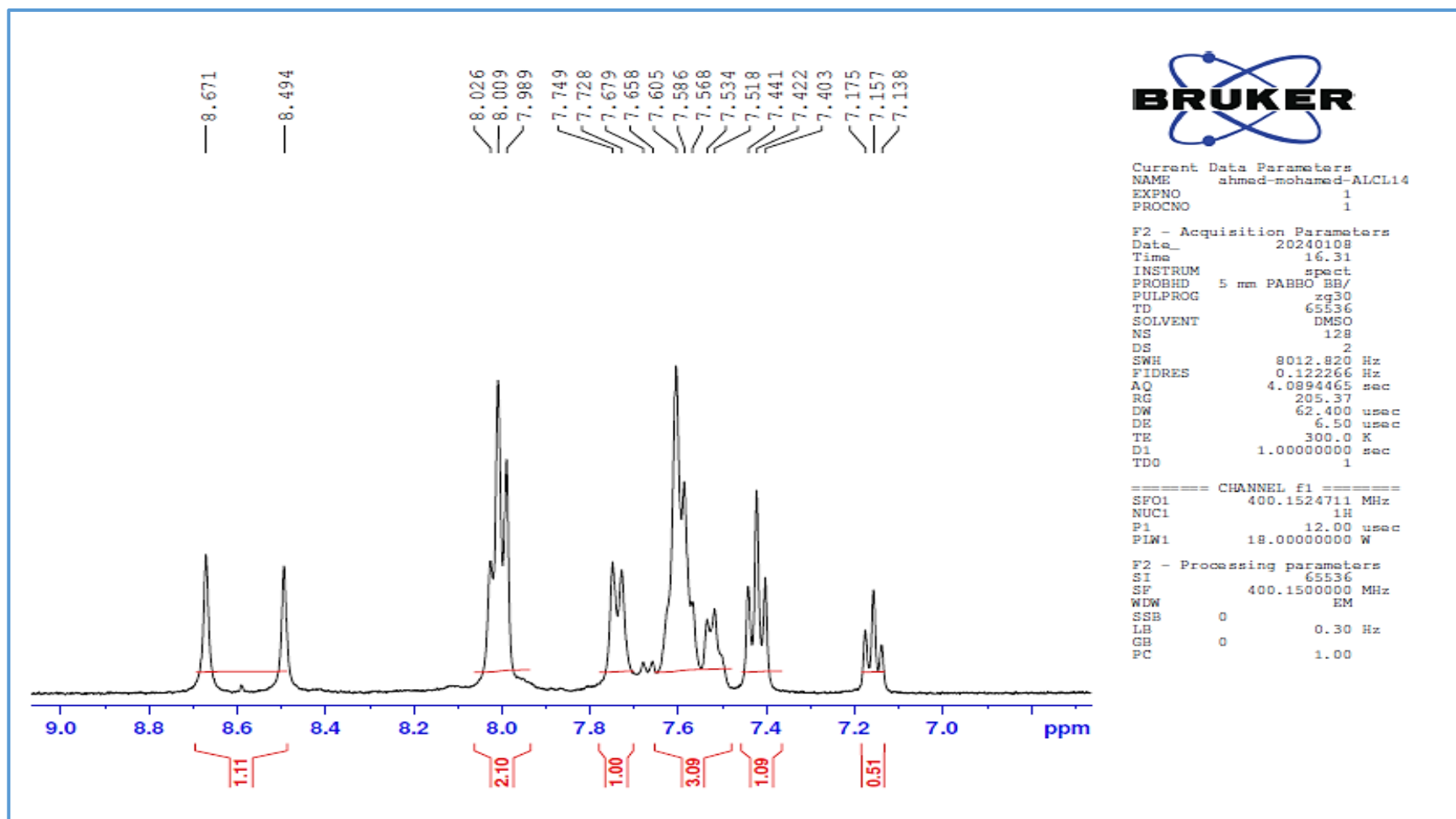


Fig. S30. Cont. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **6**

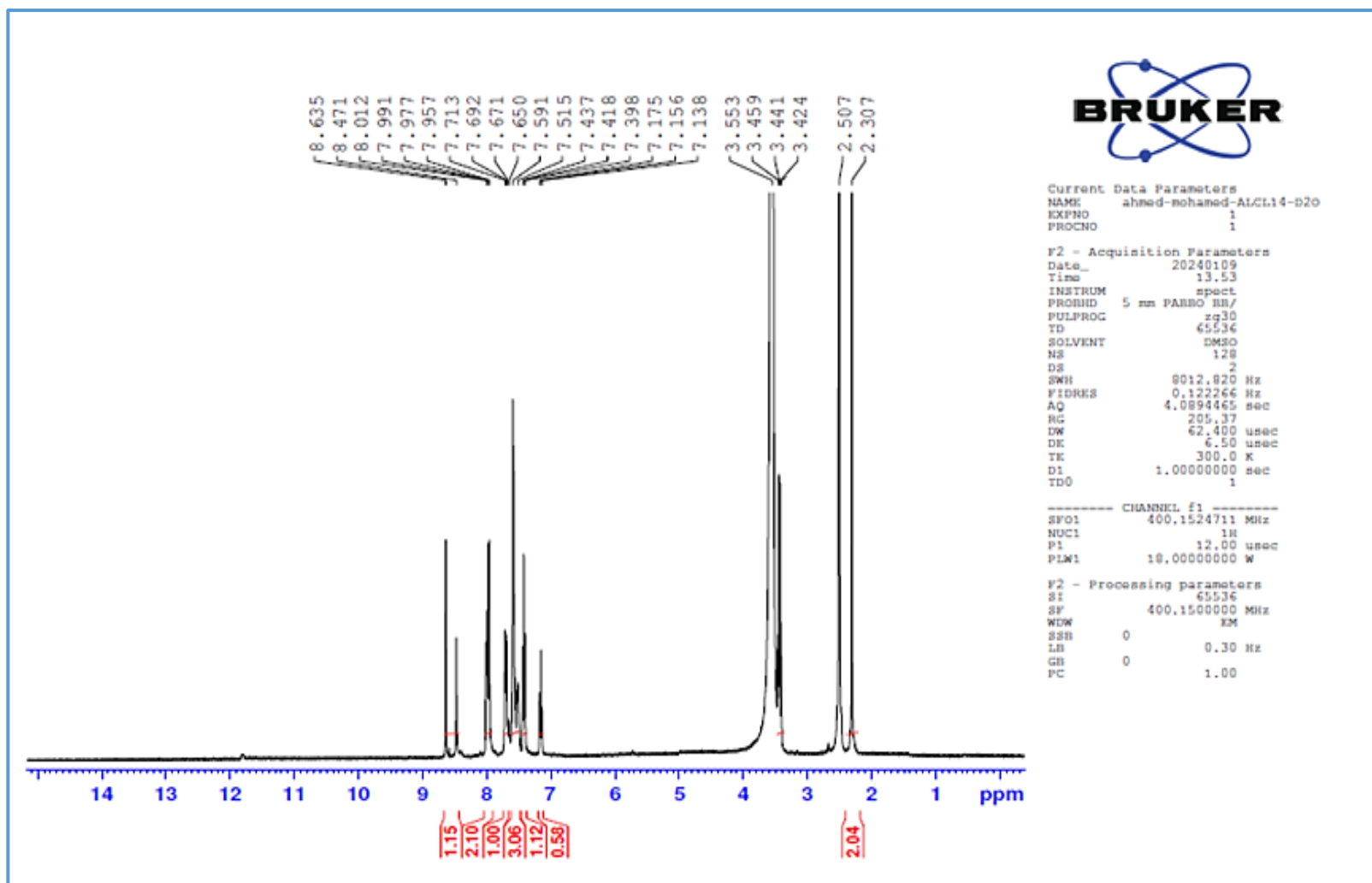


Fig. S31. ^1H NMR spectrum ($\text{DMSO-}d_6+\text{D}_2\text{O}$) of compound 6

ahmed-6 #252 RT: 4.23 AV: 1 SB: 2 3.82 , 3.53 NL: 5.58E2
T: {0,0} + c EI Full ms [40.00-1000.00]

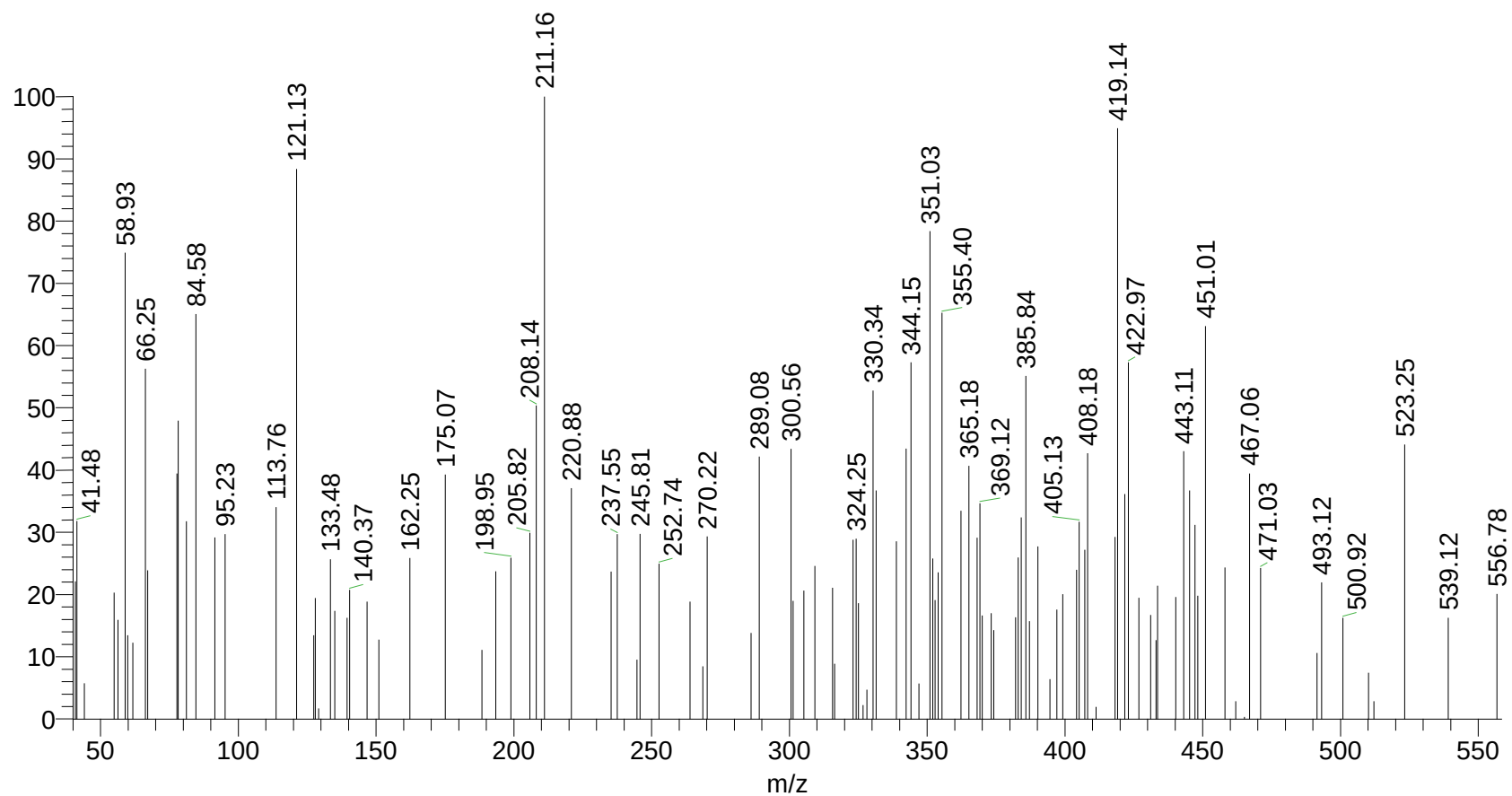


Fig. S32. EI-Mass spectrum (DMSO- d_6) of compound 6

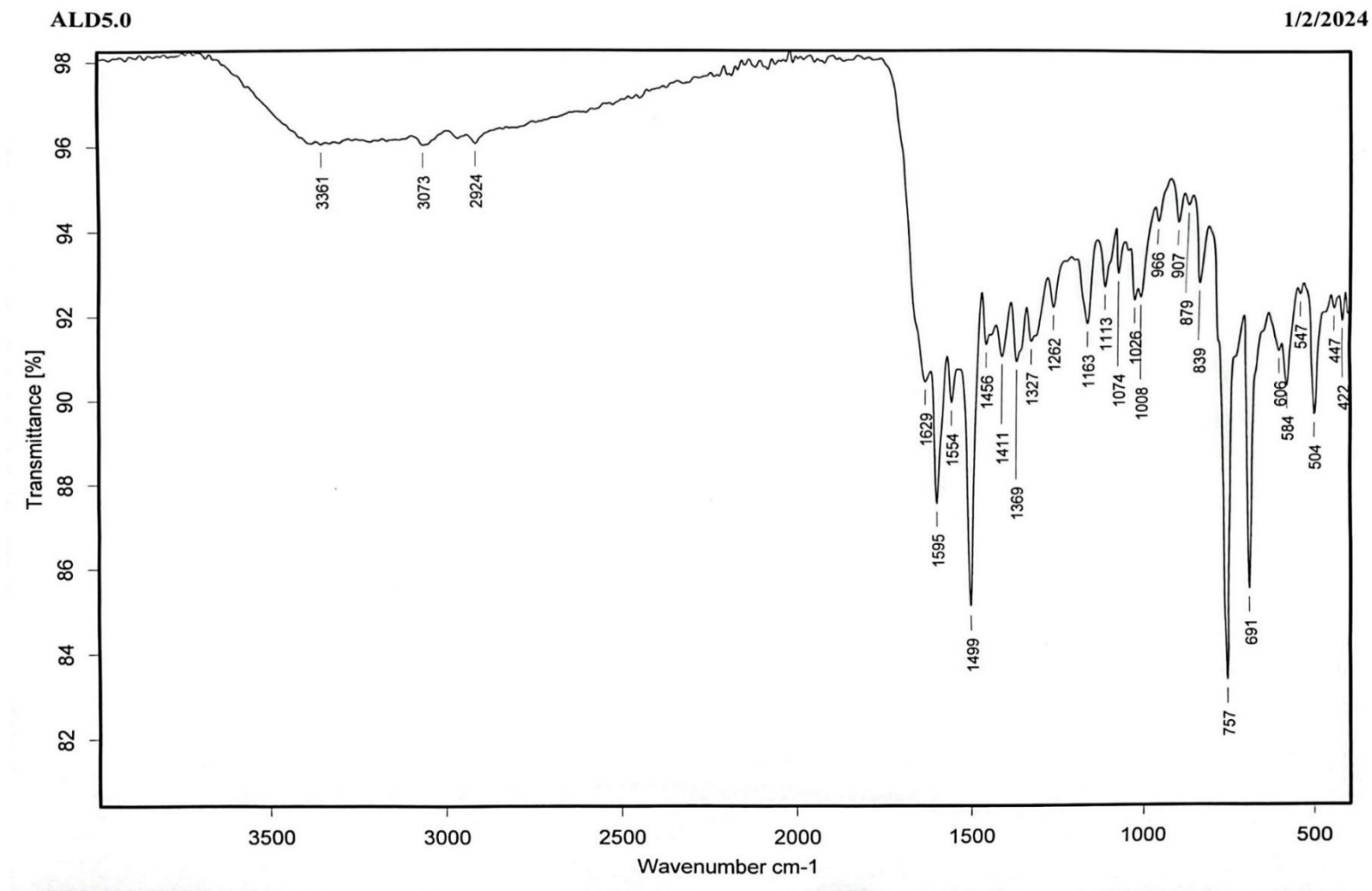


Fig. S33. IR spectrum of compound 7

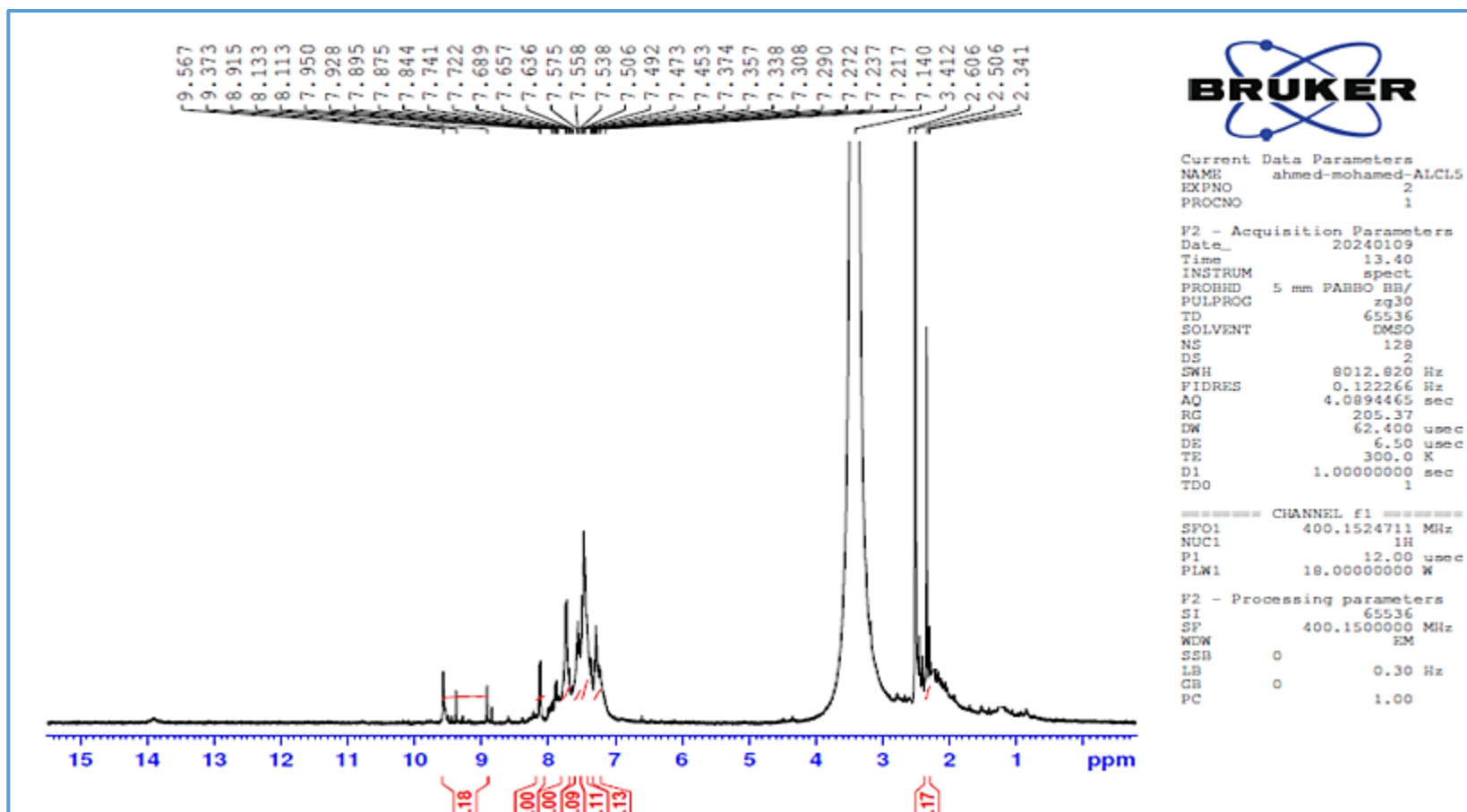


Fig. S34. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound 7

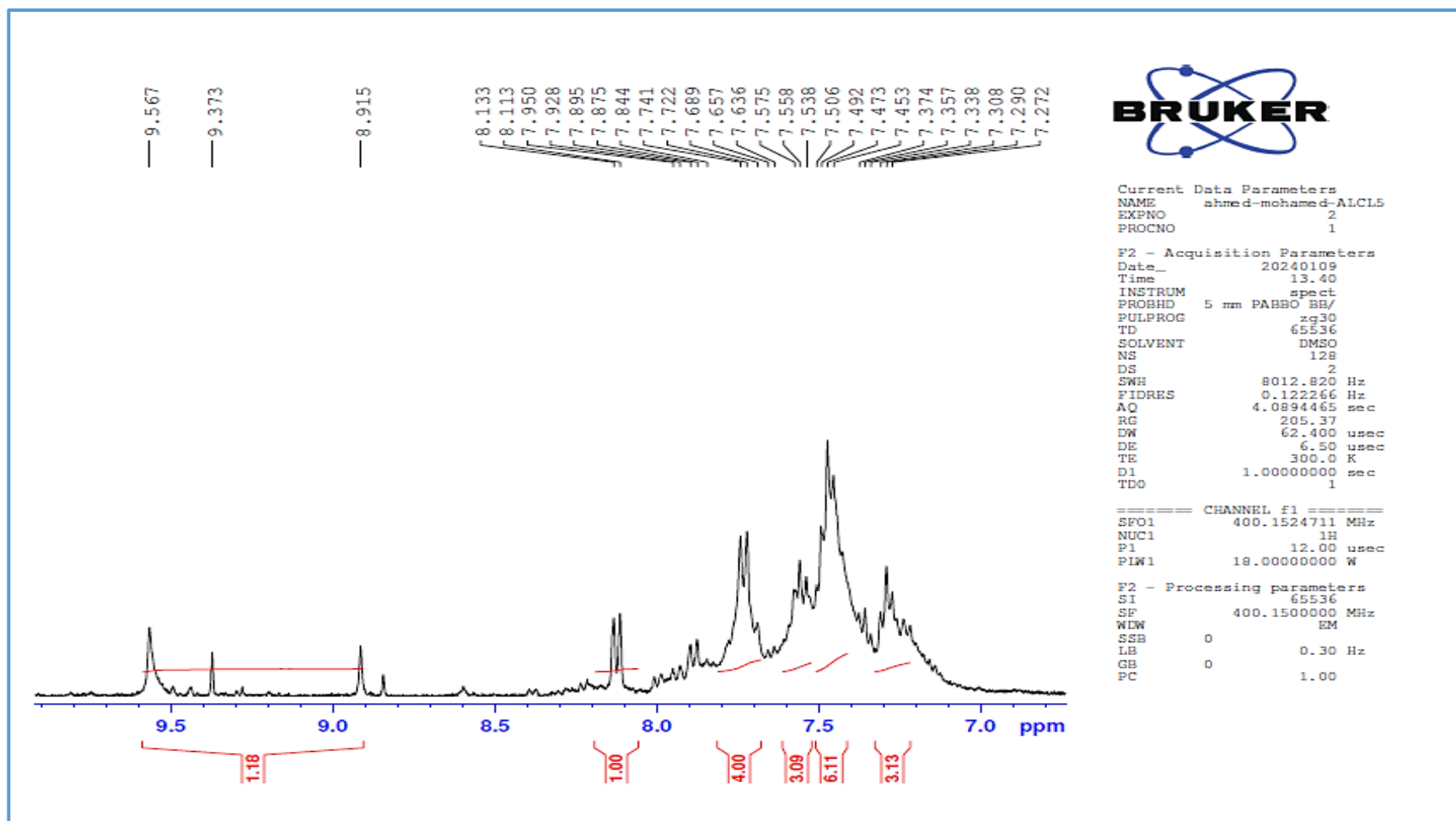


Fig. S35. Cont. ^1H NMR spectrum ($\text{DMSO-}d_6$) of compound 7

ahmed-7 #312 RT: 5.24 AV: 1 SB: 2 3.82 , 3.53 NL: 5.68E2
T: {0,0} + c EI Full ms [40.00-1000.00]

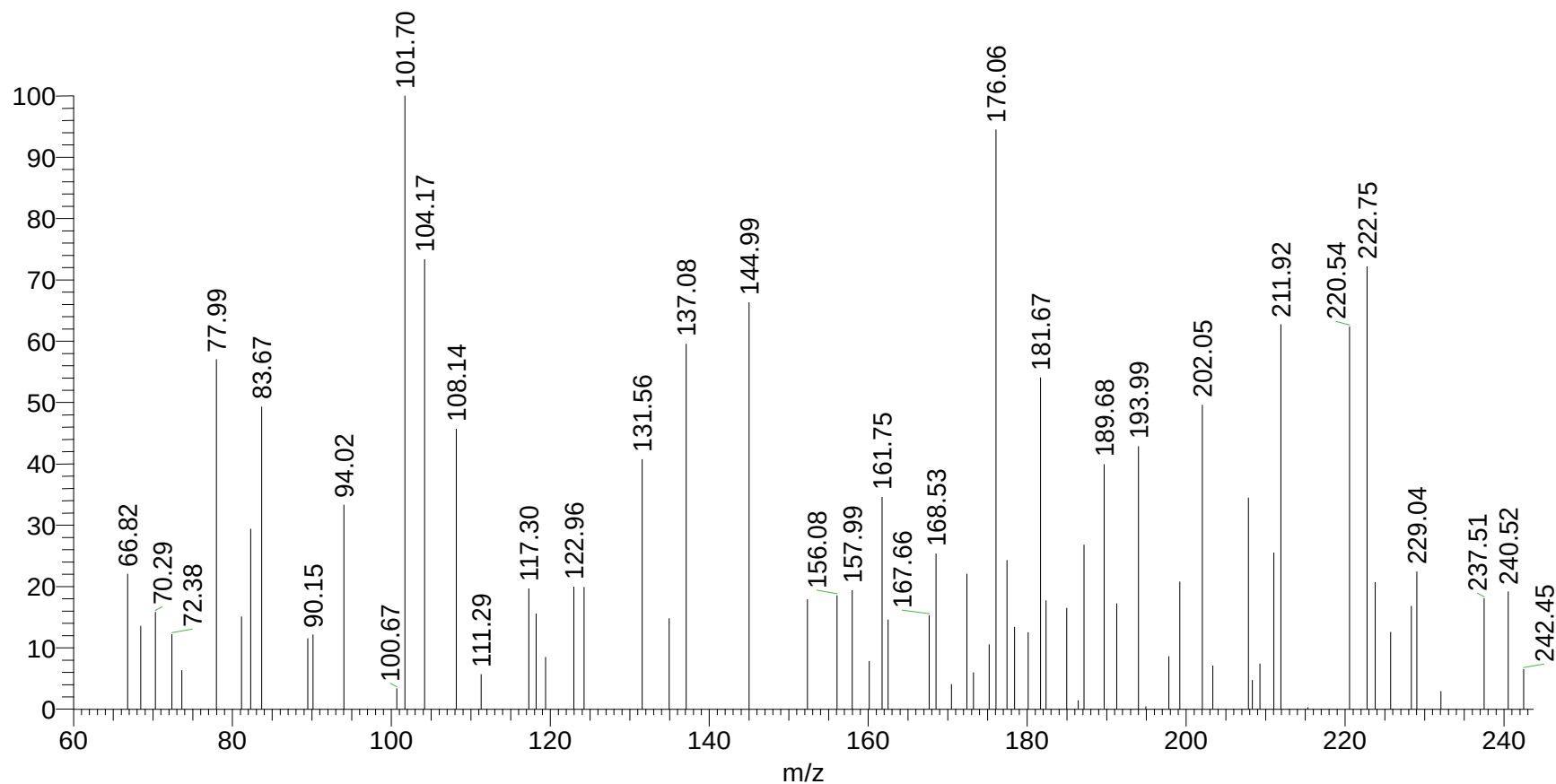


Fig. S36. EI-Mass spectrum of compound 7

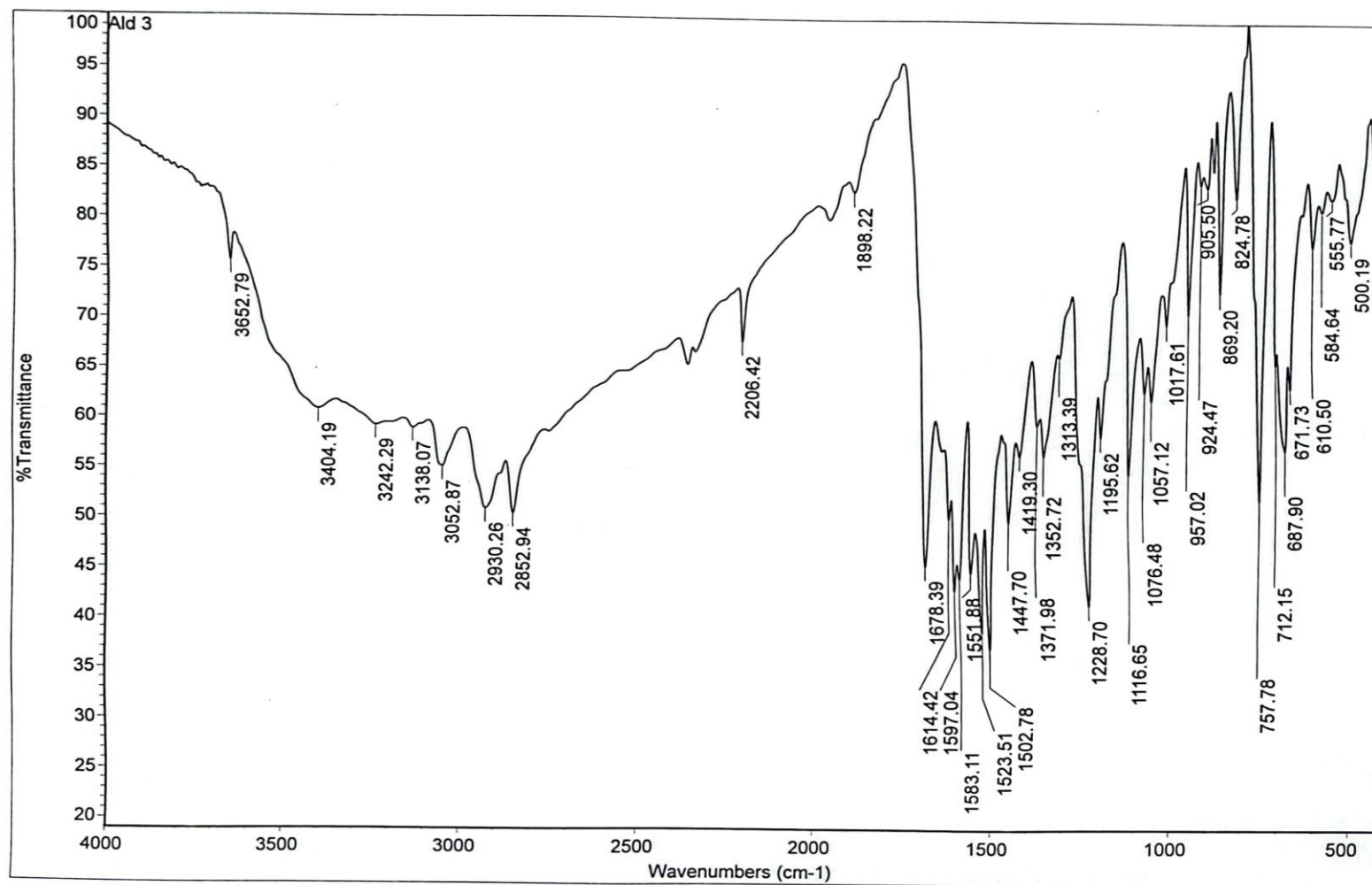


Fig. S37. IR spectrum of compound **8**

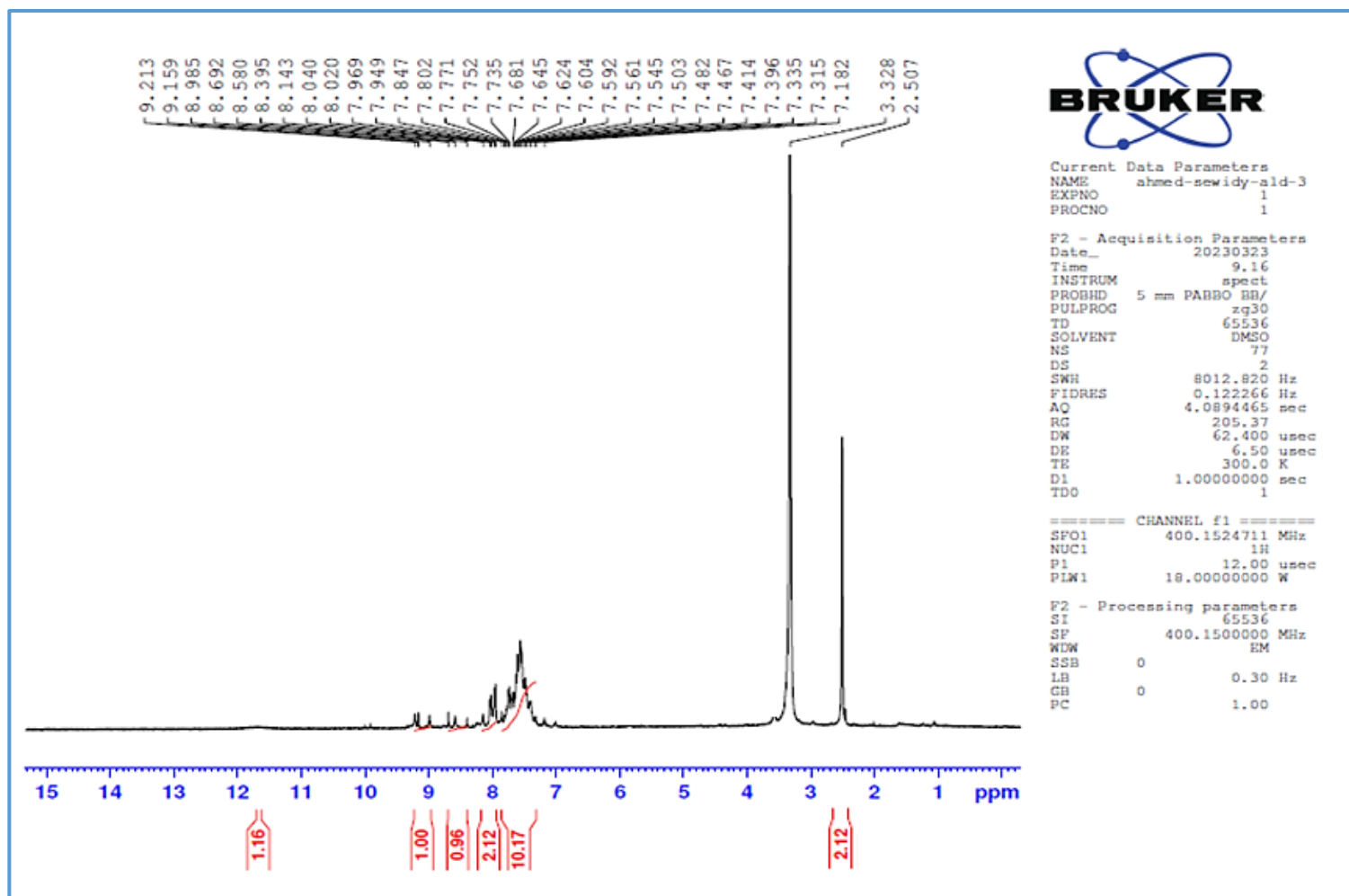


Fig. S38. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **8**

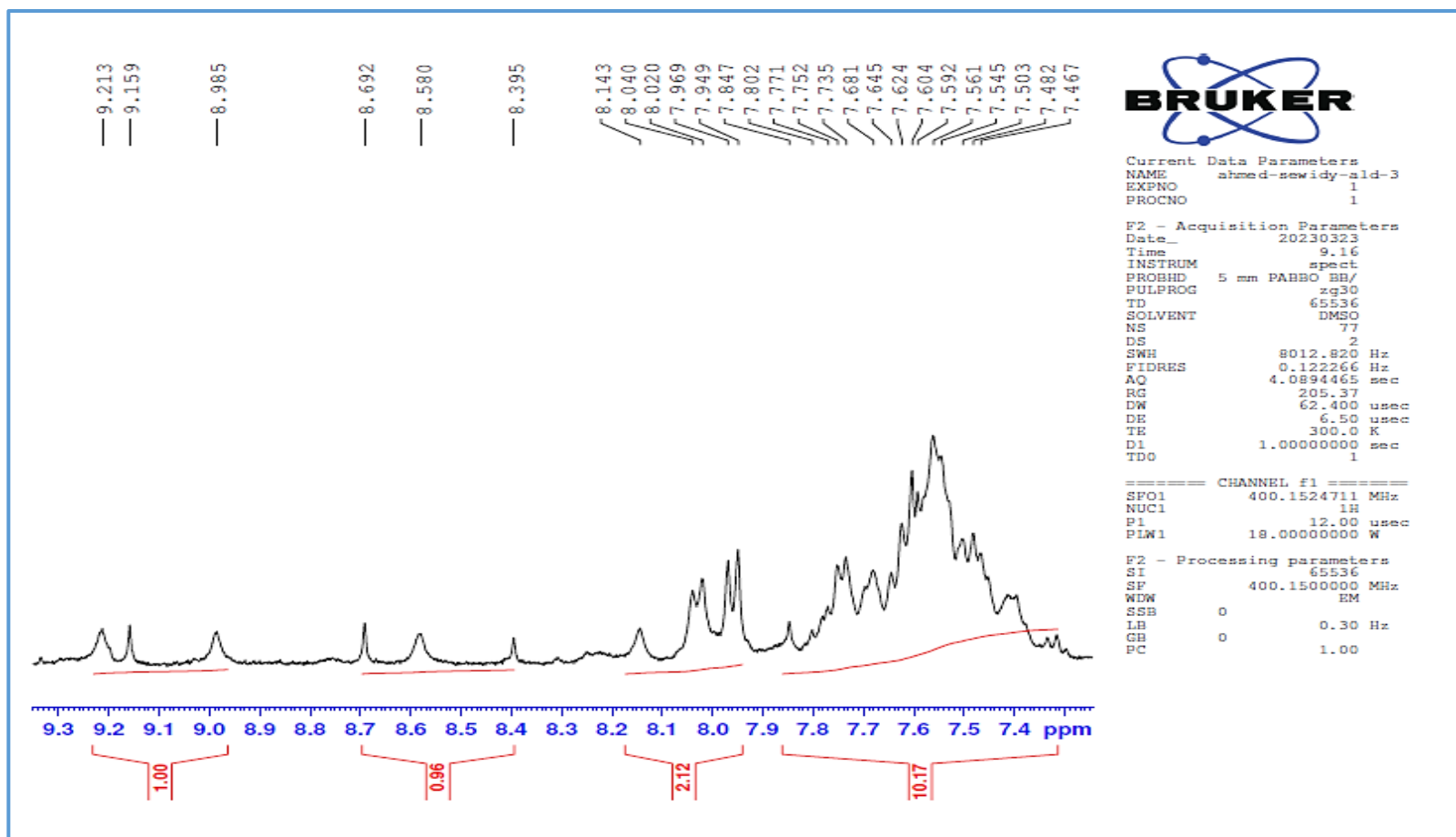


Fig. S39. Cont. ^1H NMR spectrum ($\text{DMSO-}d_6$) of compound **8**

ahmed-8 #249 RT: 4.18 AV: 1 SB: 2 3.82 , 3.53 NL: 1.45E3
T: {0,0} + c EI Full ms [40.00-1000.00]

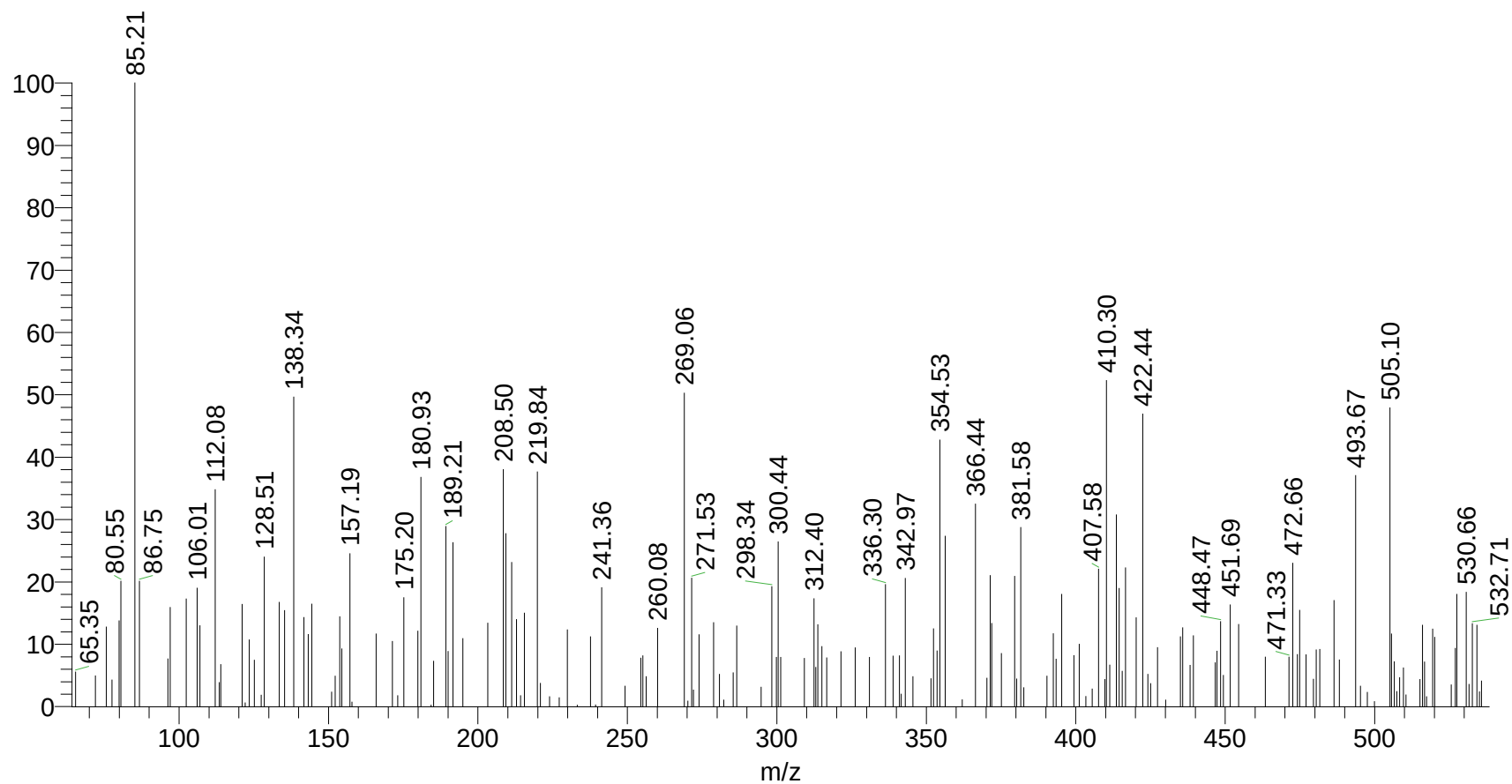


Fig. S40. EI-Mass spectrum of compound 8

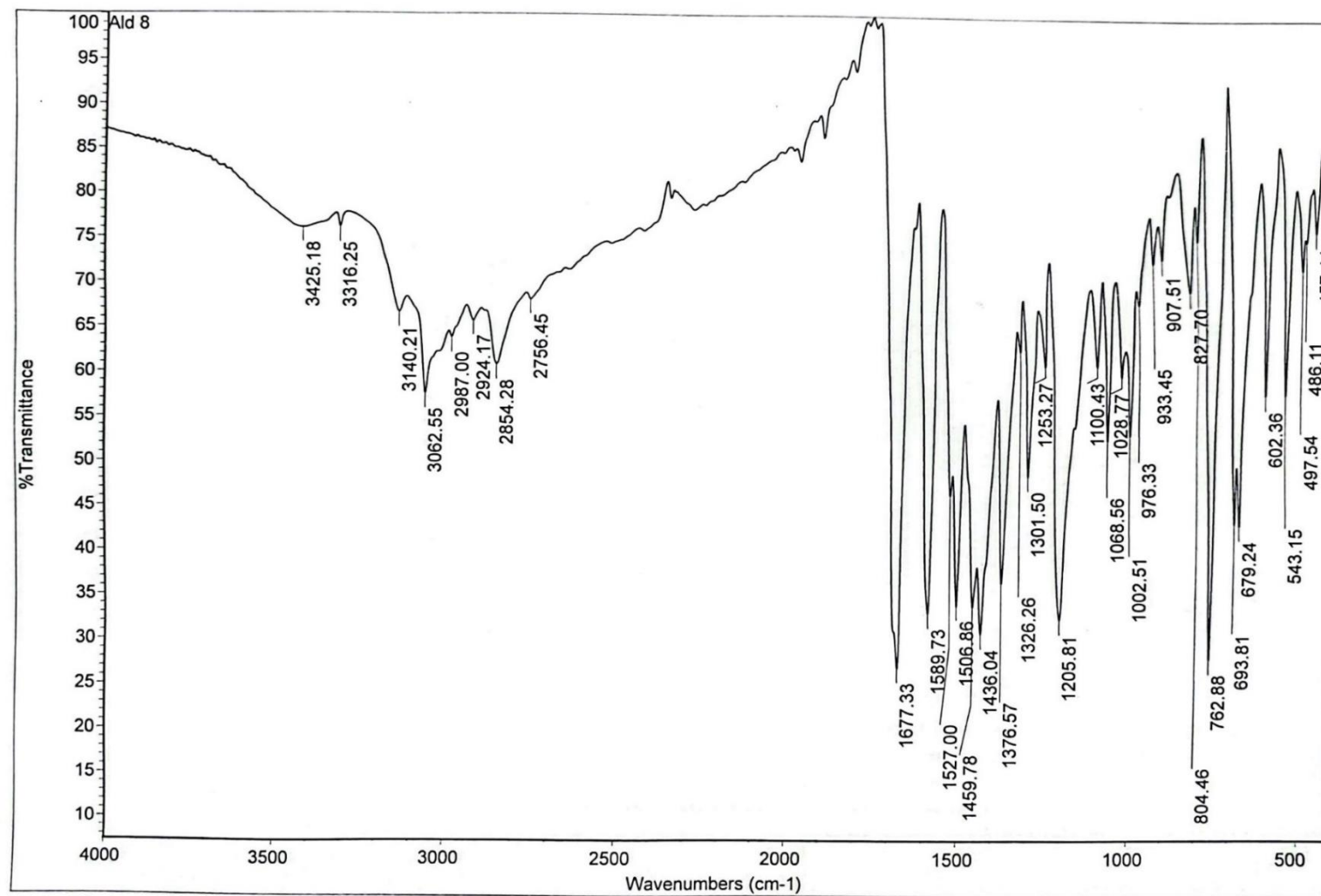


Fig. S41. IR spectrum of compound 9

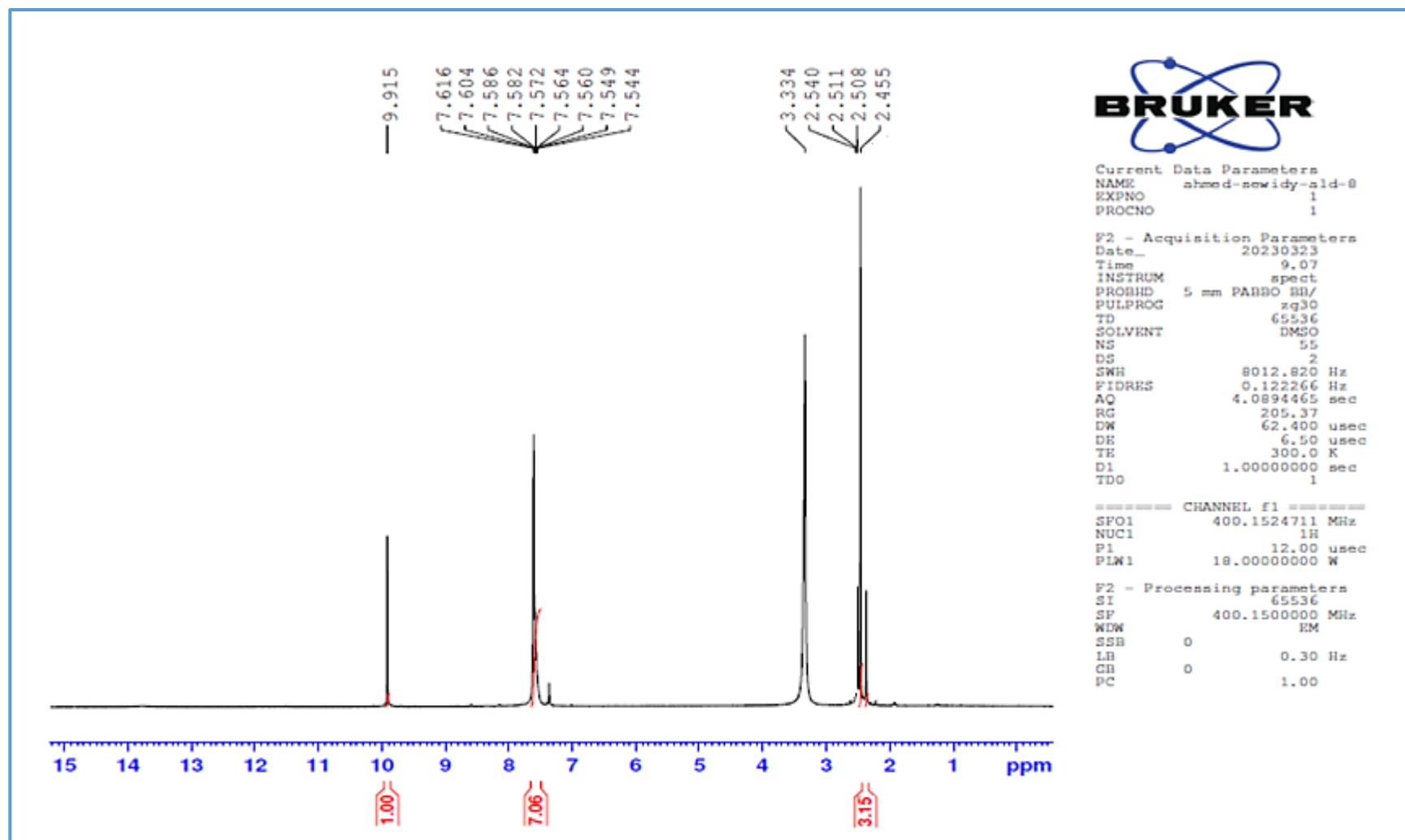


Fig. S42. ^1H NMR spectrum (DMSO- d_6) of compound **9**

ahmed-9 #286 RT: 4.80 AV: 1 SB: 2 3.82 , 3.53 NL: 1.00E4
T: {0,0} + c EI Full ms [40.00-1000.00]

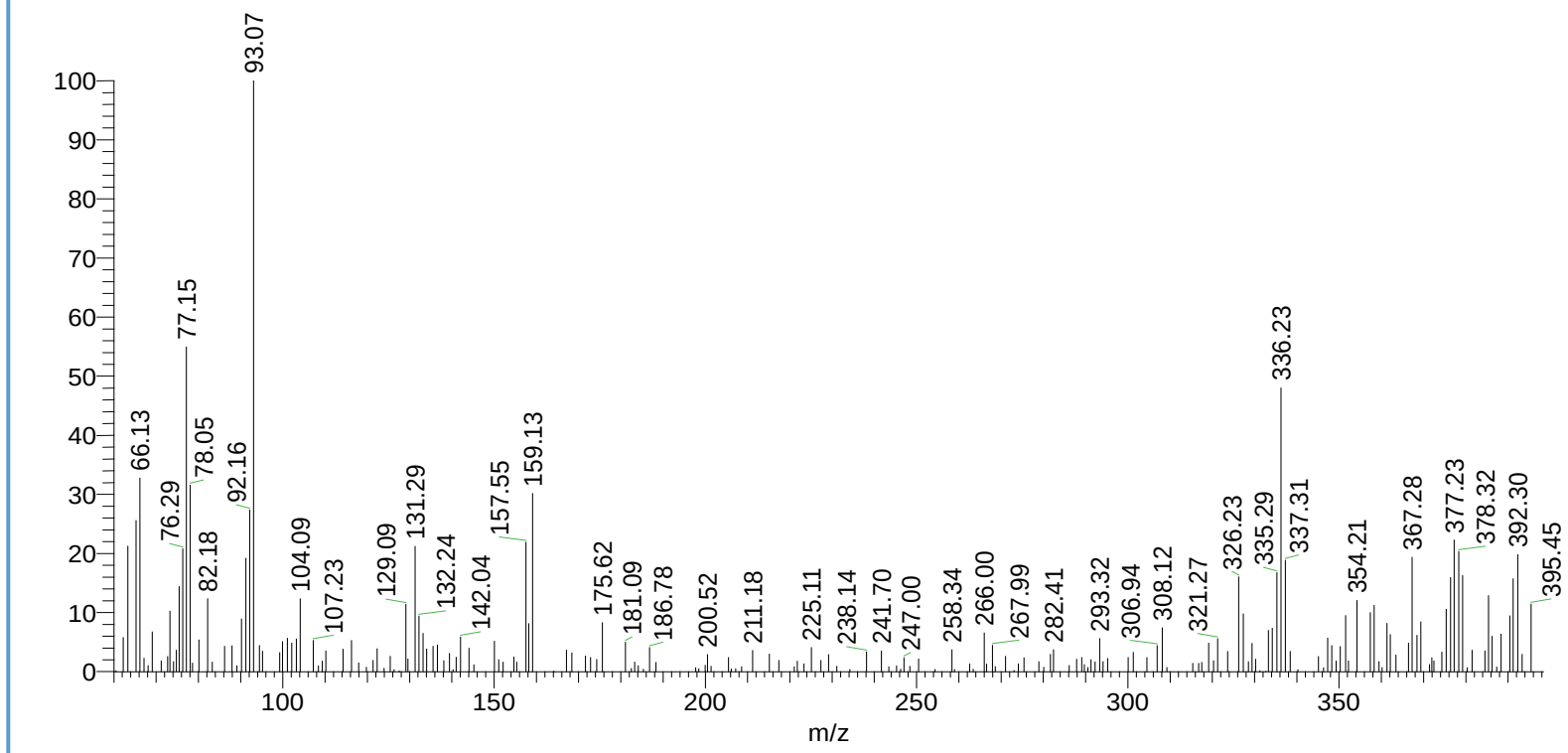


Fig. S43. EI-Mass spectrum of compound 9

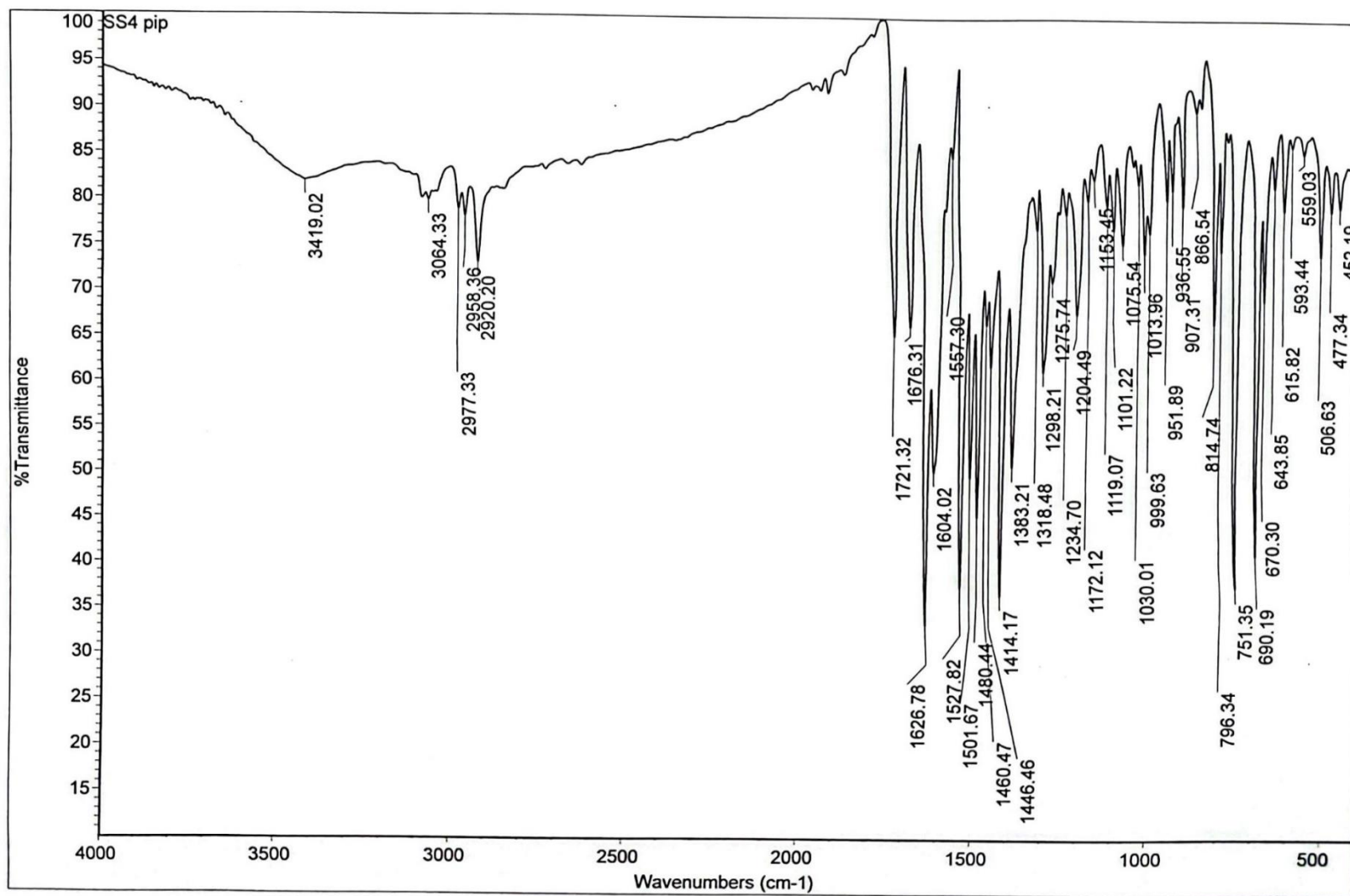


Fig. S44. IR spectrum of compound 10

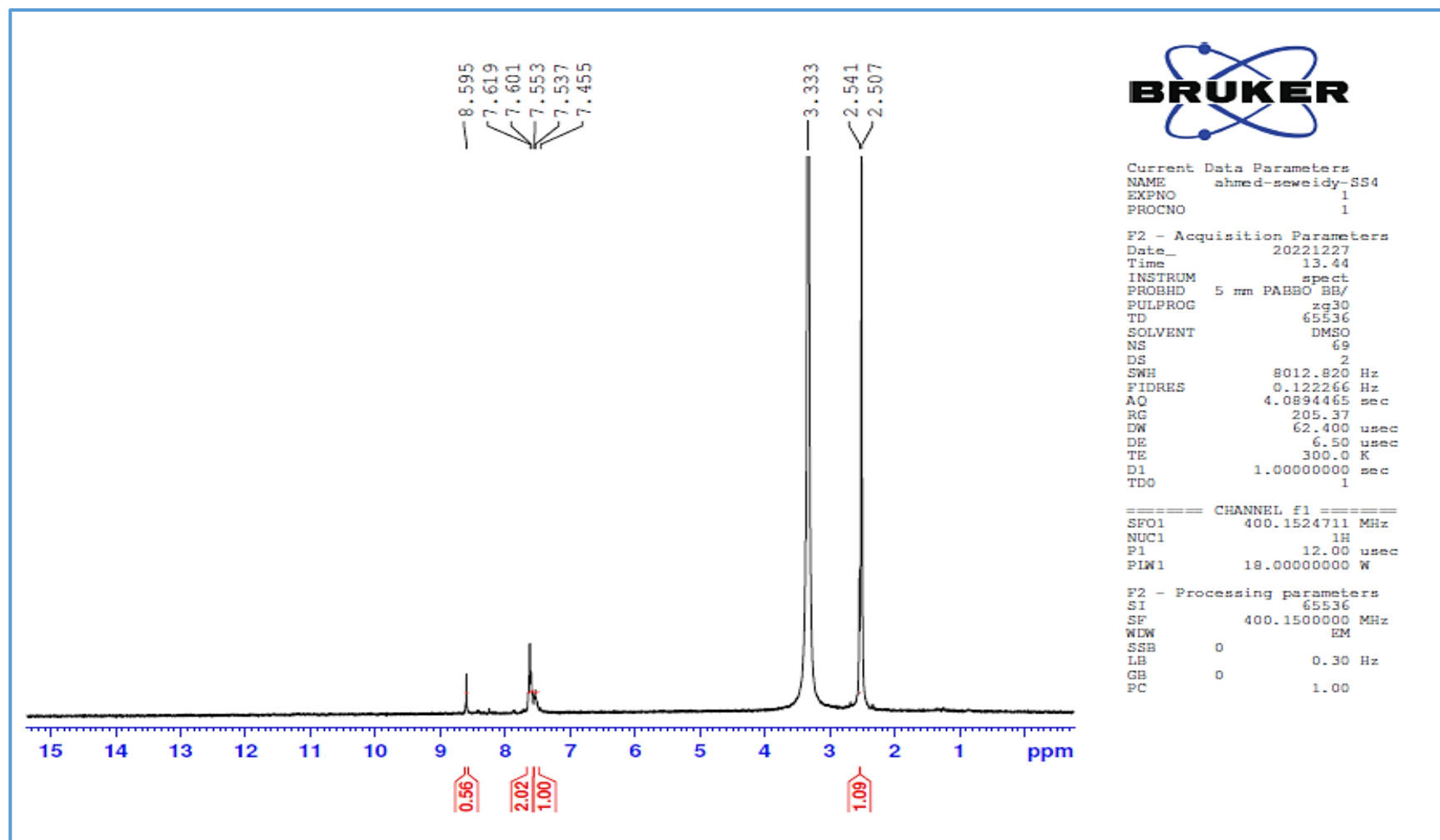


Fig. S45. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **10**

ahmed-10 #182 RT: 2.73 P: + NL: 1.45E3

T: [0,0] + eEI Full ms [40.00-1000.00]

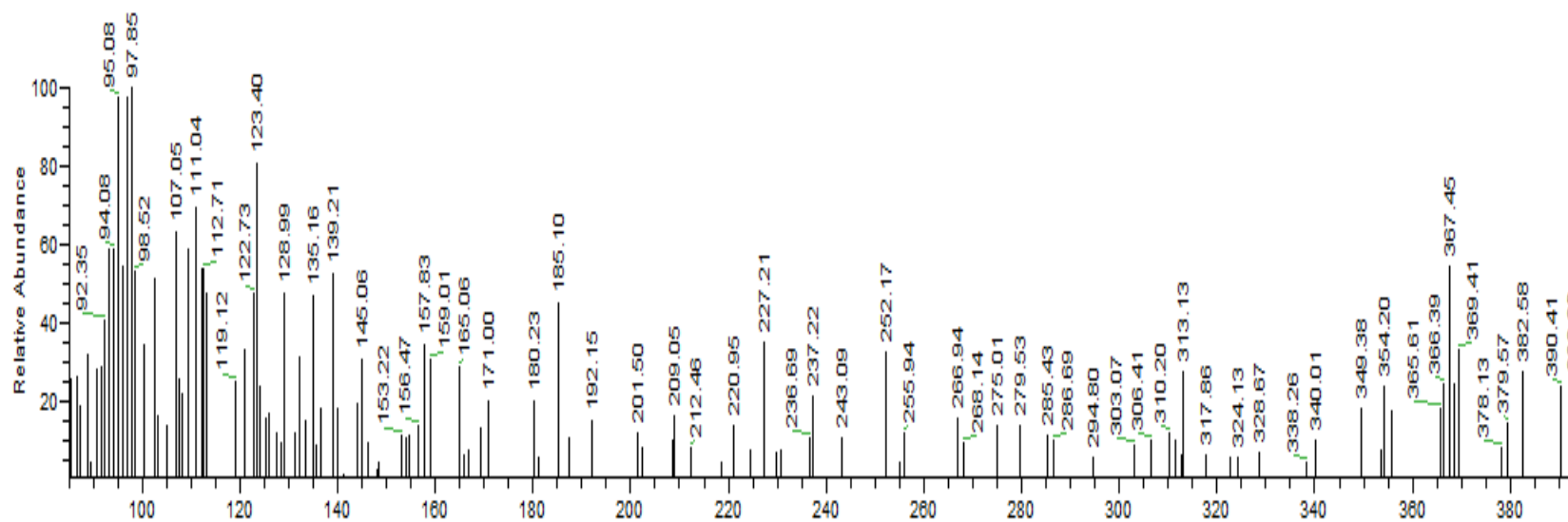


Fig. S46. EI-Mass spectrum of compound **10**

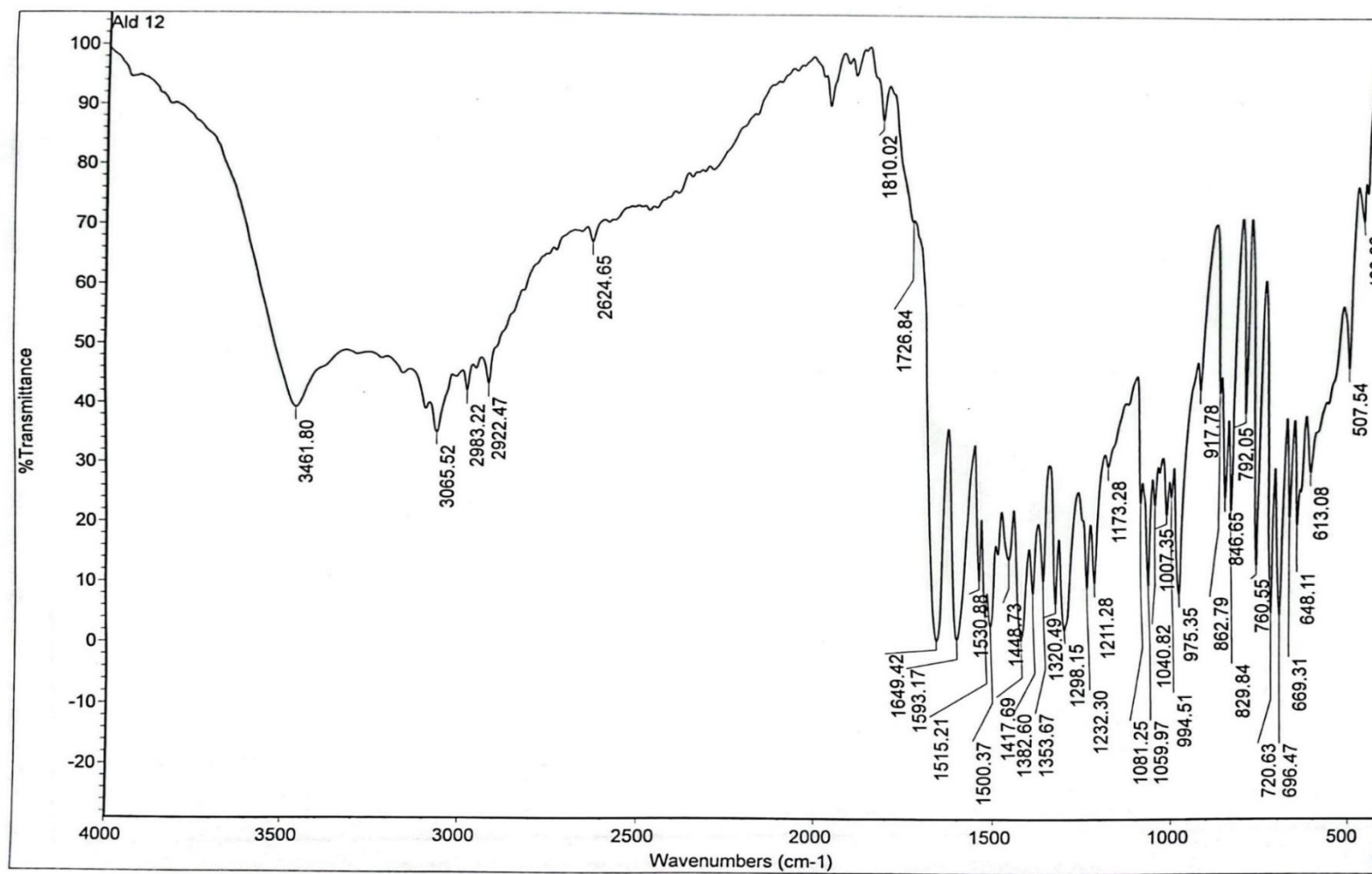


Fig. S47. IR spectrum of compound **11**

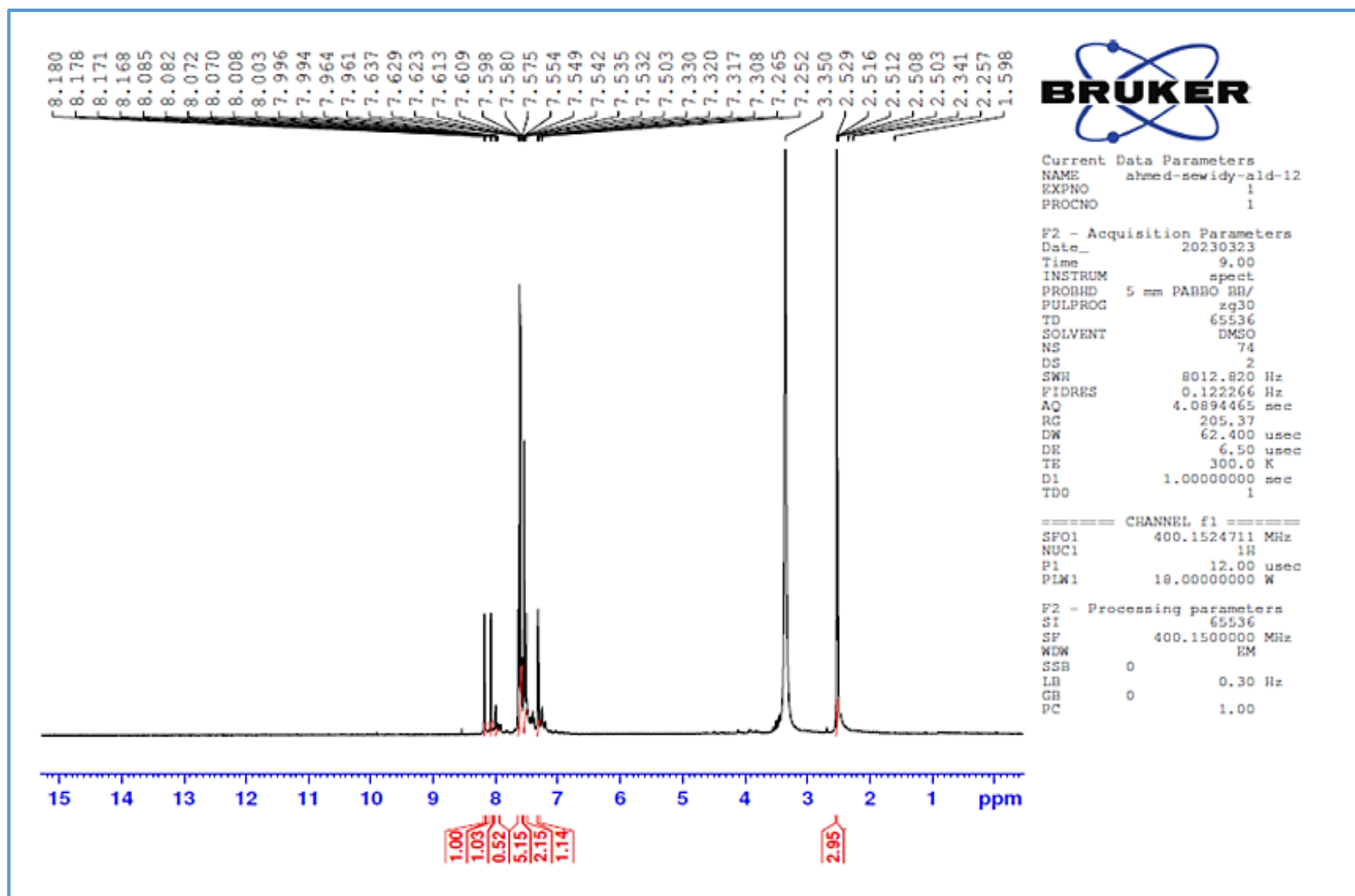


Fig. S48. ^1H NMR spectrum ($\text{DMSO}-d_6$) of compound **11**

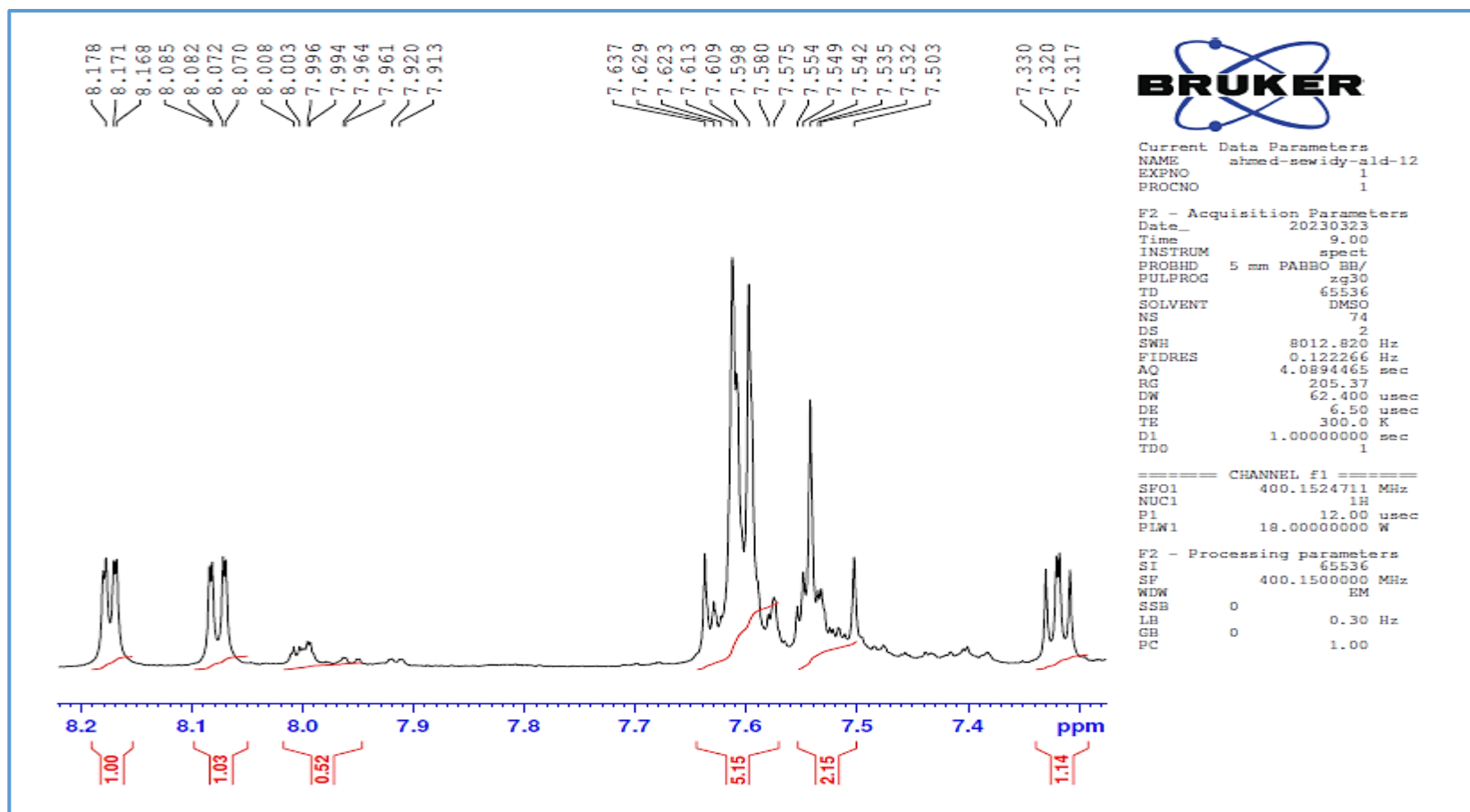


Fig. S49. Cont. ^1H NMR spectrum (DMSO- d_6) of compound **11**

ahmed-11 #10 RT: 0.18 P: + NL: 4.39E2
T: {0,0} + c EI Full ms [40.00-1000.00]

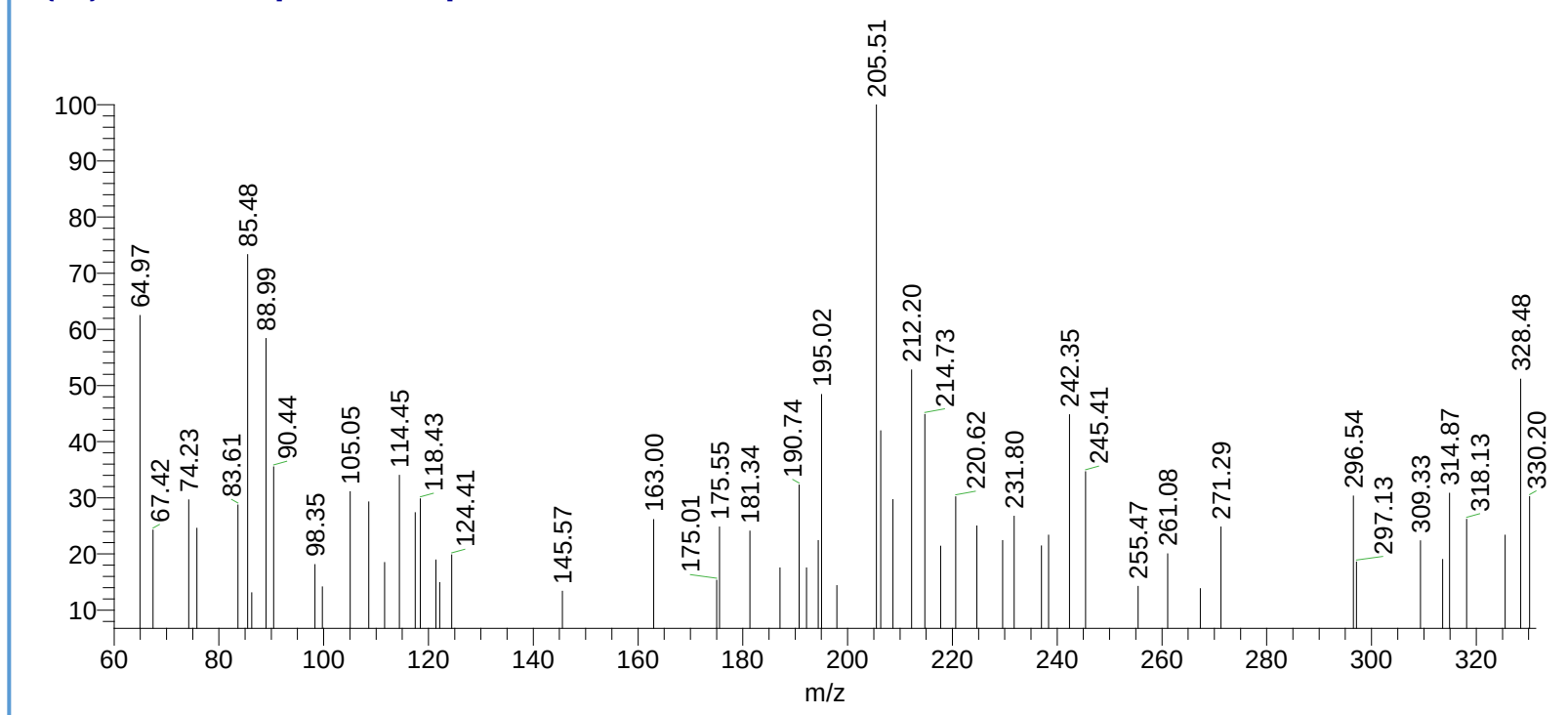


Fig. S50. EI-Mass spectrum of compound **11**