

Table of contents

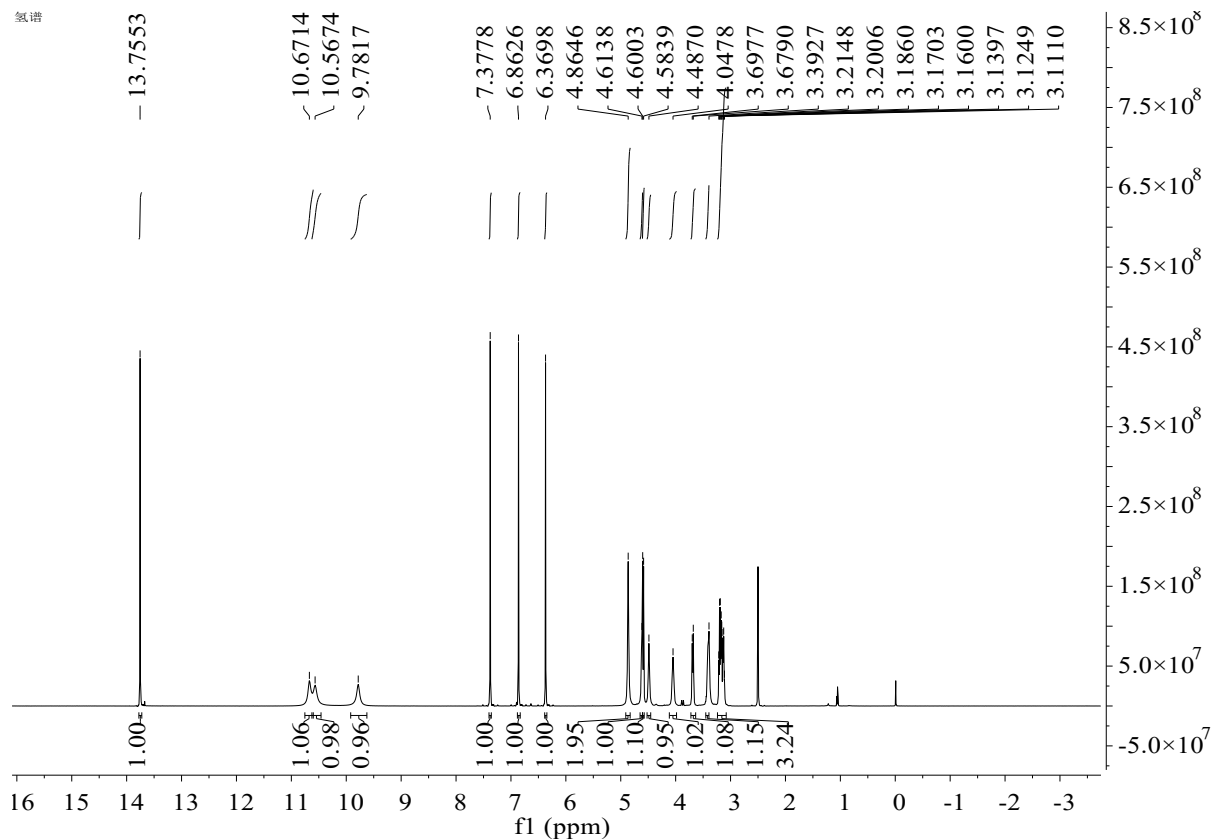
S1-S19. ^1H NMR and ^{13}C NMR of MGF and intermediates A1-A18

S20-S37. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G1-G18

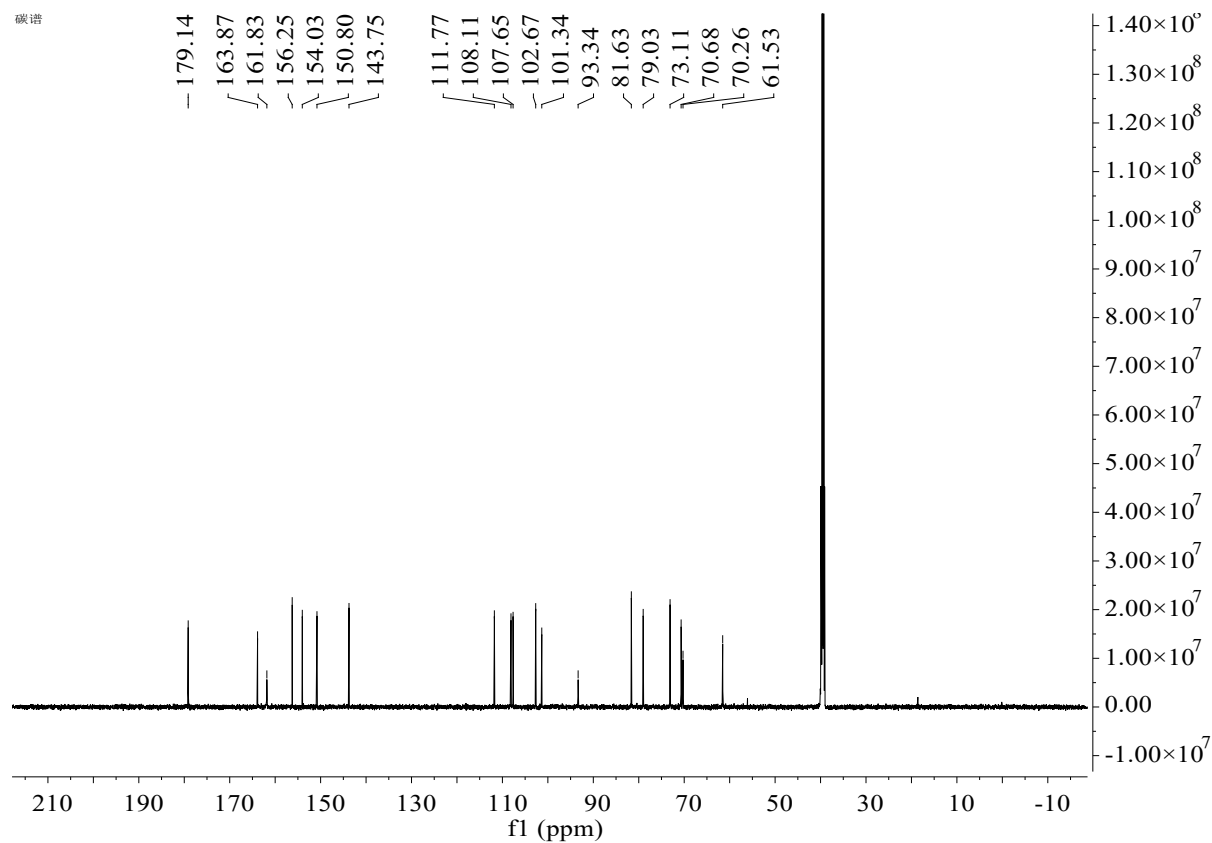
S38-S55. HPLC of G1-G18

S56. Stability of MGF derivative G1 in mice plasma

S1. ¹H NMR and ¹³C NMR of MGF

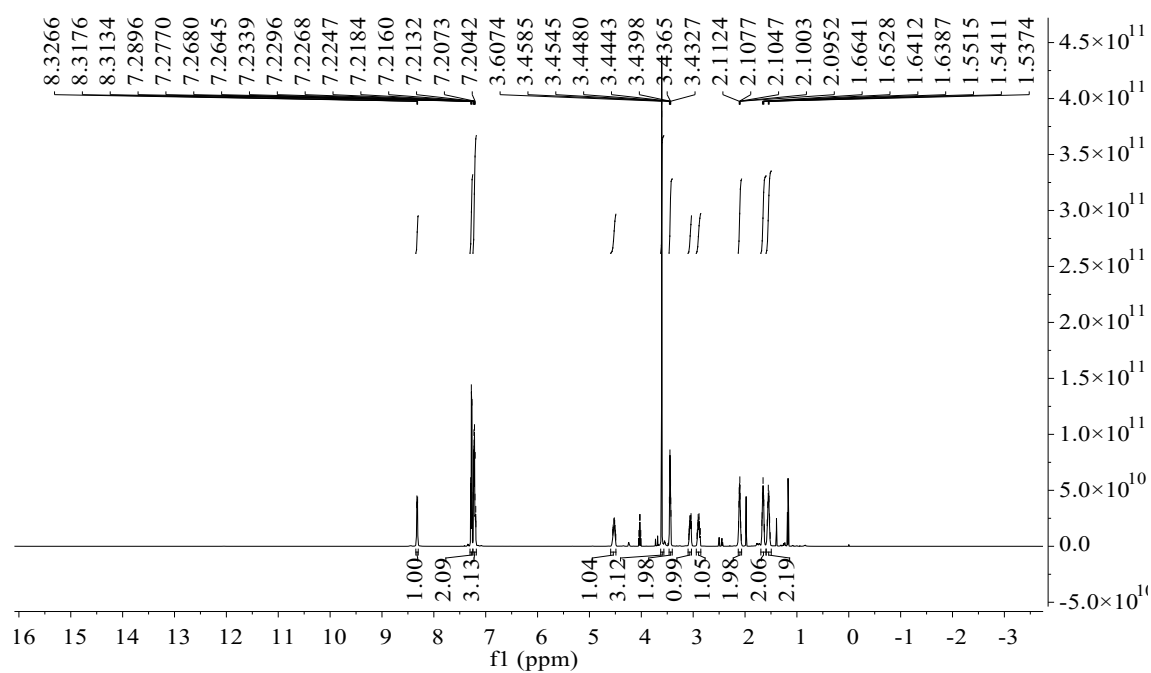


¹H NMR spectrum of compound MGF

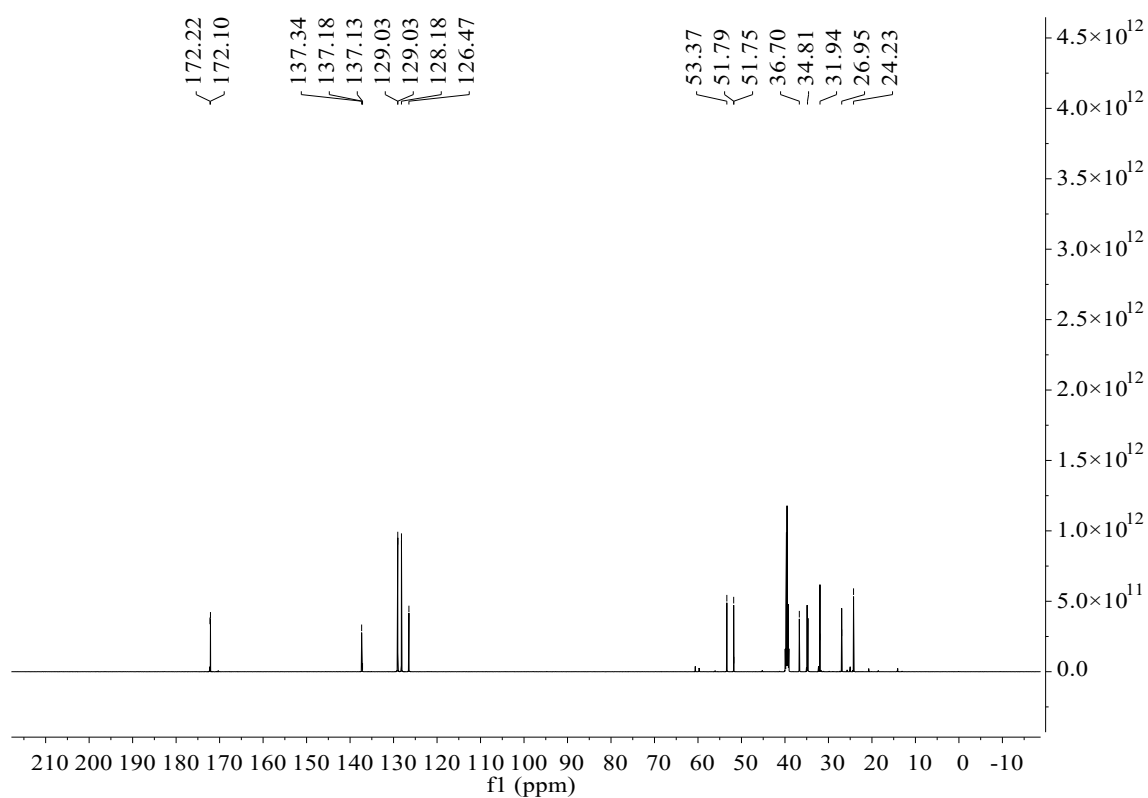


¹³C NMR spectrum of compound MGF

S2. ¹H NMR and ¹³C NMR of intermediates A1

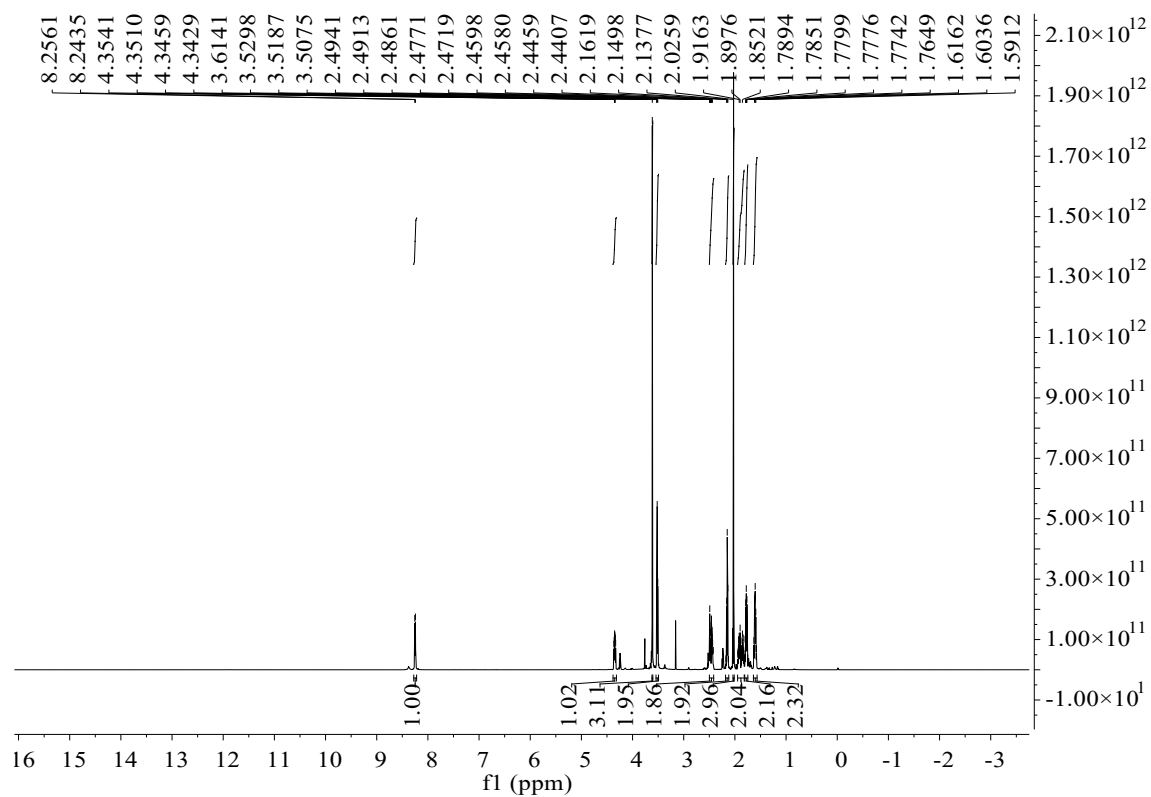


¹H NMR spectrum of compound A1

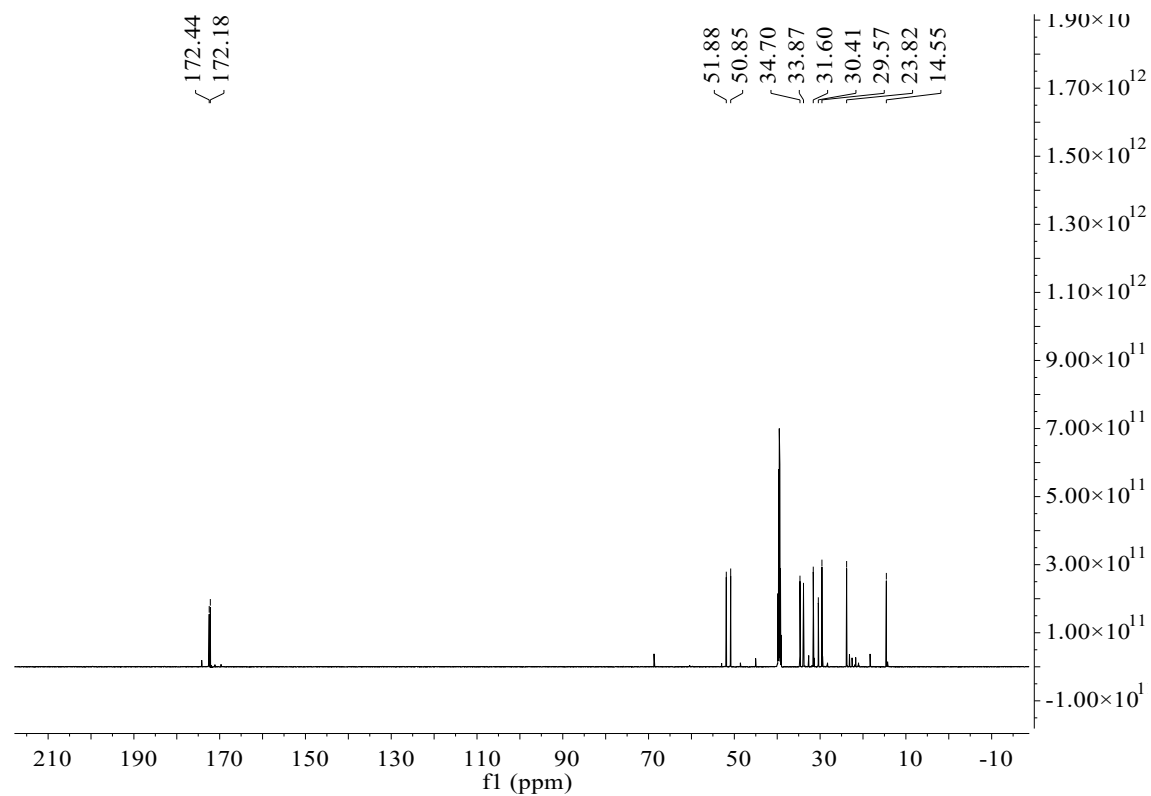


¹³C NMR spectrum of compound A1

S3. ^1H NMR and ^{13}C NMR of intermediates A2

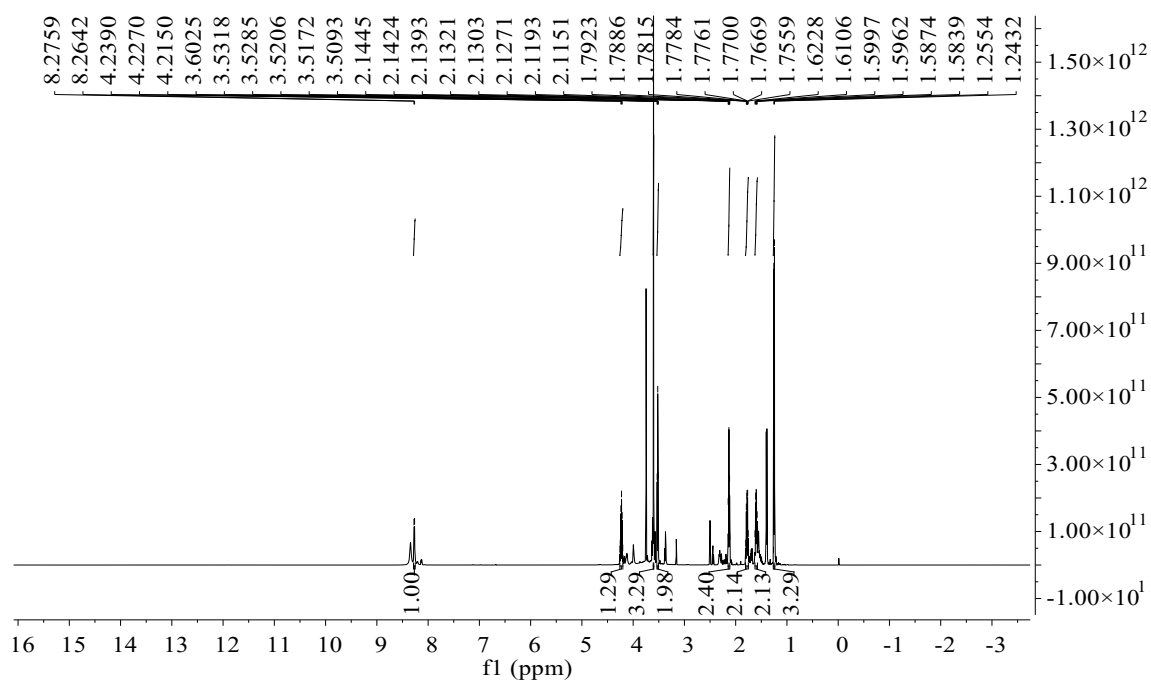


^1H NMR spectrum of compound A2

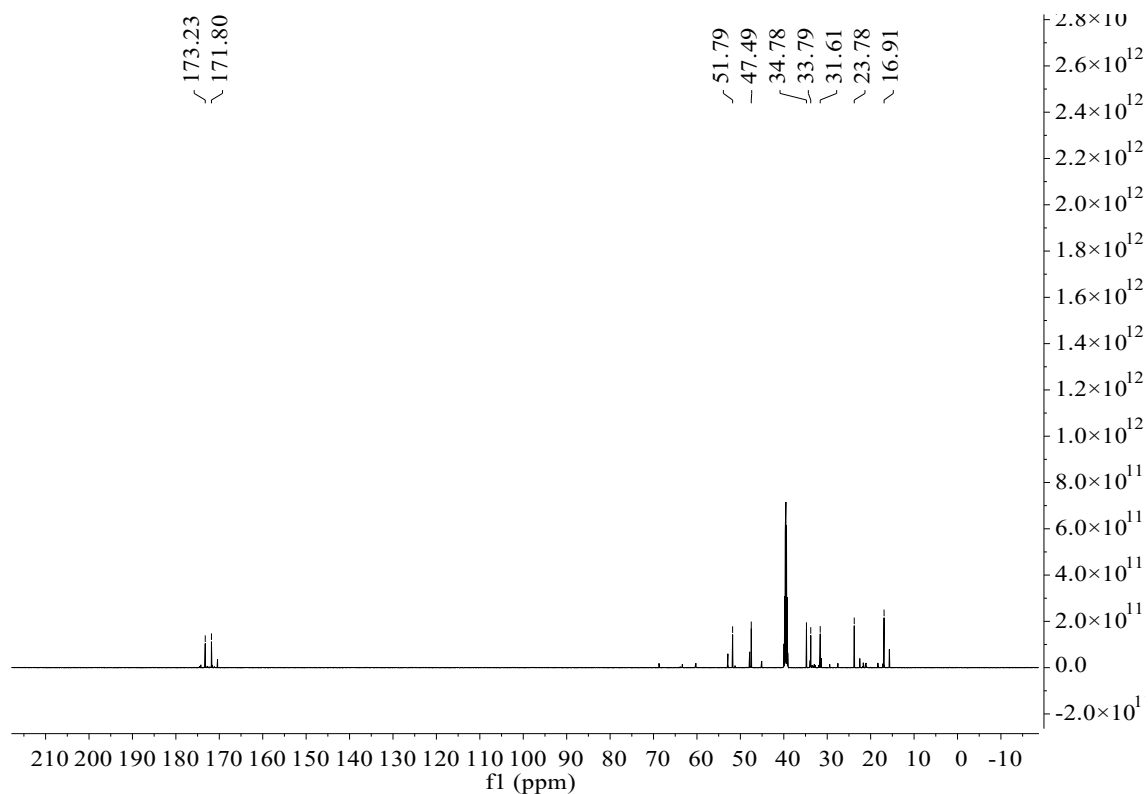


¹³C NMR spectrum of compound A2

S4. ¹H NMR and ¹³C NMR of intermediates A3

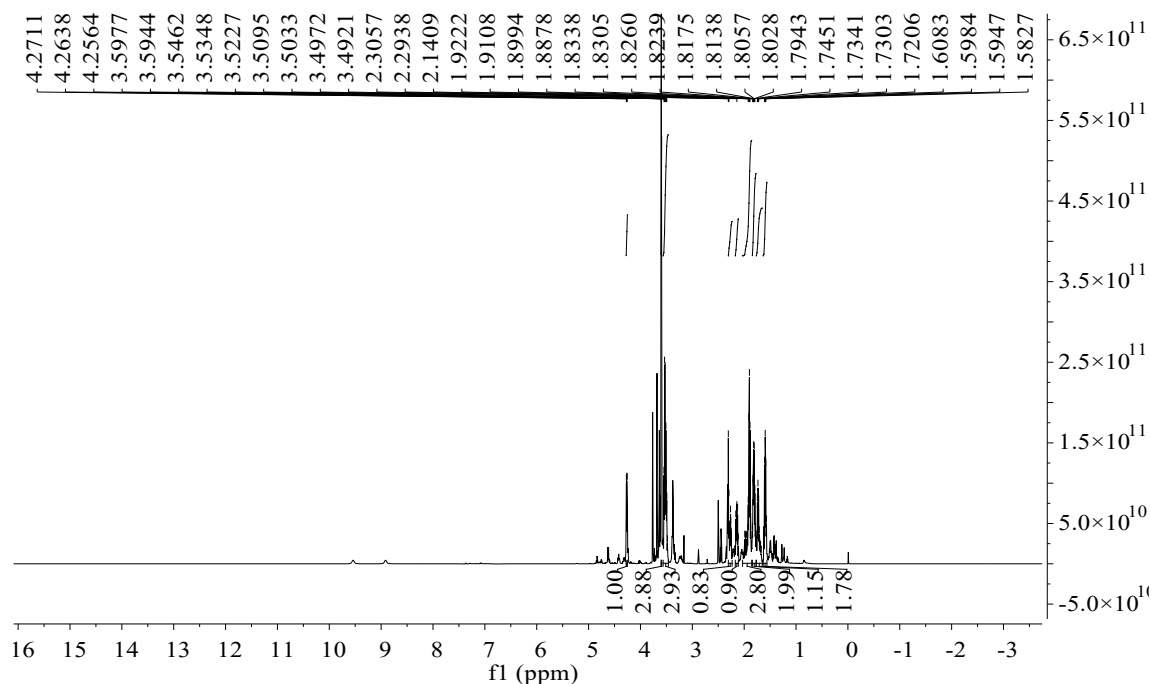


¹H NMR spectrum of compound A3

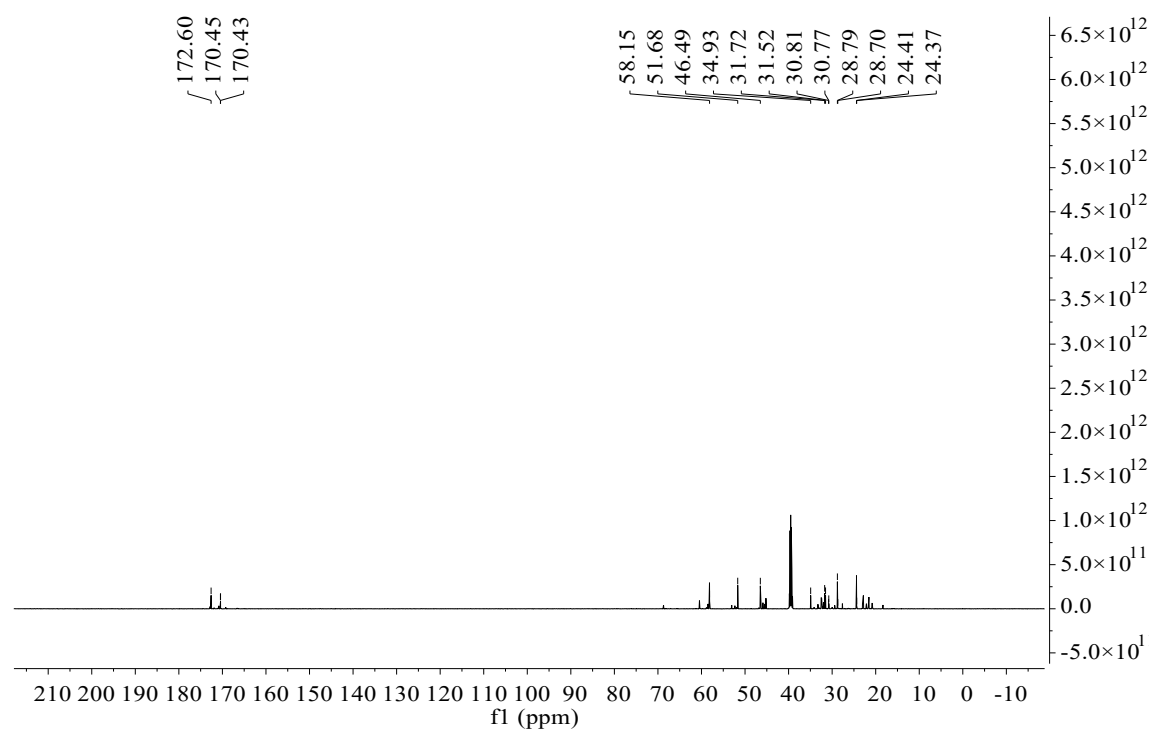


¹³C NMR spectrum of compound A3

S5. ^1H NMR and ^{13}C NMR of intermediates A4

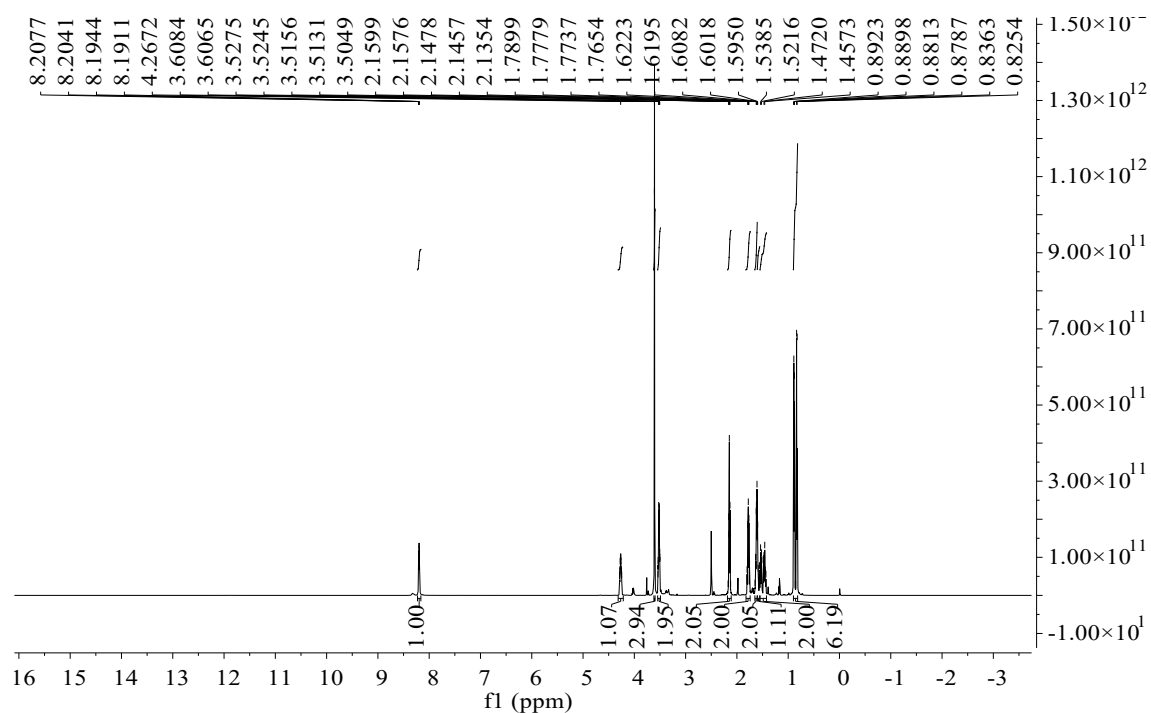


^1H NMR spectrum of compound A4

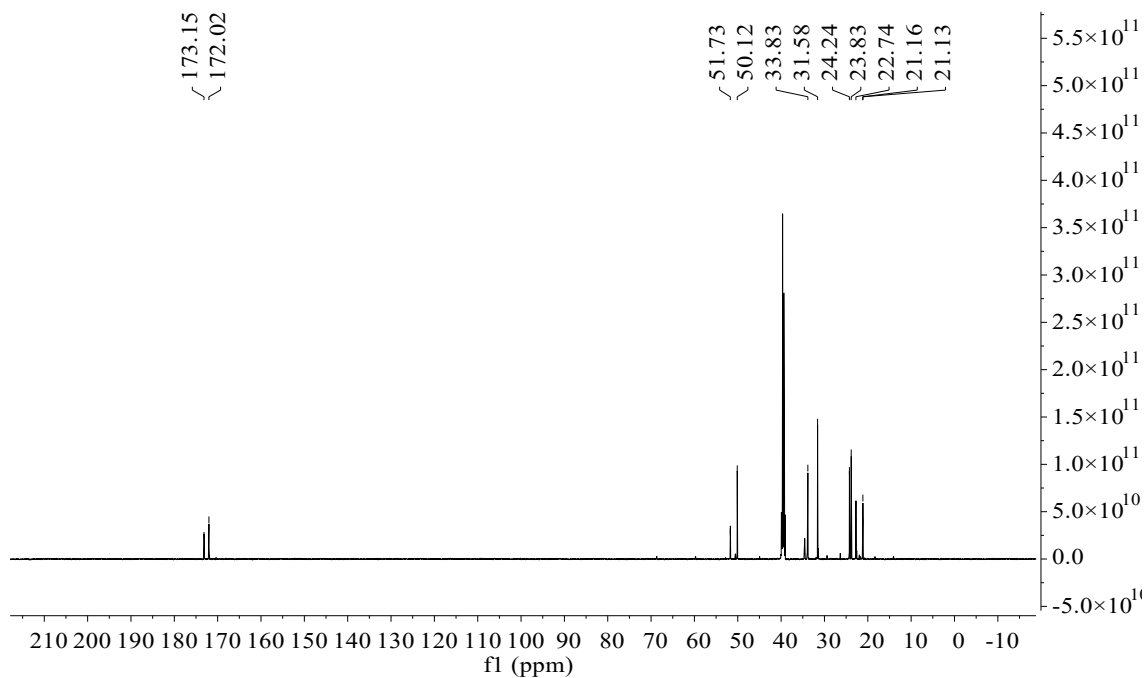


^{13}C NMR spectrum of compound A4

S6. ^1H NMR and ^{13}C NMR of intermediates A5

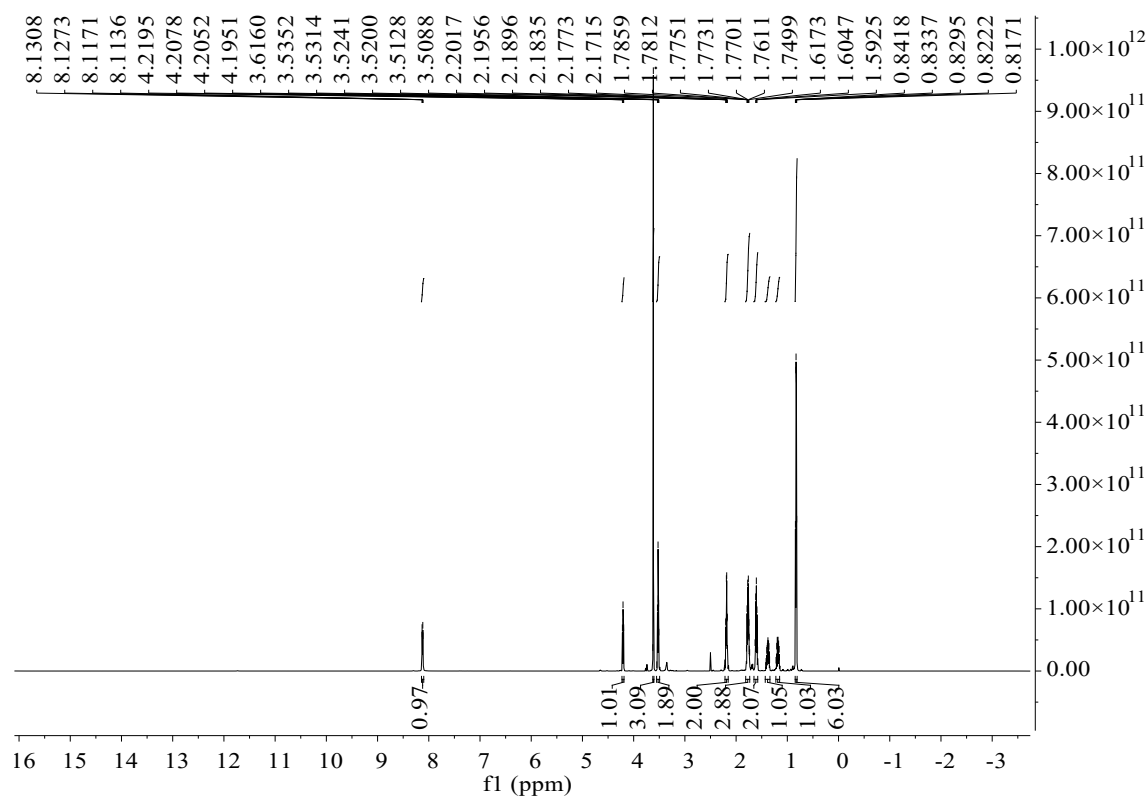


^1H NMR spectrum of compound A5

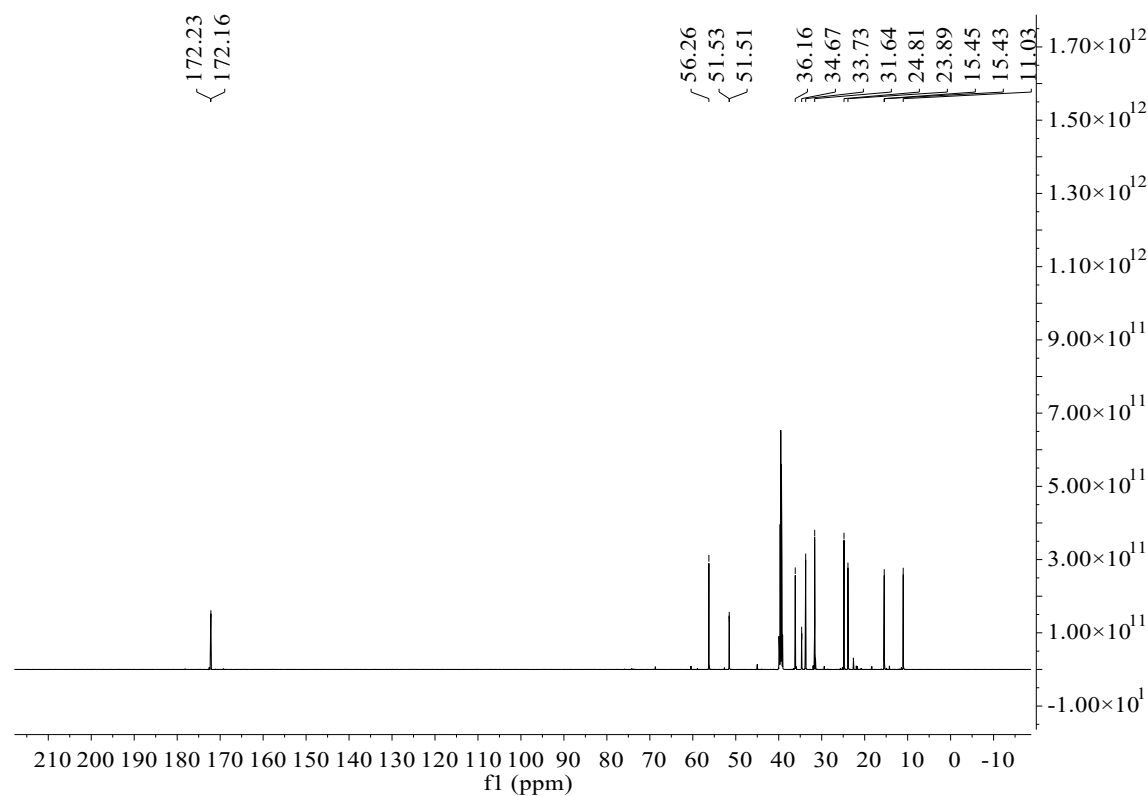


^{13}C NMR spectrum of compound A5

S7. ^1H NMR and ^{13}C NMR of intermediates A6

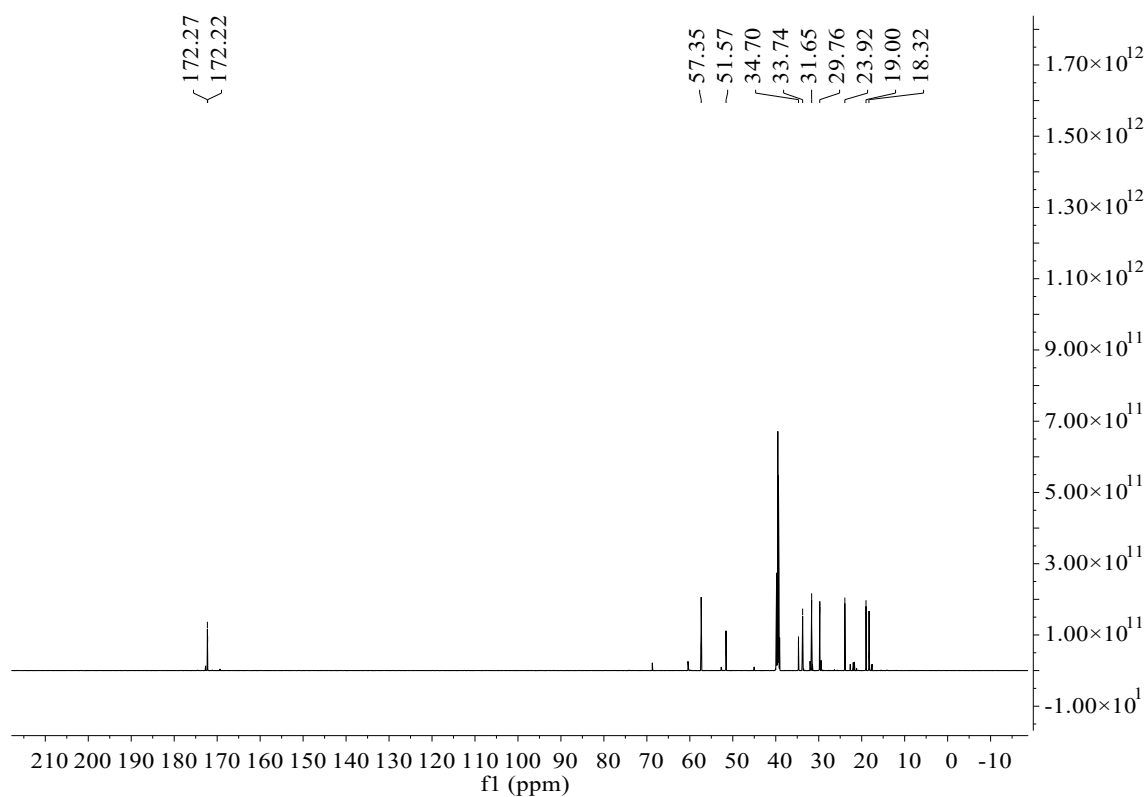


^1H NMR spectrum of compound A6

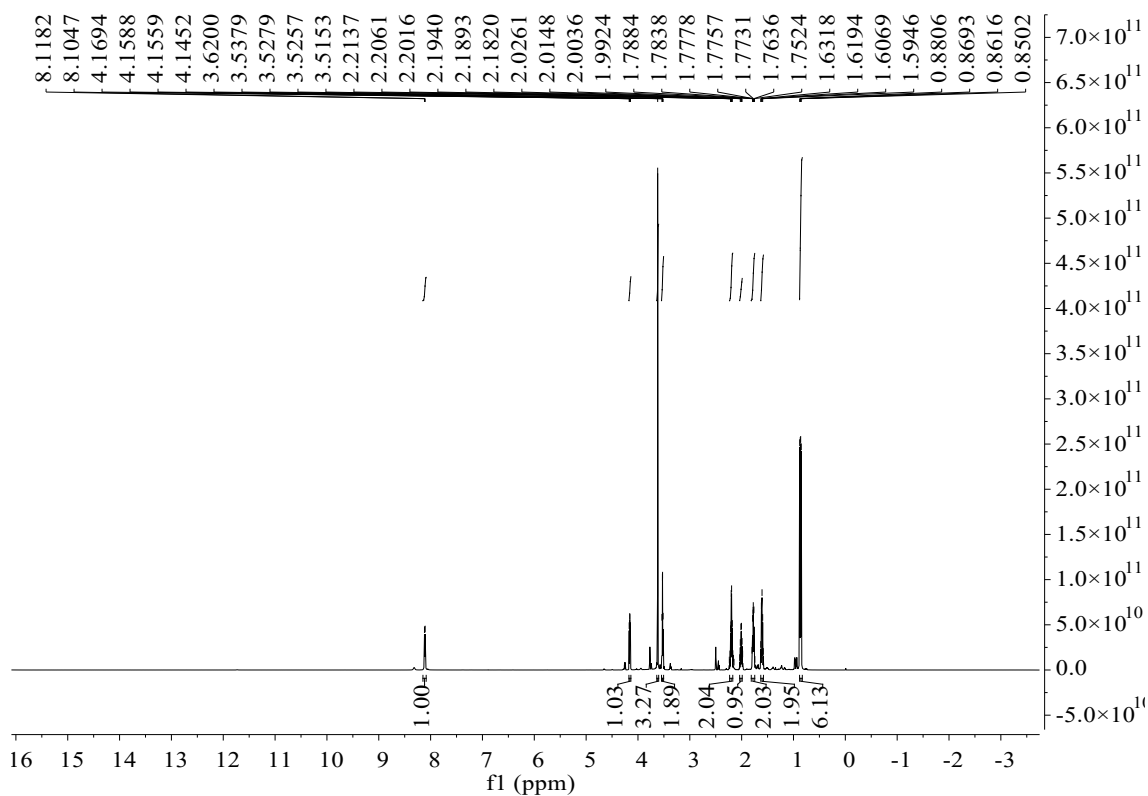


¹³C NMR spectrum of compound A6

S8. ¹H NMR and ¹³C NMR of intermediates A7

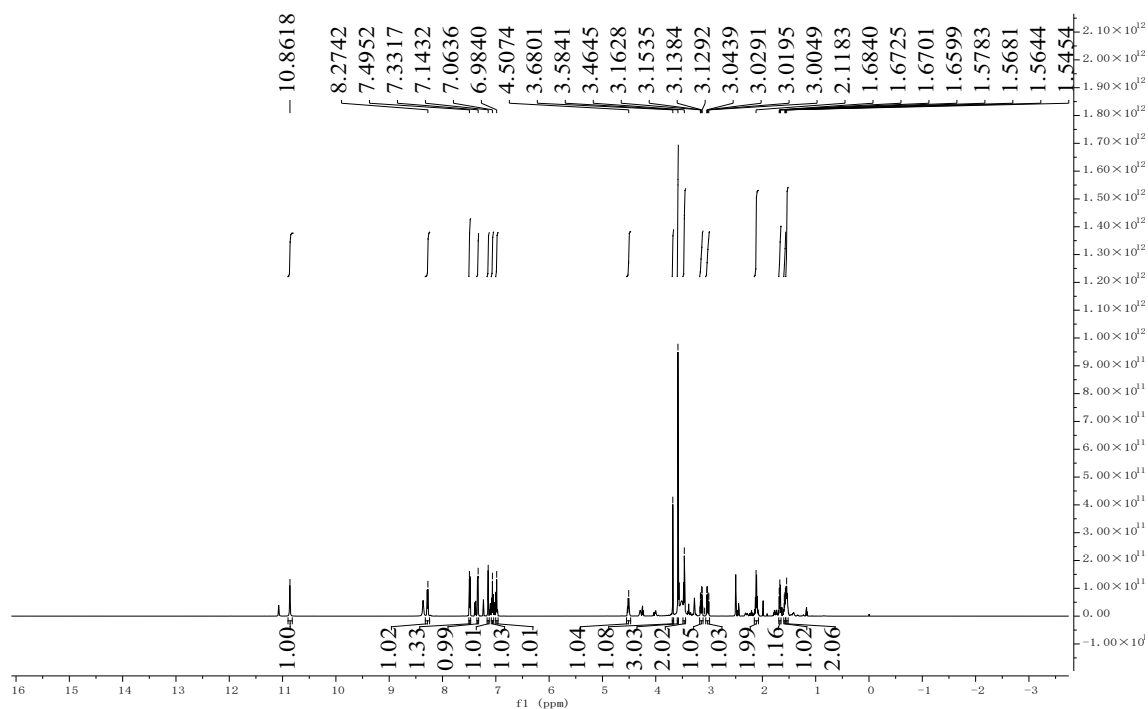


¹H NMR spectrum of compound A7

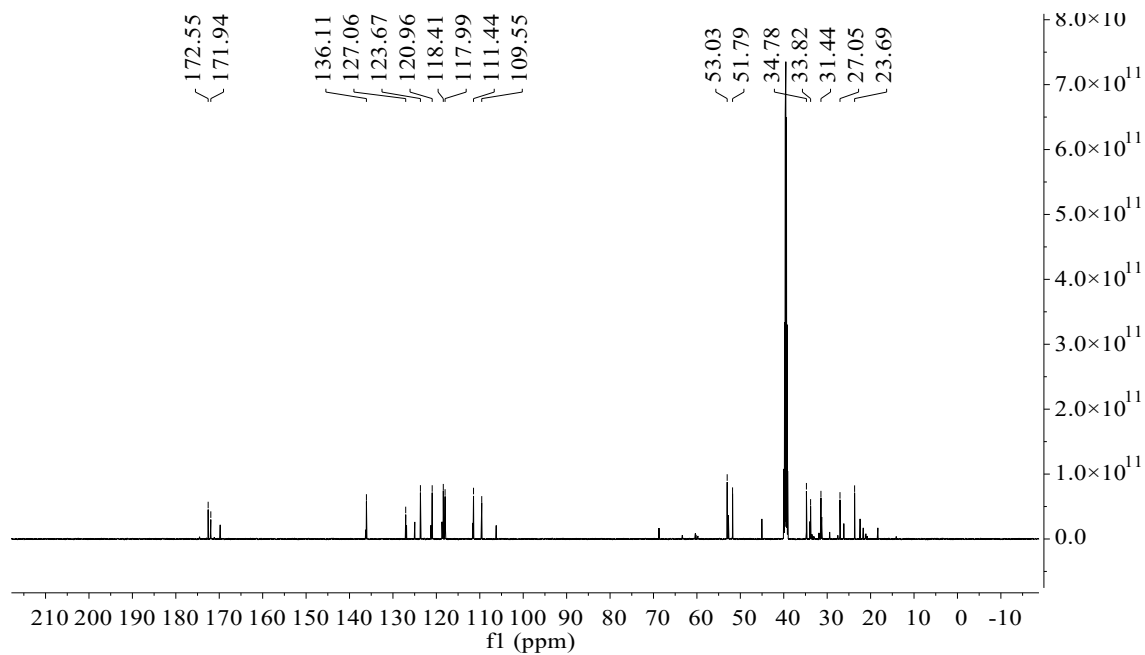


¹³C NMR spectrum of compound A7

S9. ¹H NMR and ¹³C NMR of intermediates A8

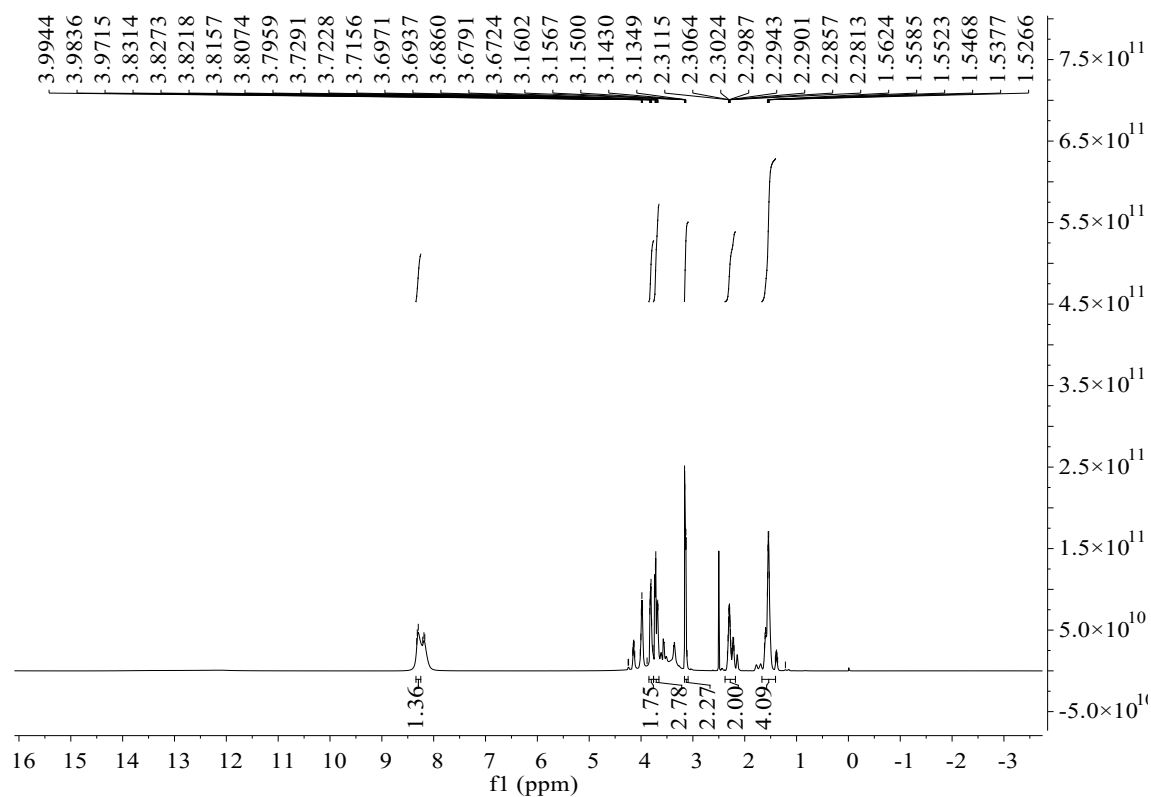


¹H NMR spectrum of compound A8

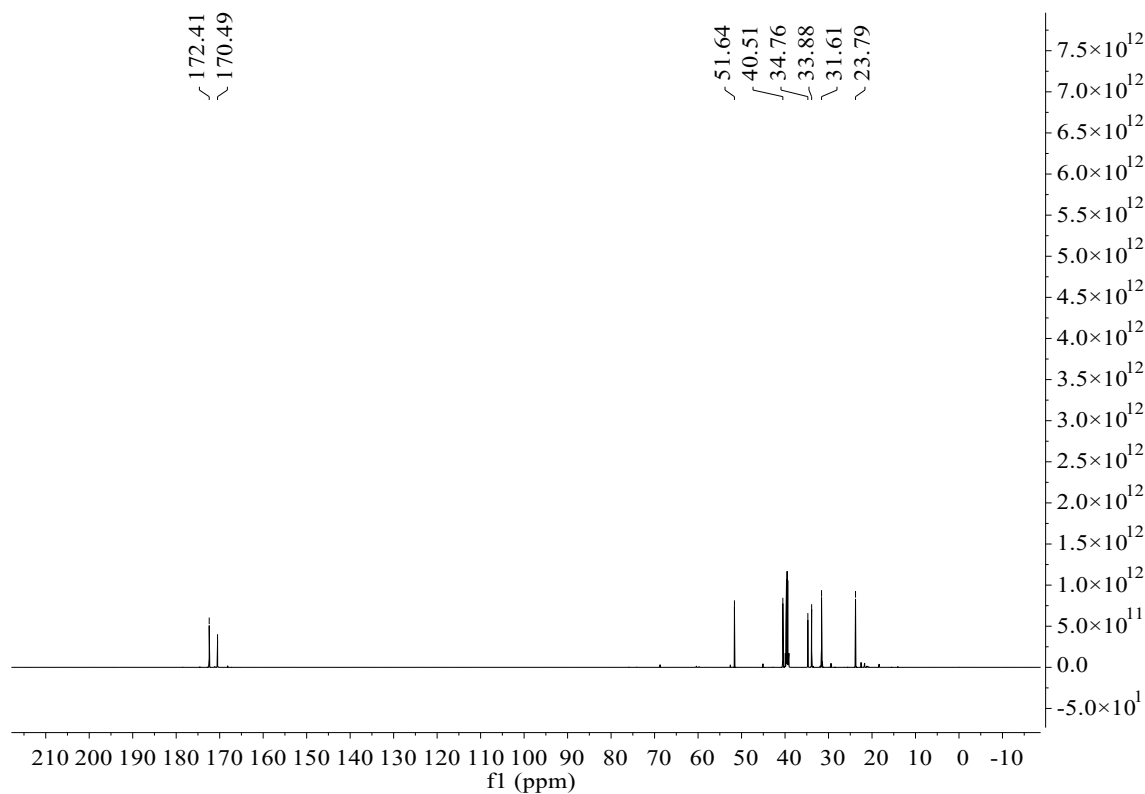


¹³C NMR spectrum of compound A8

S10. ^1H NMR and ^{13}C NMR of intermediates A9

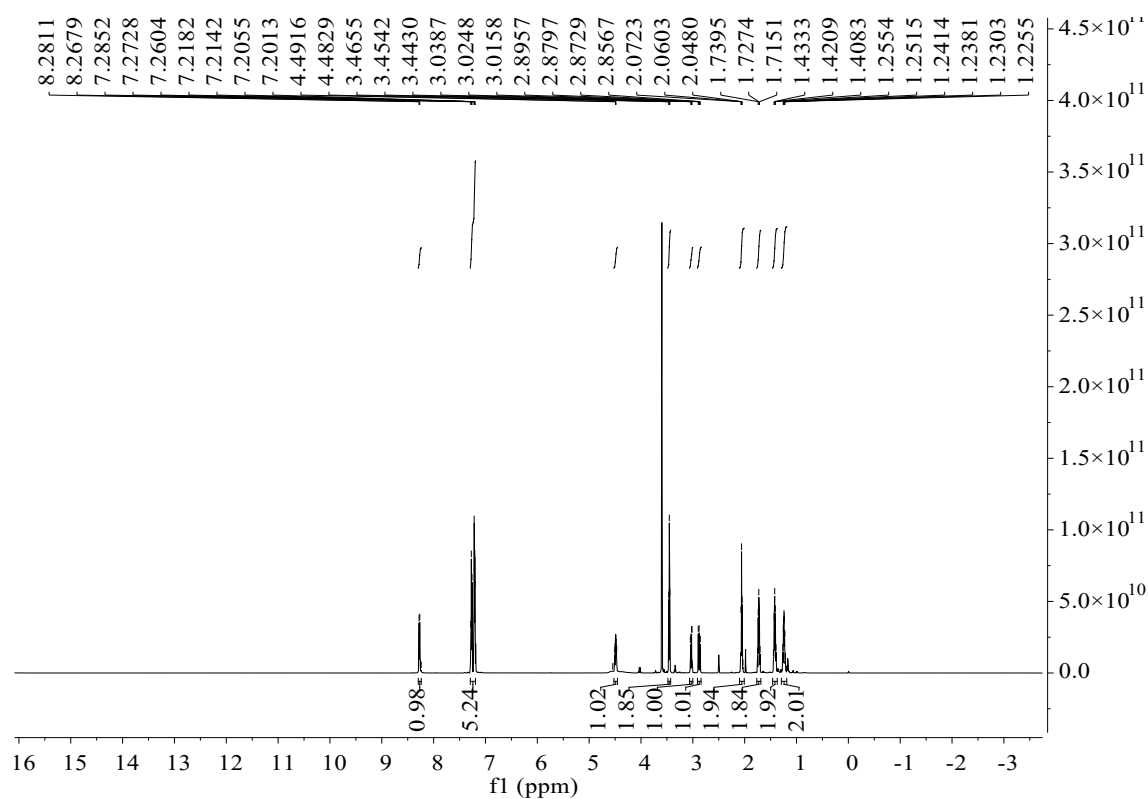


^1H NMR spectrum of compound A9

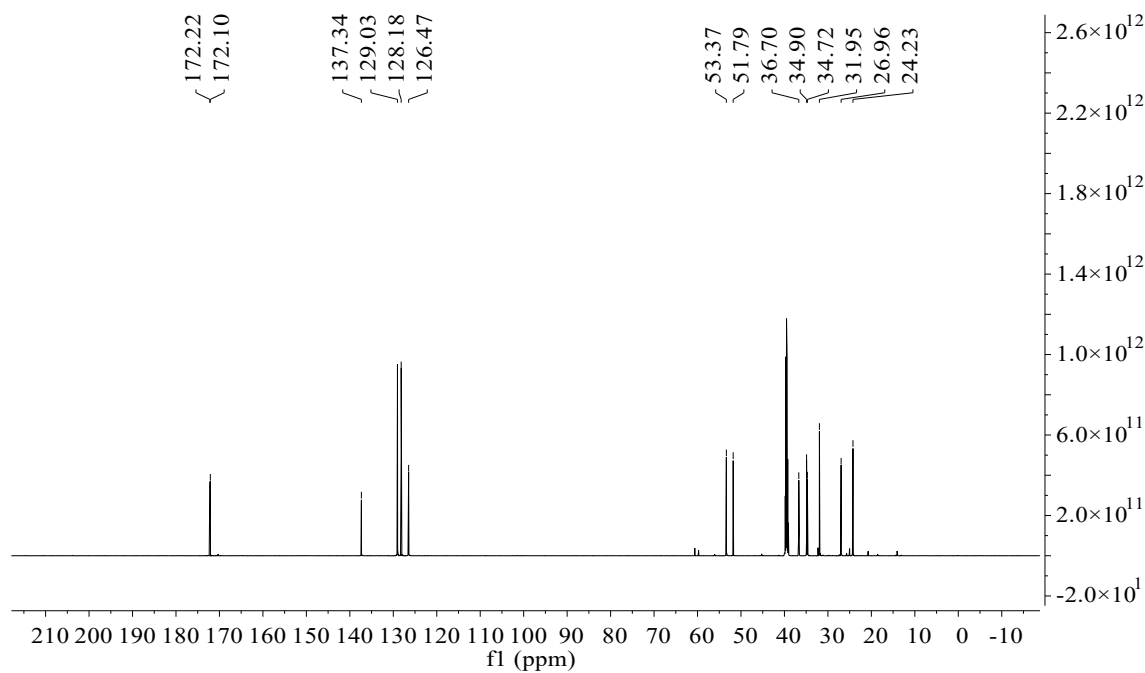


¹³C NMR spectrum of compound A9

S11. ¹H NMR and ¹³C NMR of intermediates A10

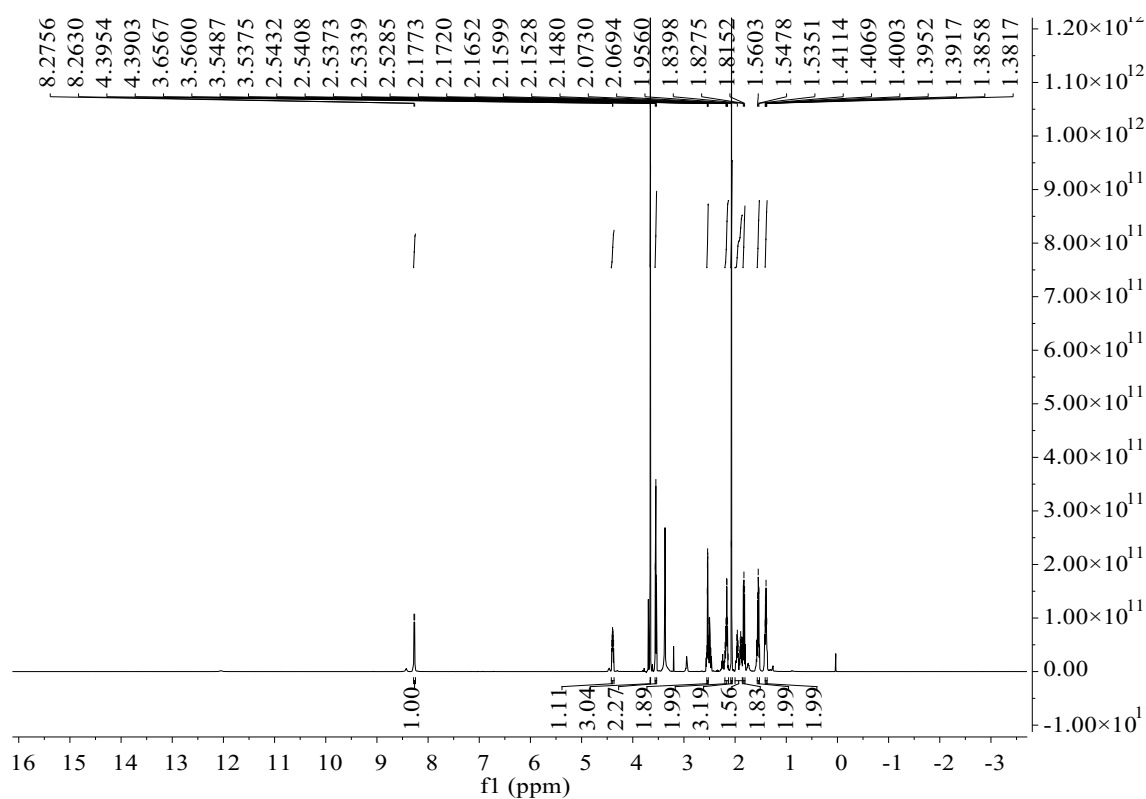


¹H NMR spectrum of compound A10

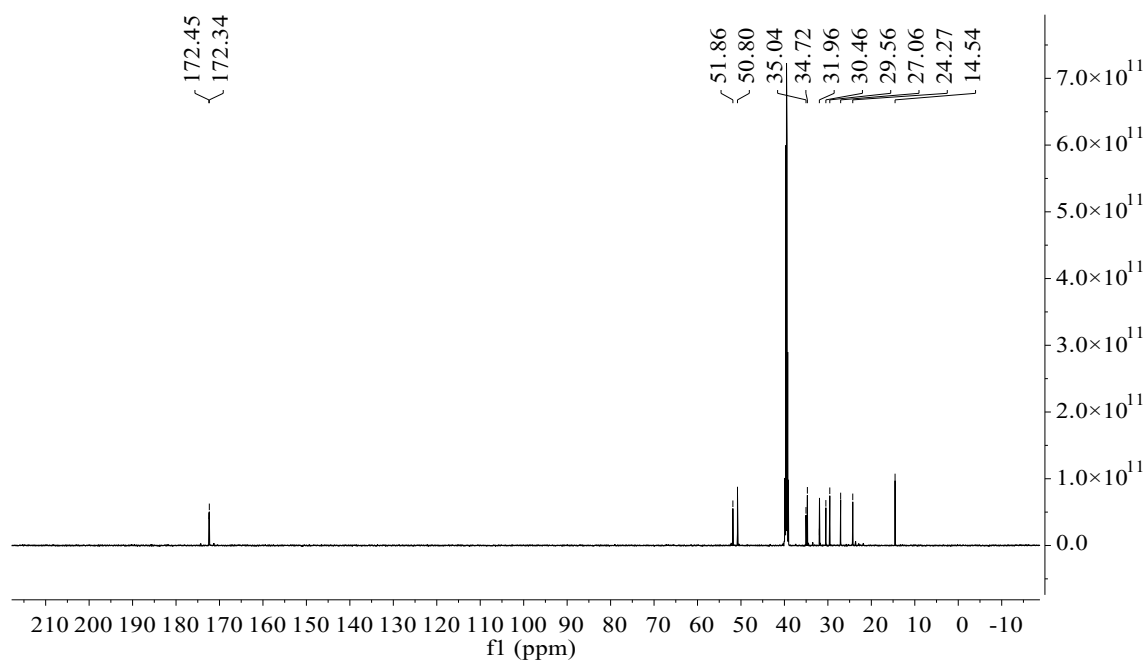


¹³C NMR spectrum of compound A10

S12. ^1H NMR and ^{13}C NMR of intermediates A11

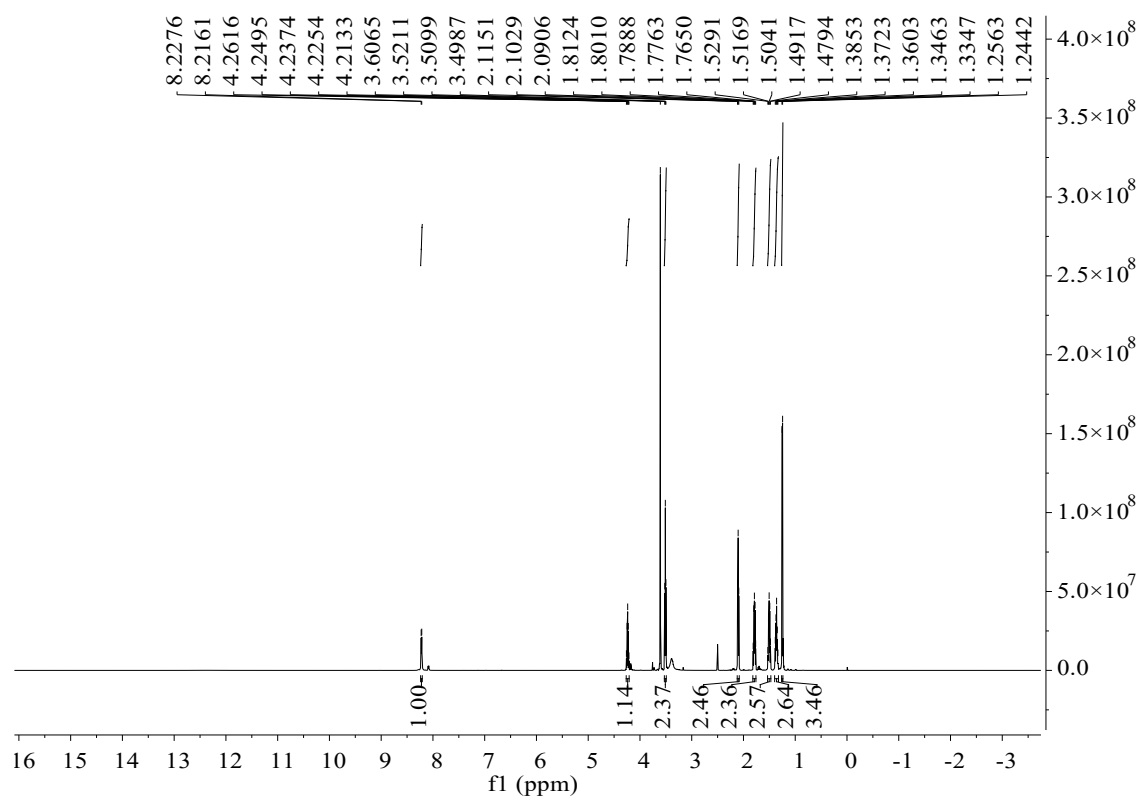


^1H NMR spectrum of compound A11

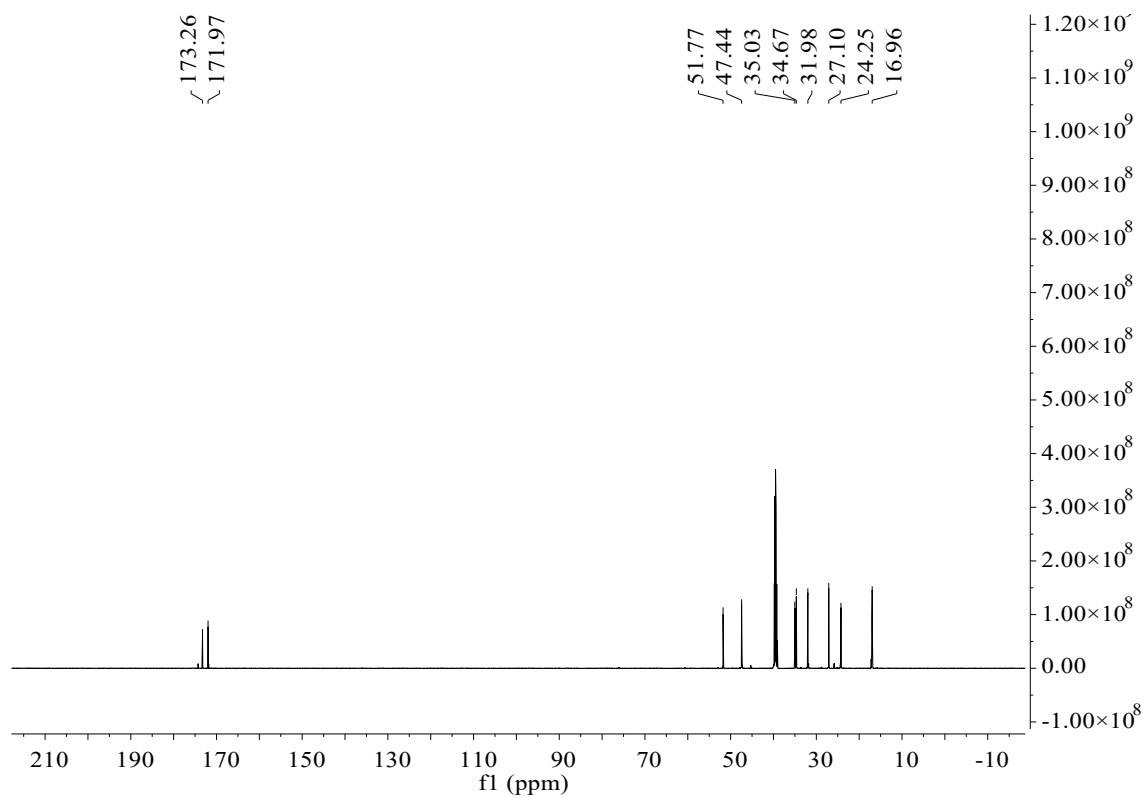


^{13}C NMR spectrum of compound A11

S13. ^1H NMR and ^{13}C NMR of intermediates A12

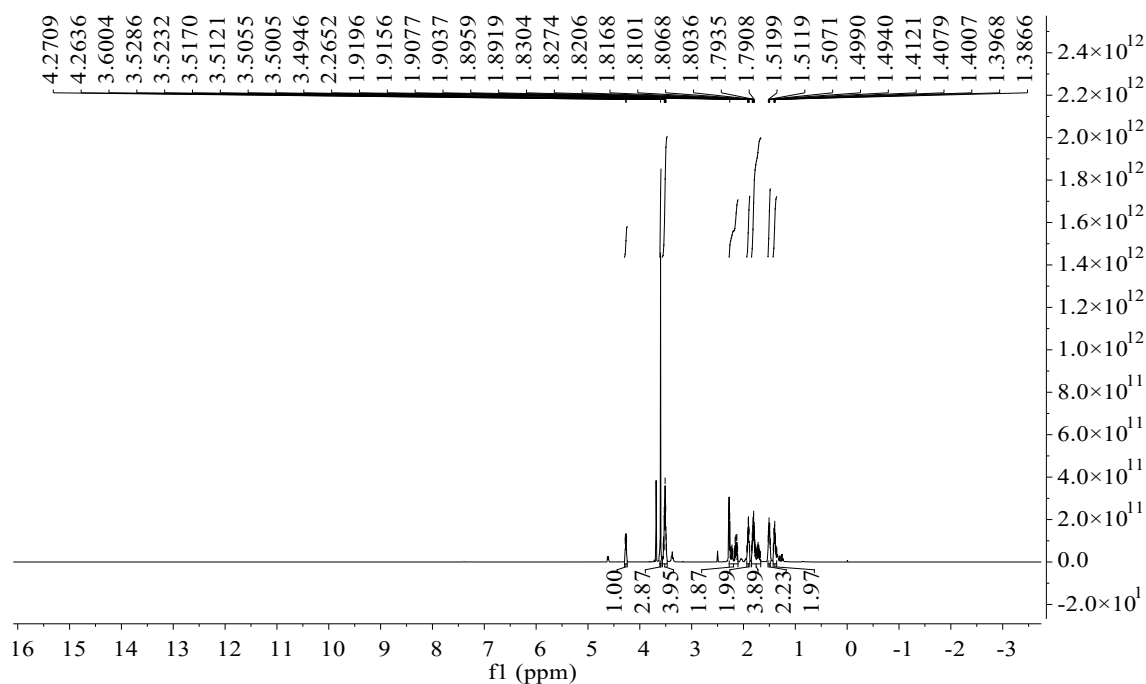


^1H NMR spectrum of compound A12

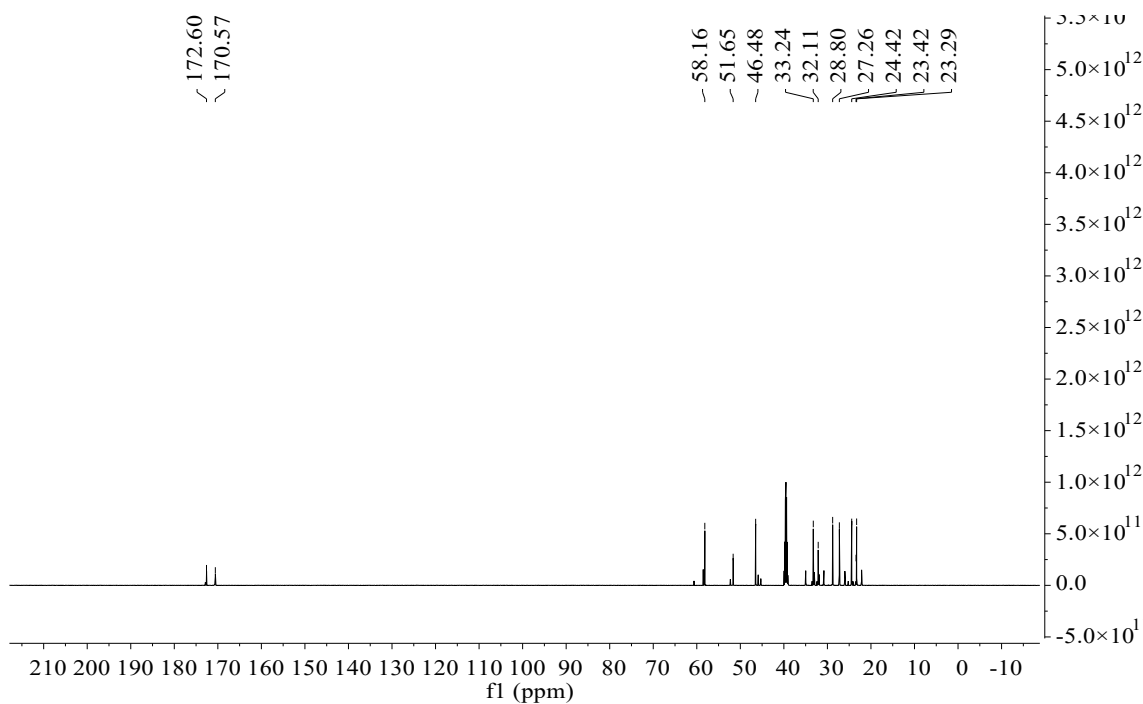


¹³C NMR spectrum of compound A12

S14. ¹H NMR and ¹³C NMR of intermediates A13

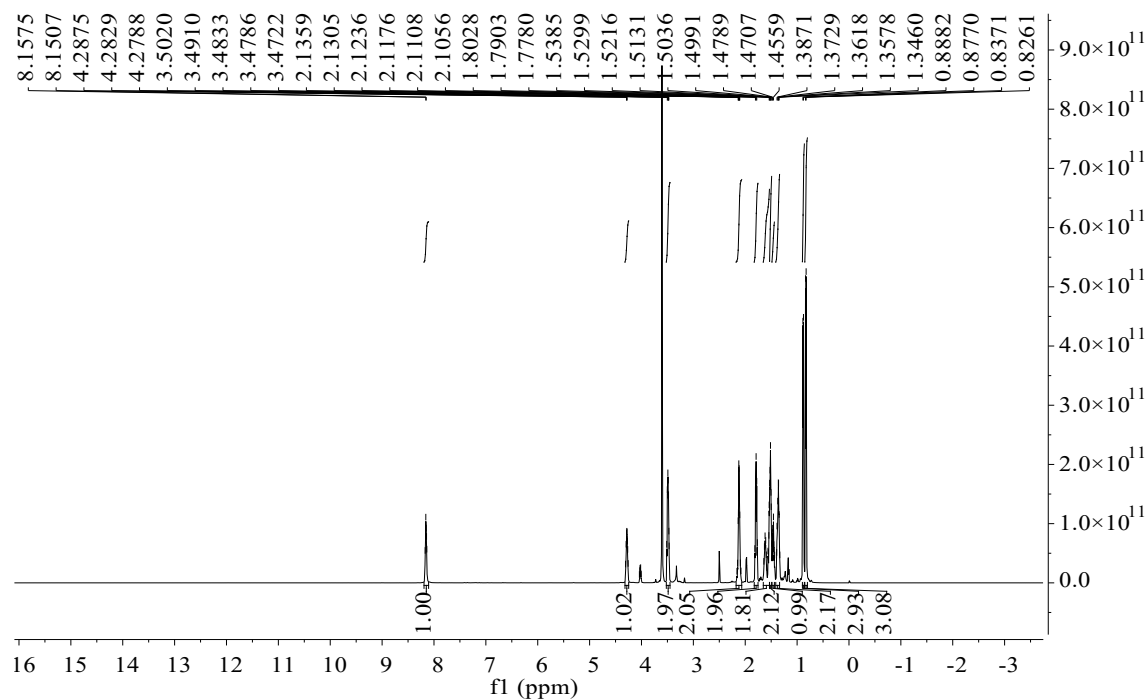


¹H NMR spectrum of compound A13

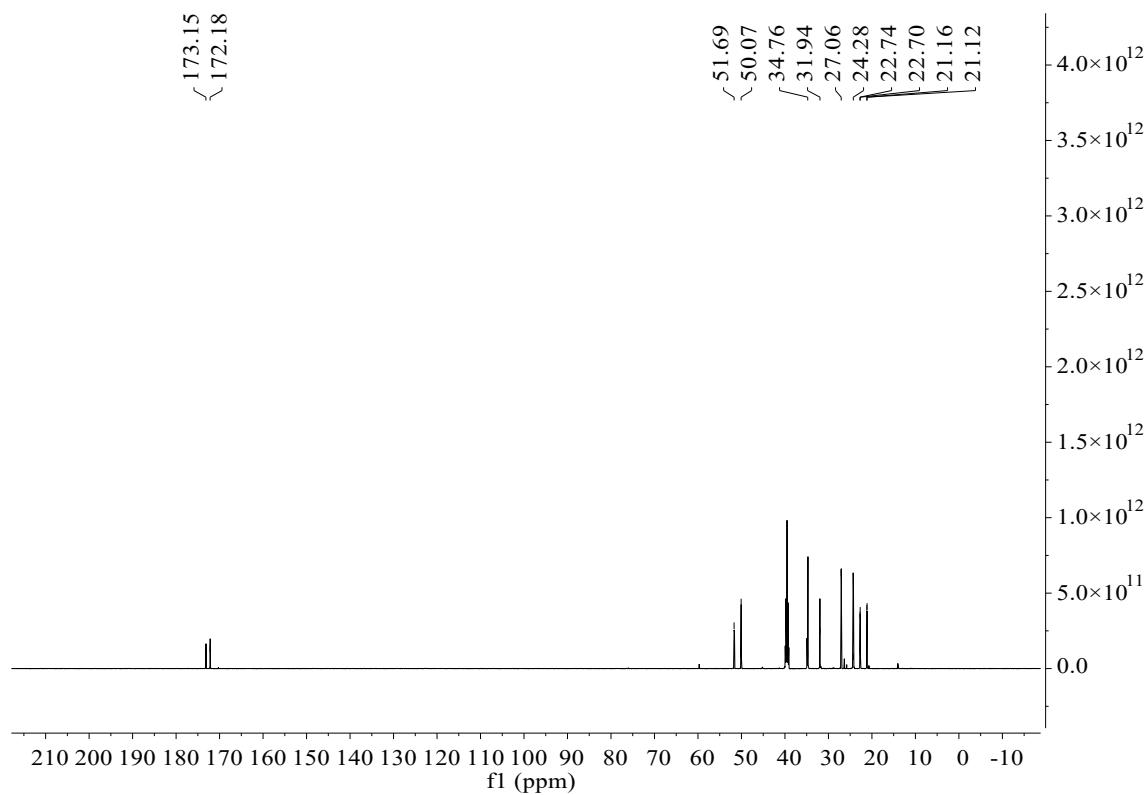


¹³C NMR spectrum of compound A13

S15. ^1H NMR and ^{13}C NMR of intermediates A14

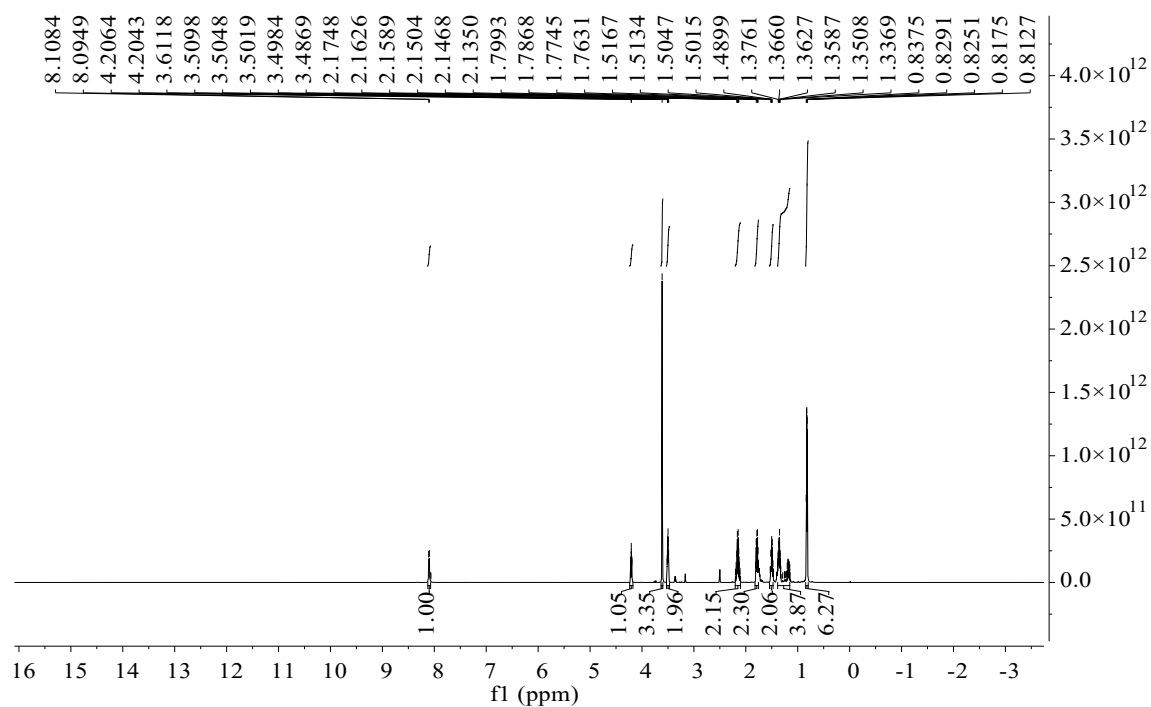


^1H NMR spectrum of compound A14

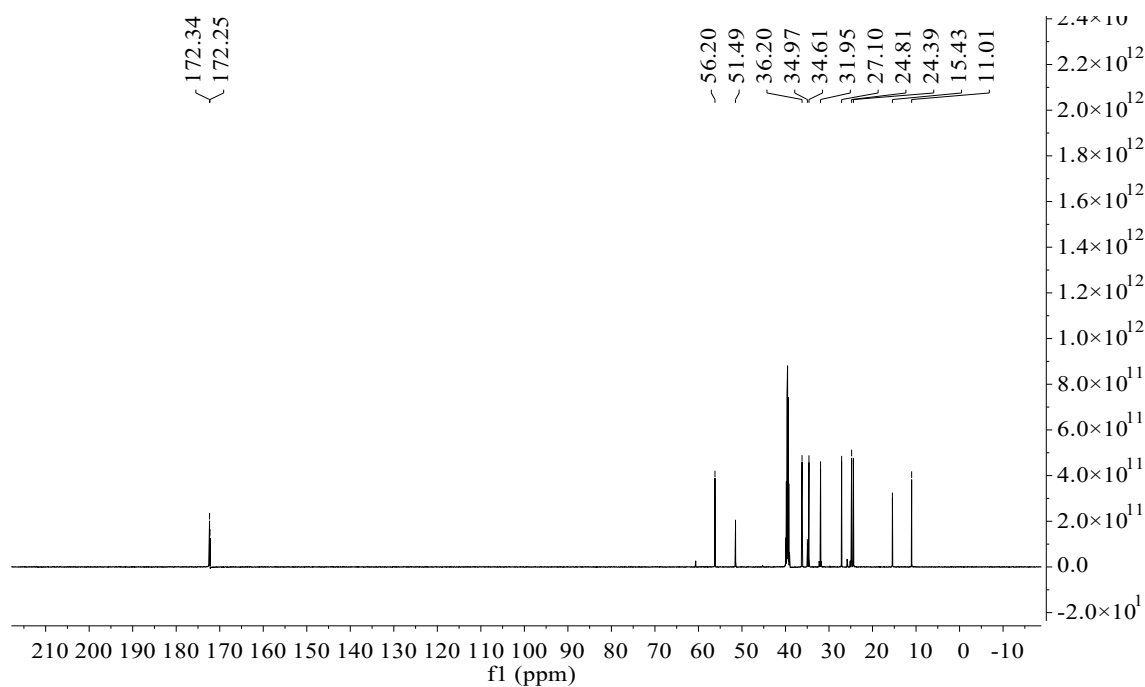


^{13}C NMR spectrum of compound A14

S16. ^1H NMR and ^{13}C NMR of intermediates A15

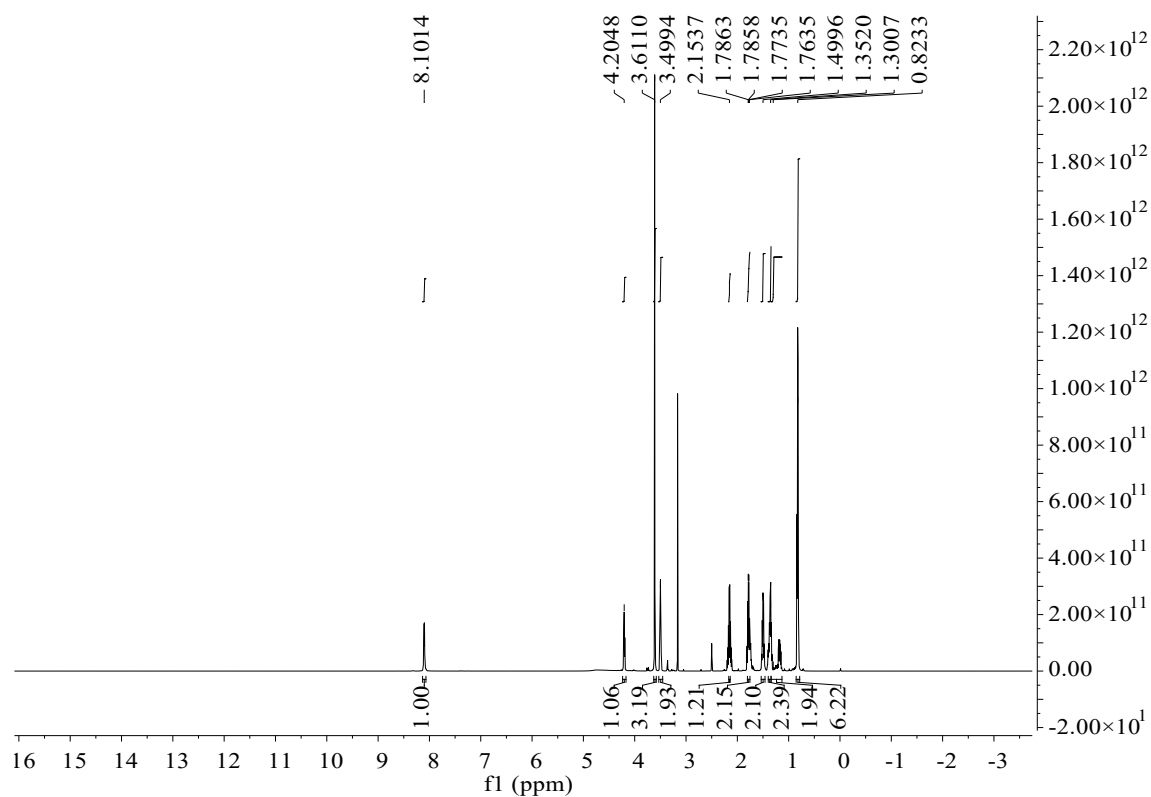


^1H NMR spectrum of compound A15

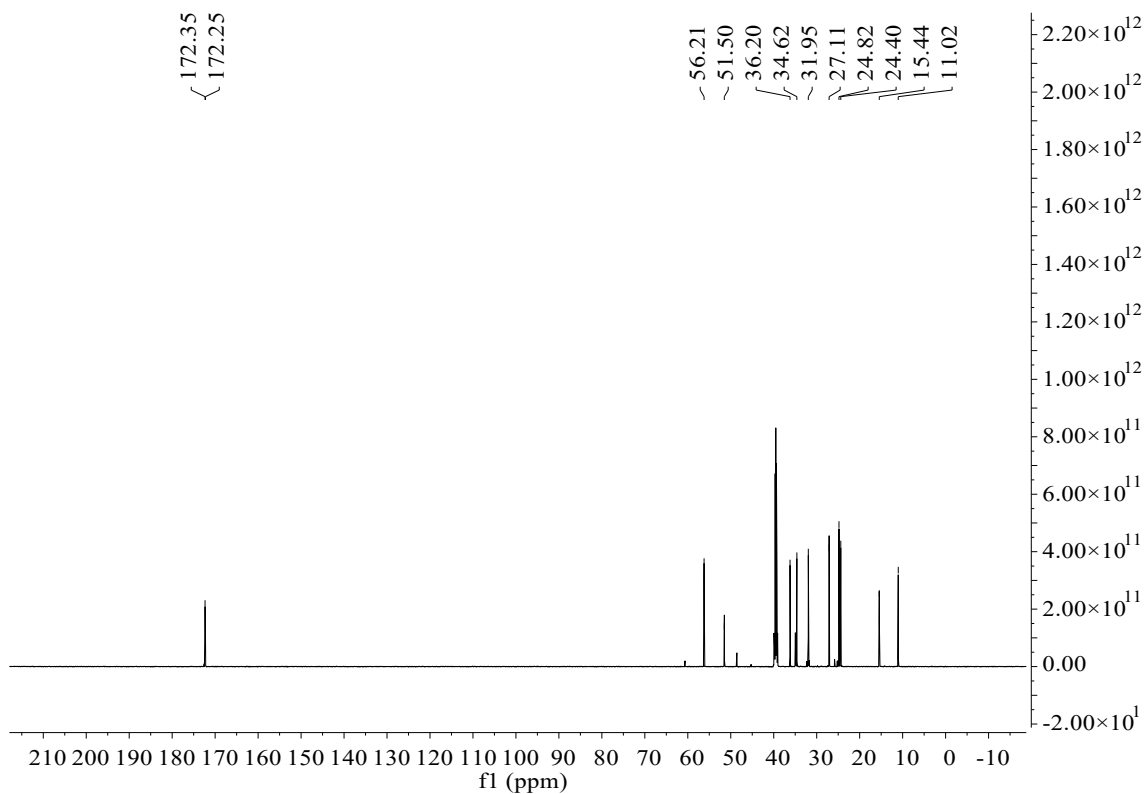


^{13}C NMR spectrum of compound A15

S17. ^1H NMR and ^{13}C NMR of intermediates A16

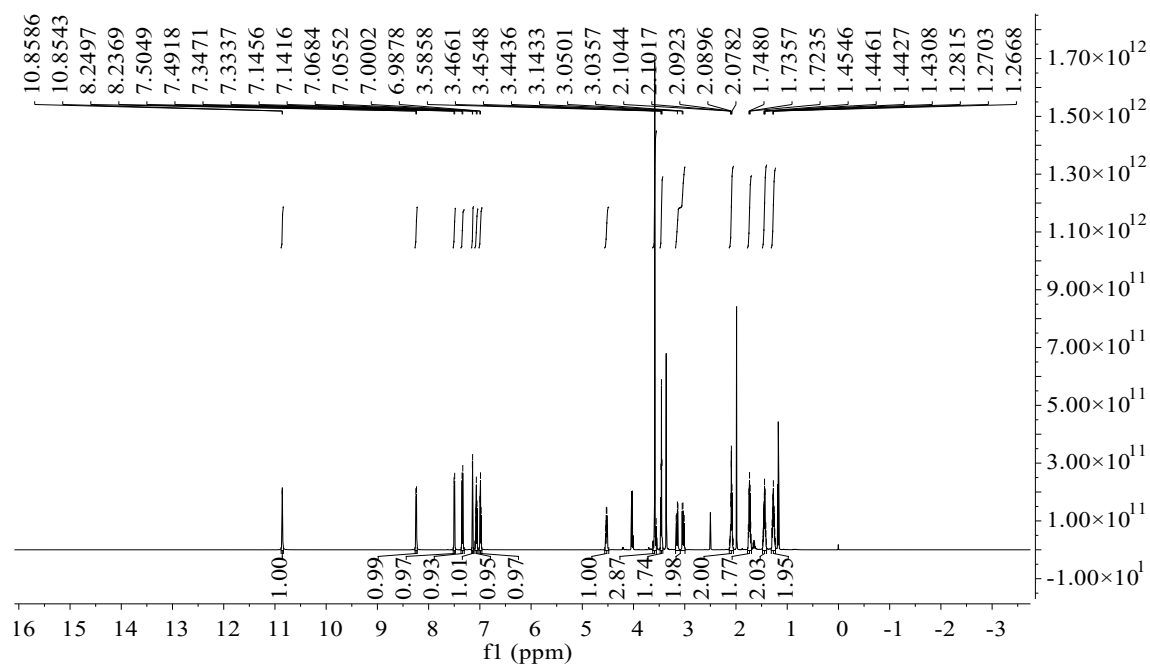


^1H NMR spectrum of compound A16

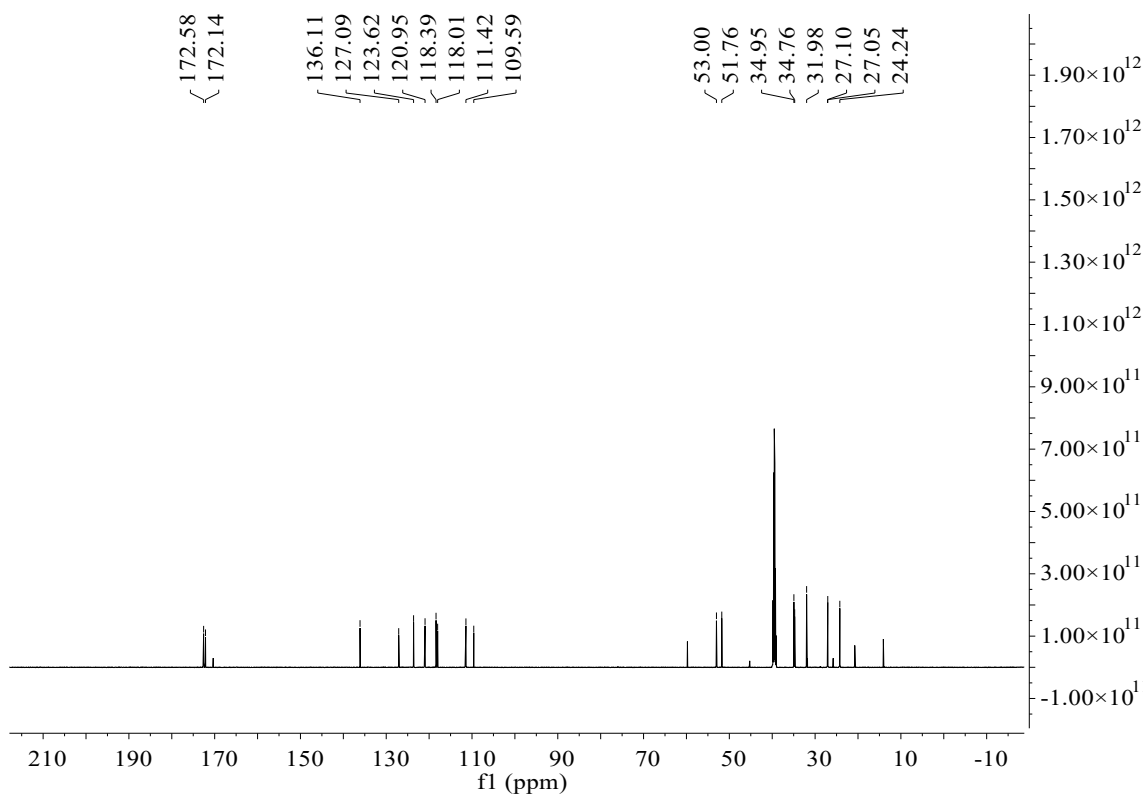


¹³C NMR spectrum of compound A16

S18. ¹H NMR and ¹³C NMR of intermediates A17

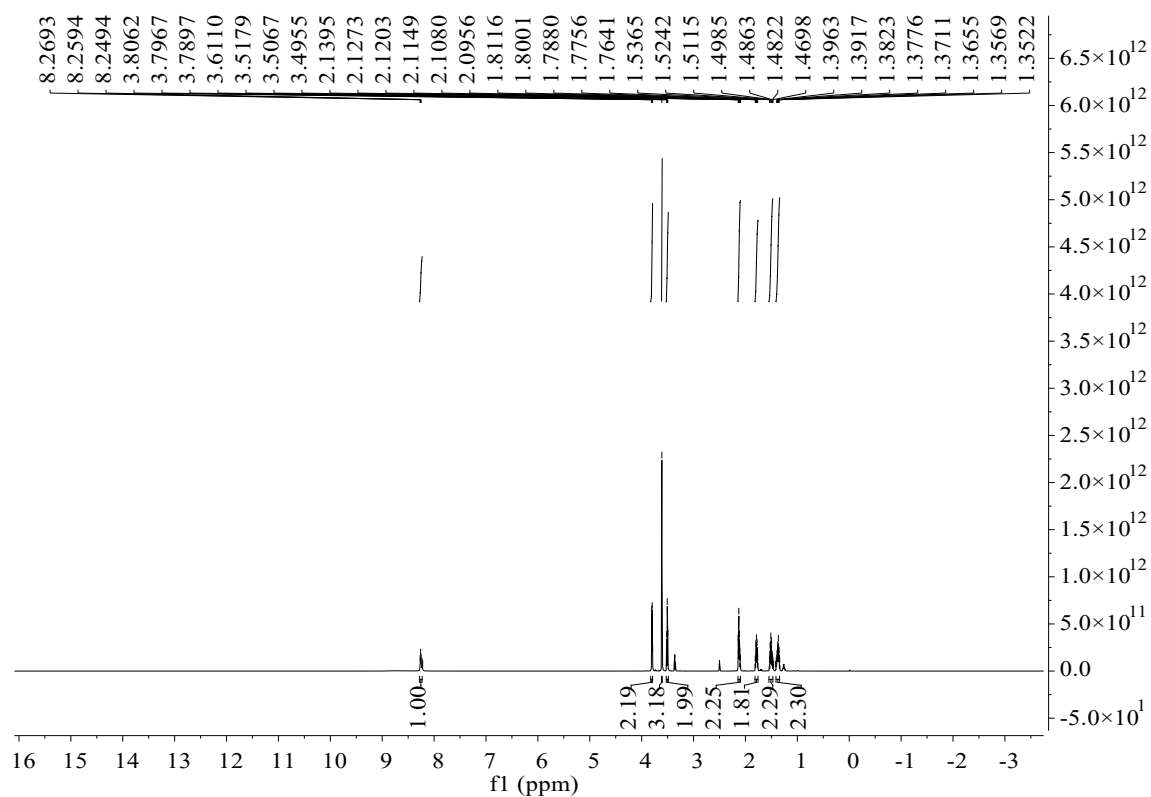


¹H NMR spectrum of compound A17

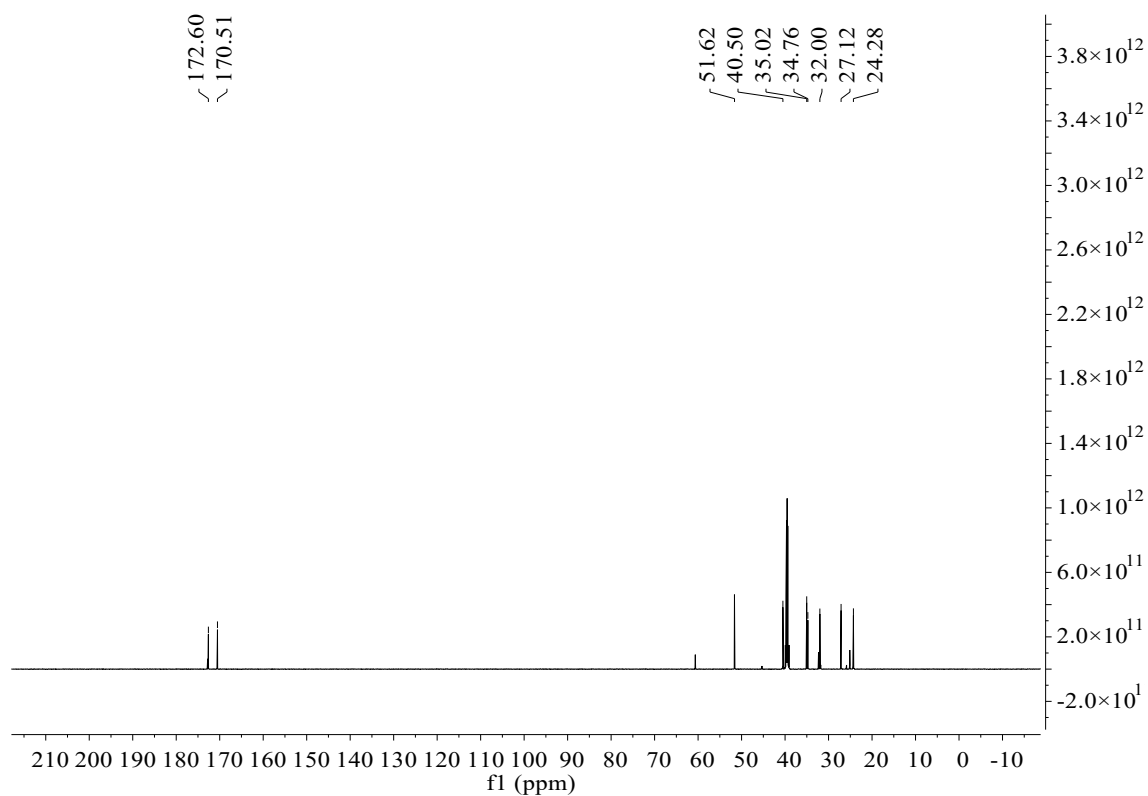


¹³C NMR spectrum of compound A17

S19. ^1H NMR and ^{13}C NMR of intermediates A18

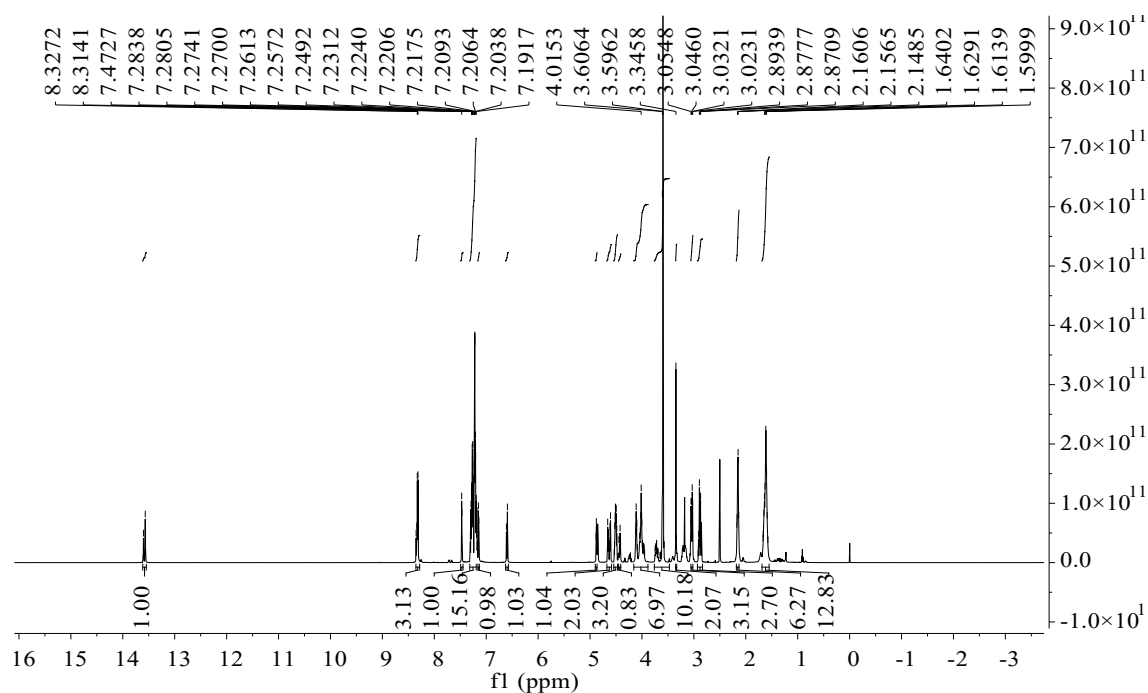


^1H NMR spectrum of compound A18

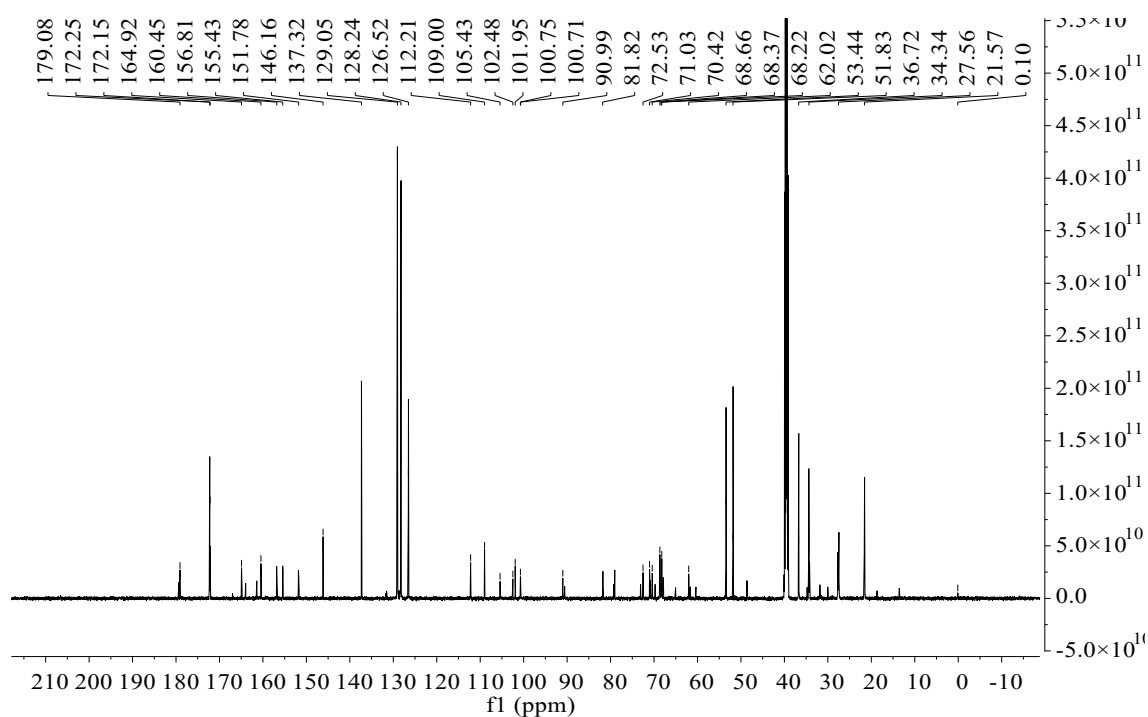


¹³C NMR spectrum of compound A18

S20. ¹H NMR, ¹³C NMR and HRESIMS of MGF derivatives G1

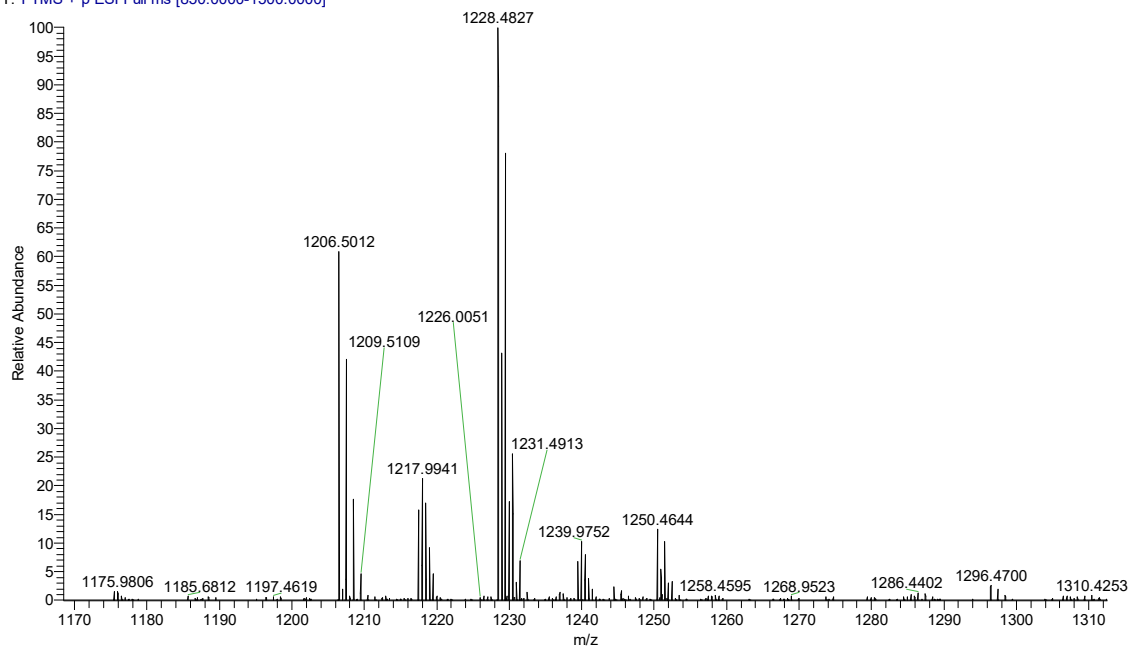


¹H NMR spectrum of compound G1



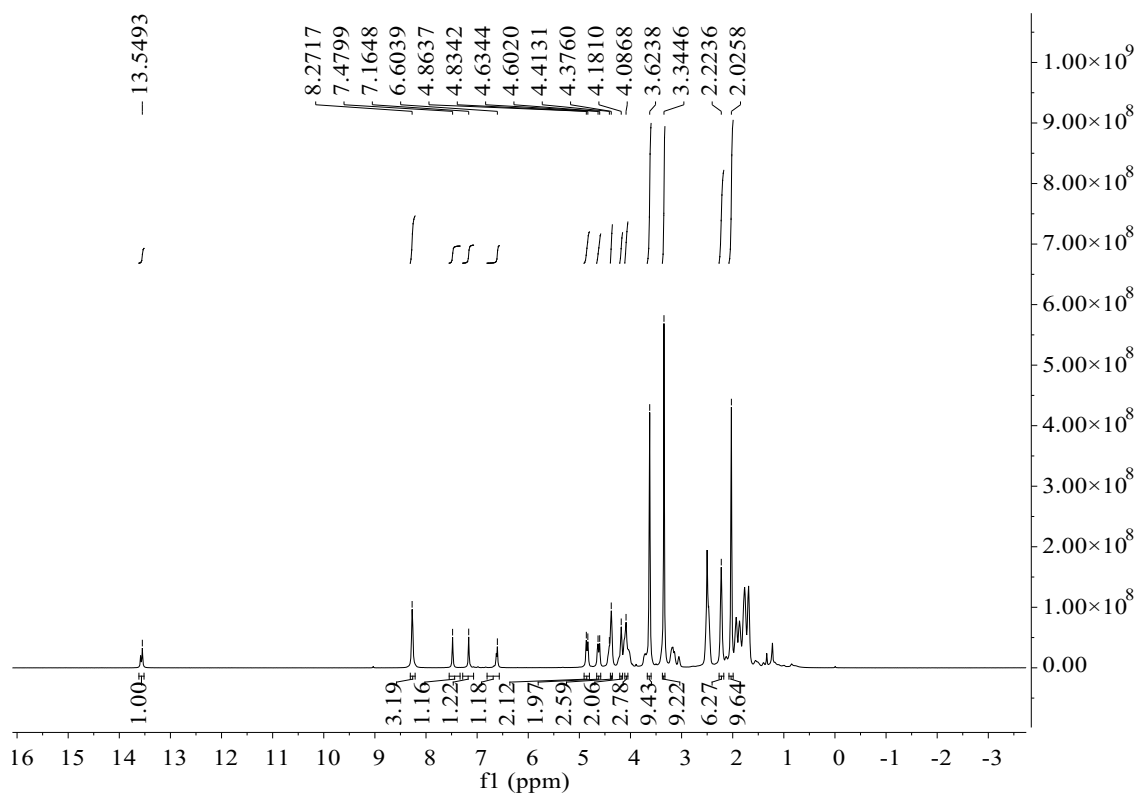
¹³C NMR spectrum of compound G1

LBW #271 RT: 1.18 AV: 1 NL: 8.36E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

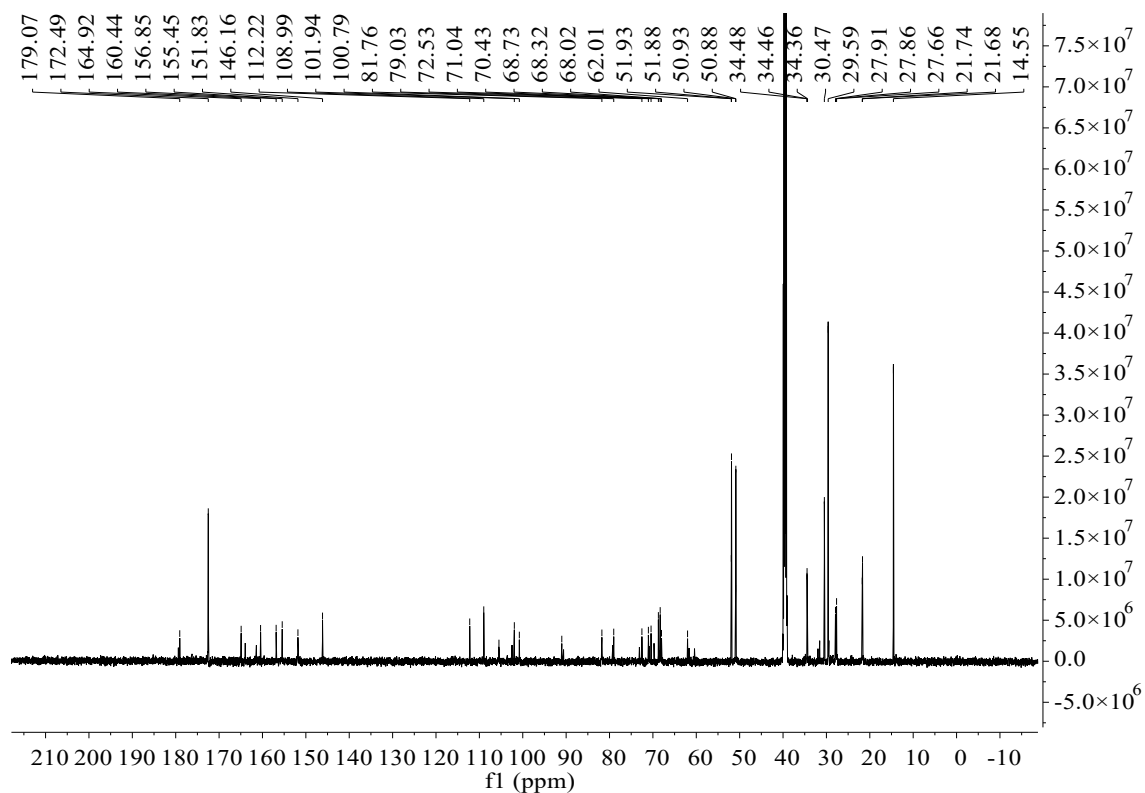


HRESIMS of compound G1

S21. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G2

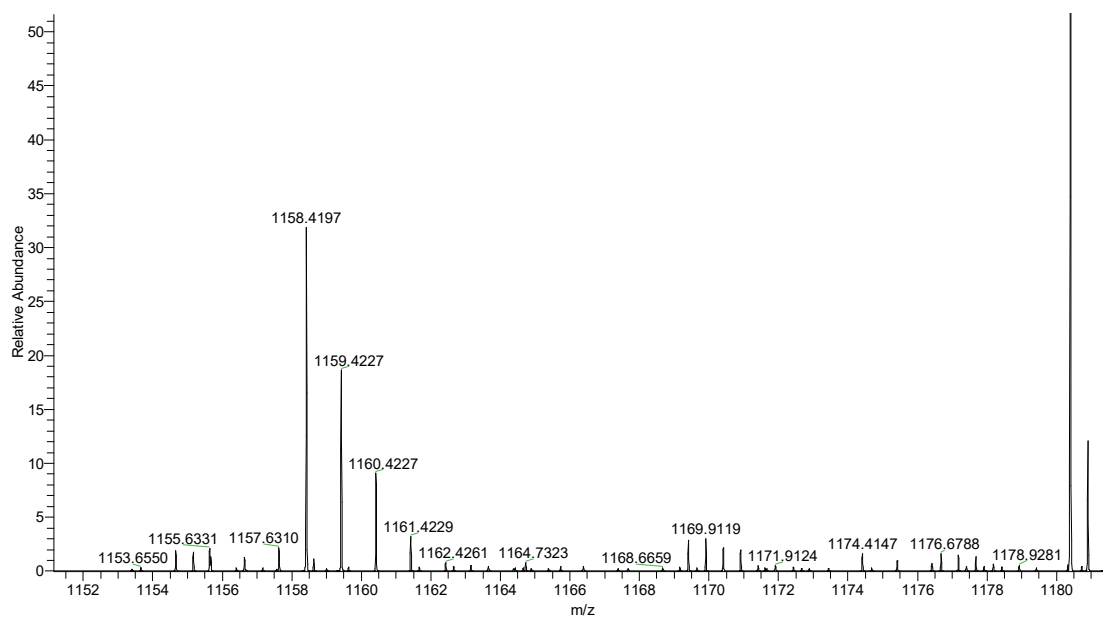


^1H NMR spectrum of compound G2



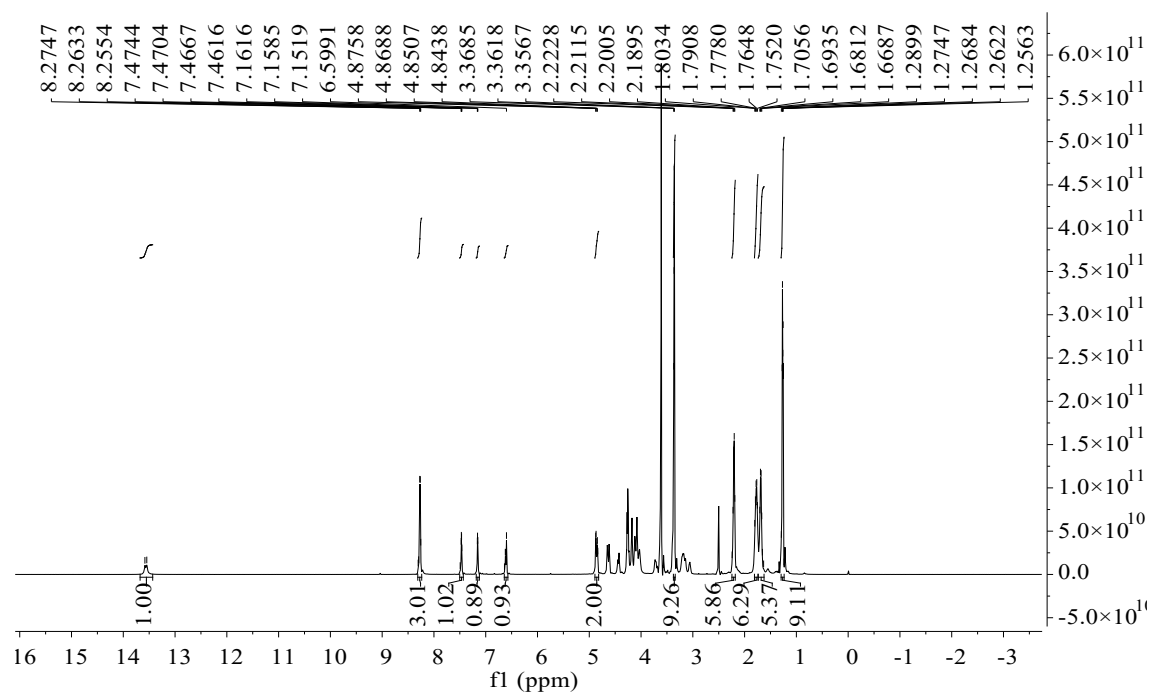
¹³C NMR spectrum of compound G2

DW #262 RT: 1.14 AV: 1 NL: 5.39E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

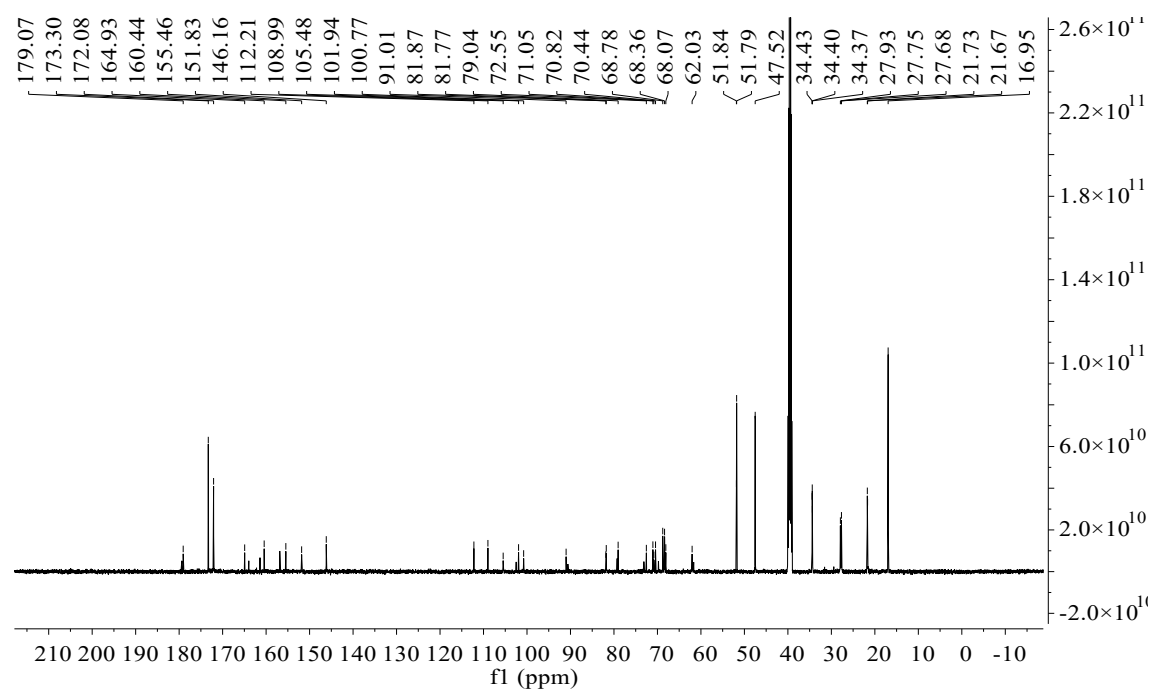


HRESIMS of compound G2

S22. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G3

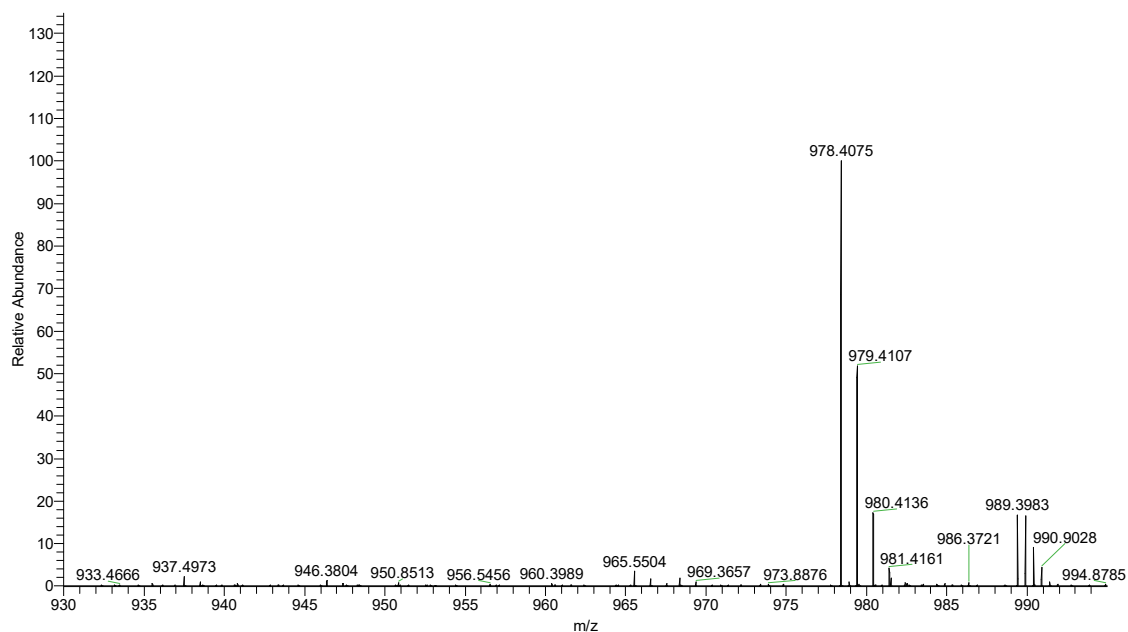


^1H NMR spectrum of compound G3



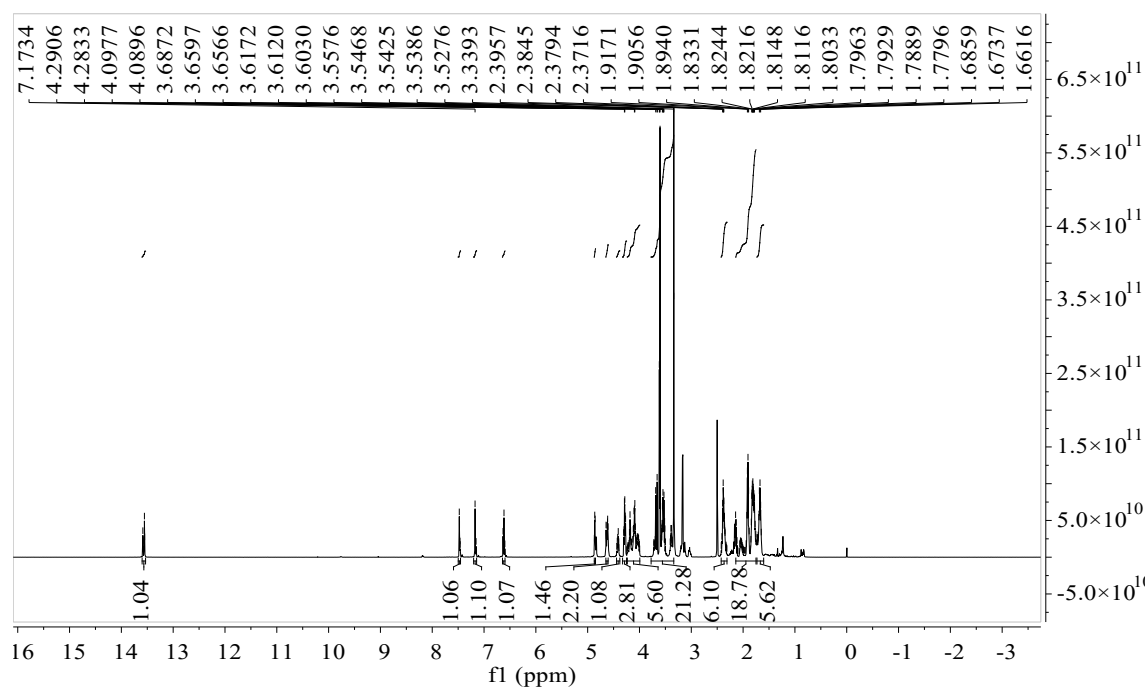
^{13}C NMR spectrum of compound G3

BW #272 RT: 1.18 AV: 1 NL: 2.94E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

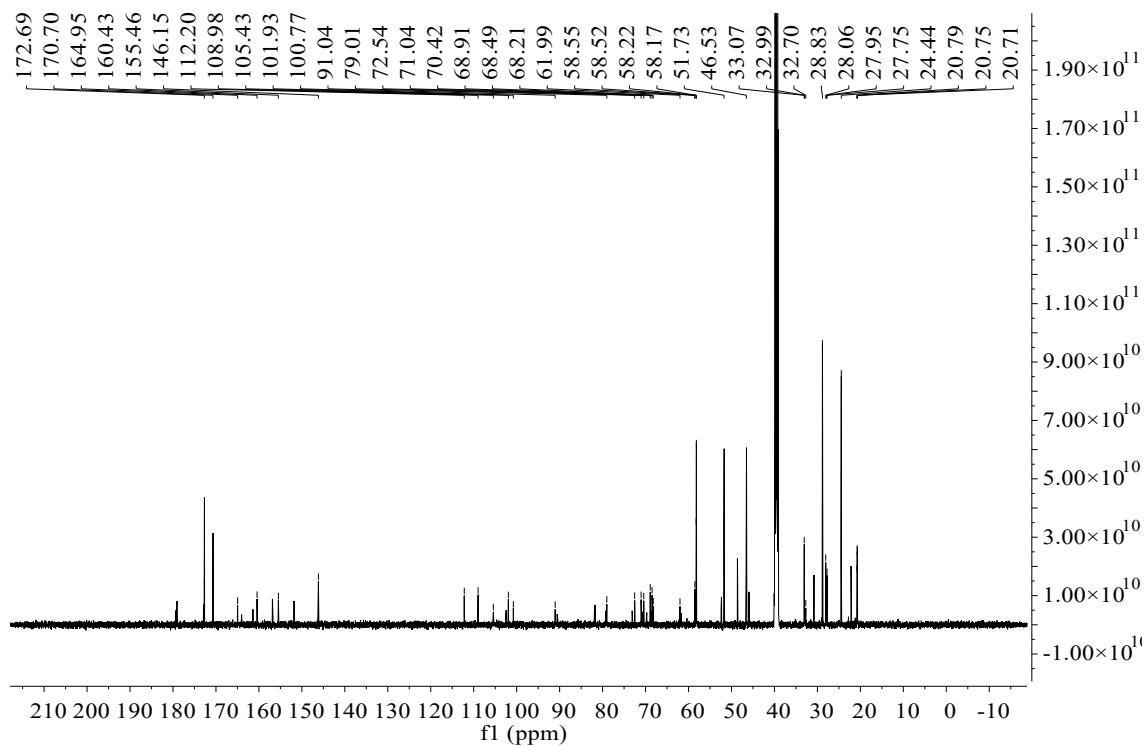


HRESIMS of compound G3

S23. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G4

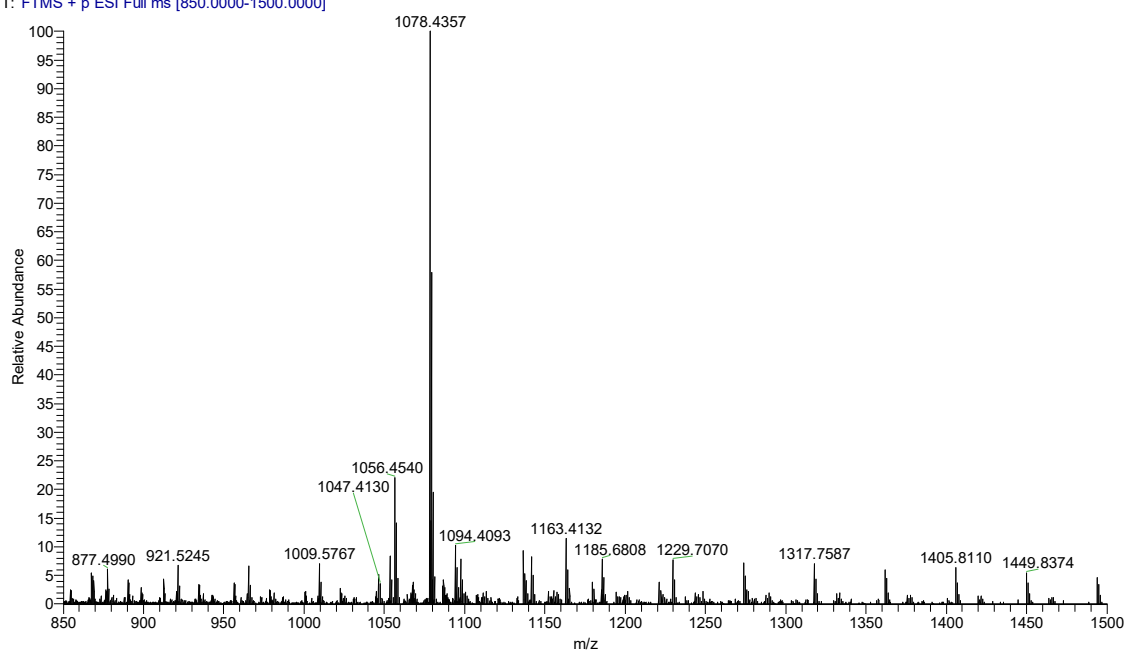


^1H NMR spectrum of compound G4



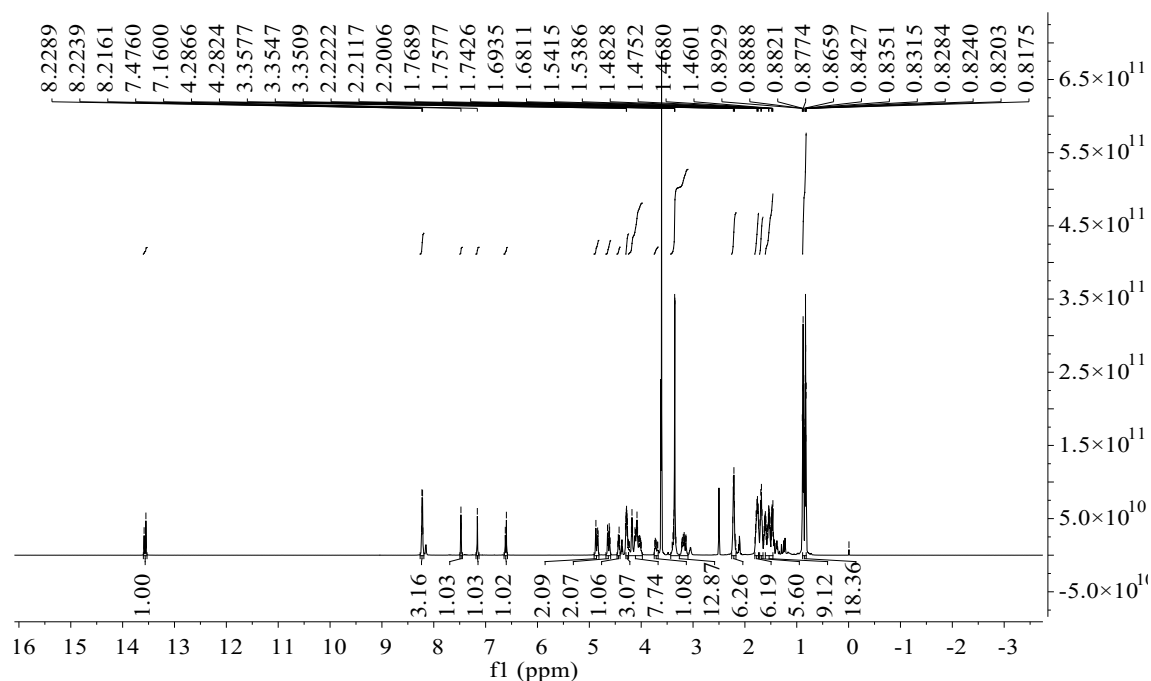
¹³C NMR spectrum of compound G4

FW #260 RT: 1.13 AV: 1 NL: 5.72E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

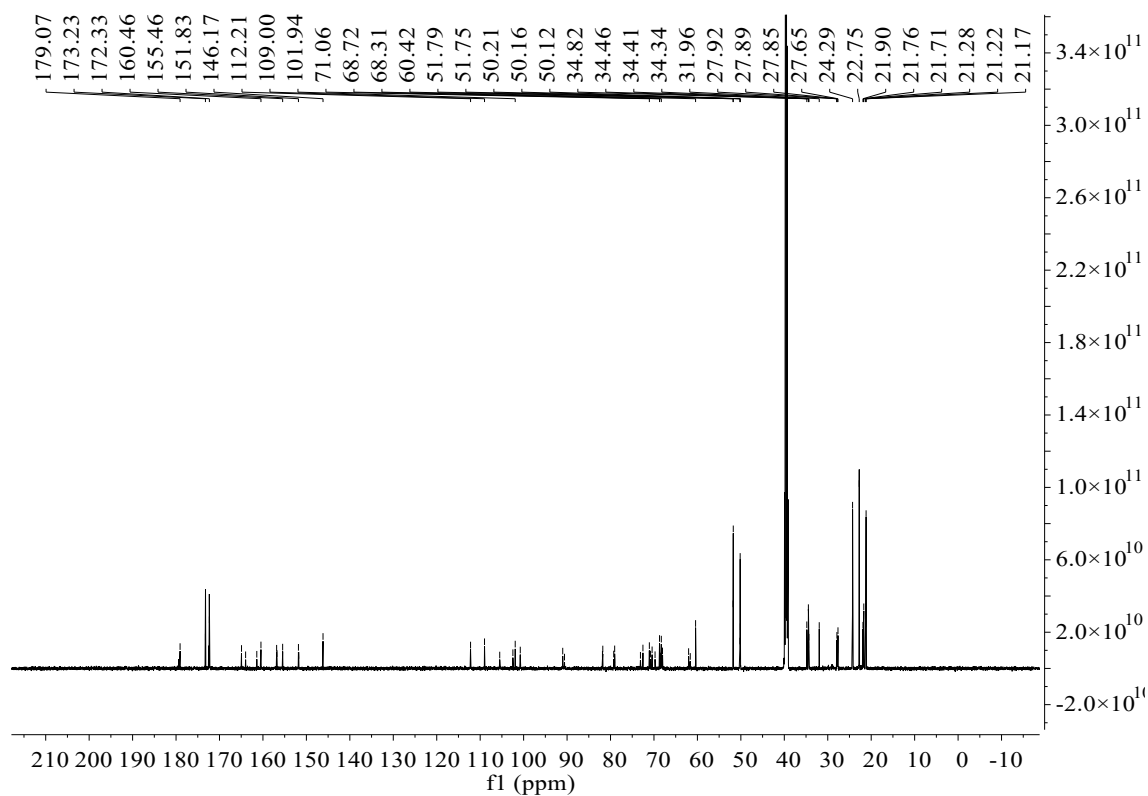


HRESIMS of compound G4

S24. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G5

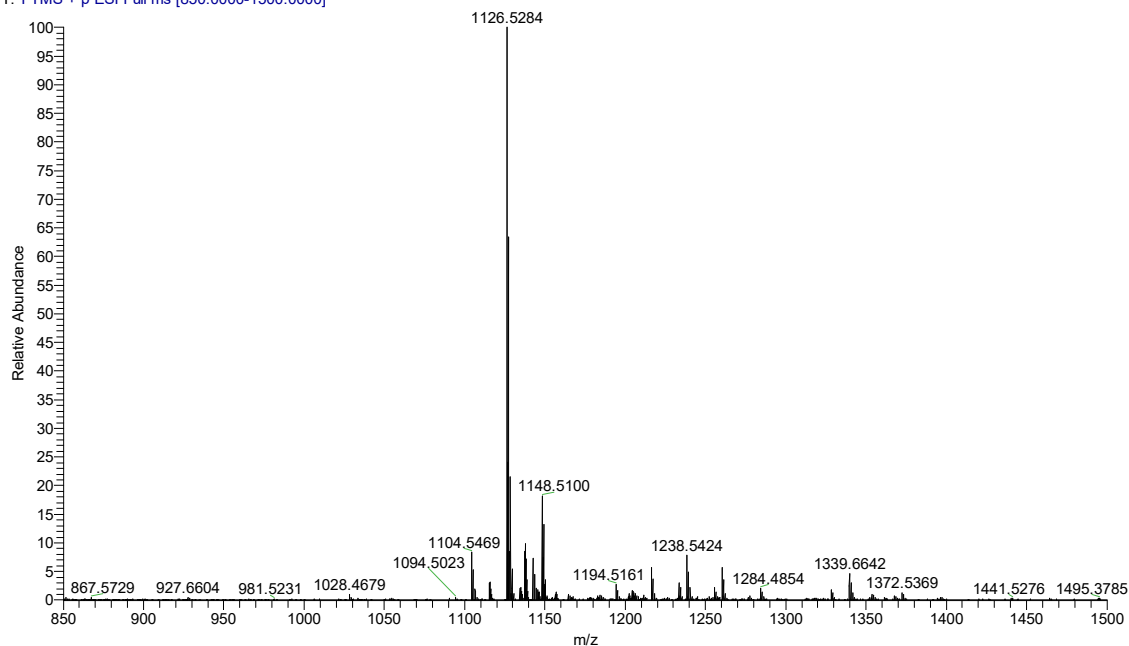


^1H NMR spectrum of compound G5



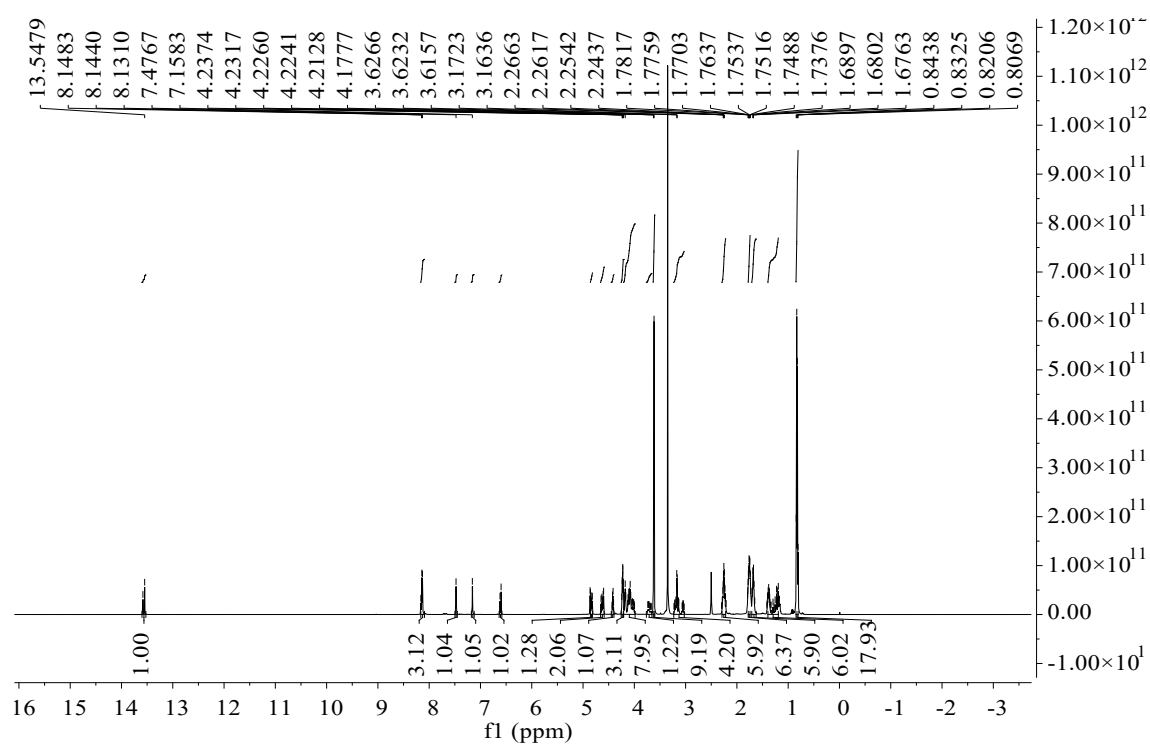
^{13}C NMR spectrum of compound G5

LW #288 RT: 1.25 AV: 1 NL: 2.05E7
T: FTMS + p ESI Full ms [850.0000-1500.0000]

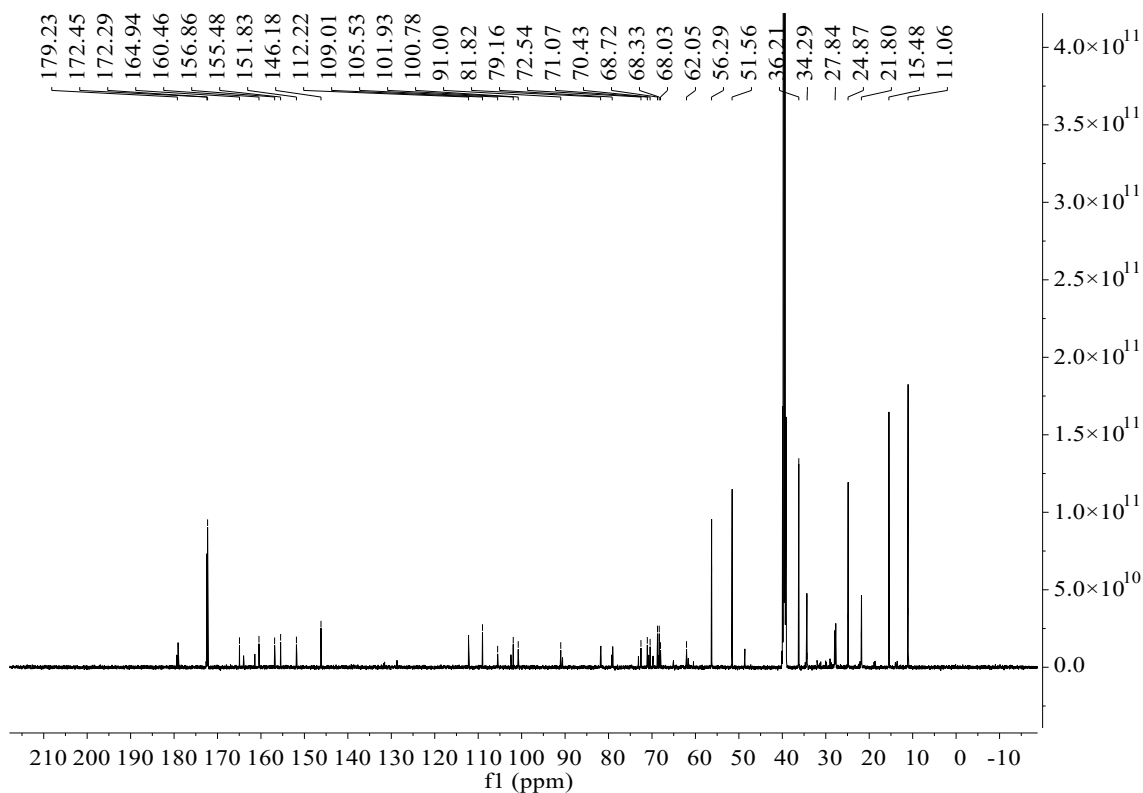


HRESIMS of compound G5

S25. ¹H NMR, ¹³C NMR and HRESIMS of MGF derivatives G6

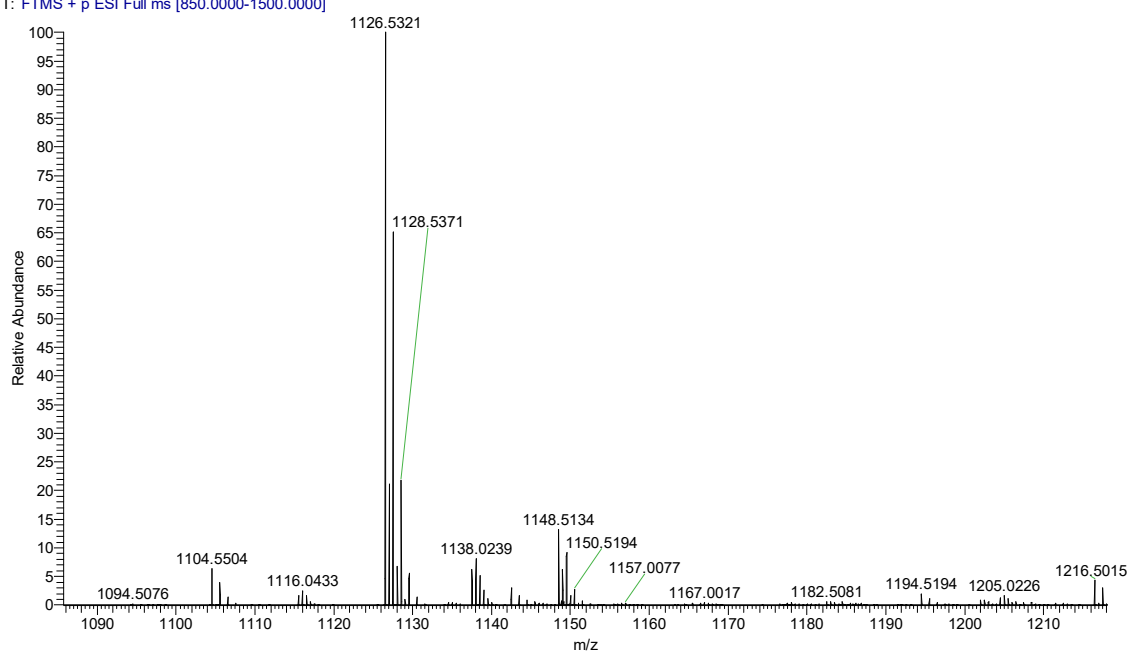


¹H NMR spectrum of compound G6



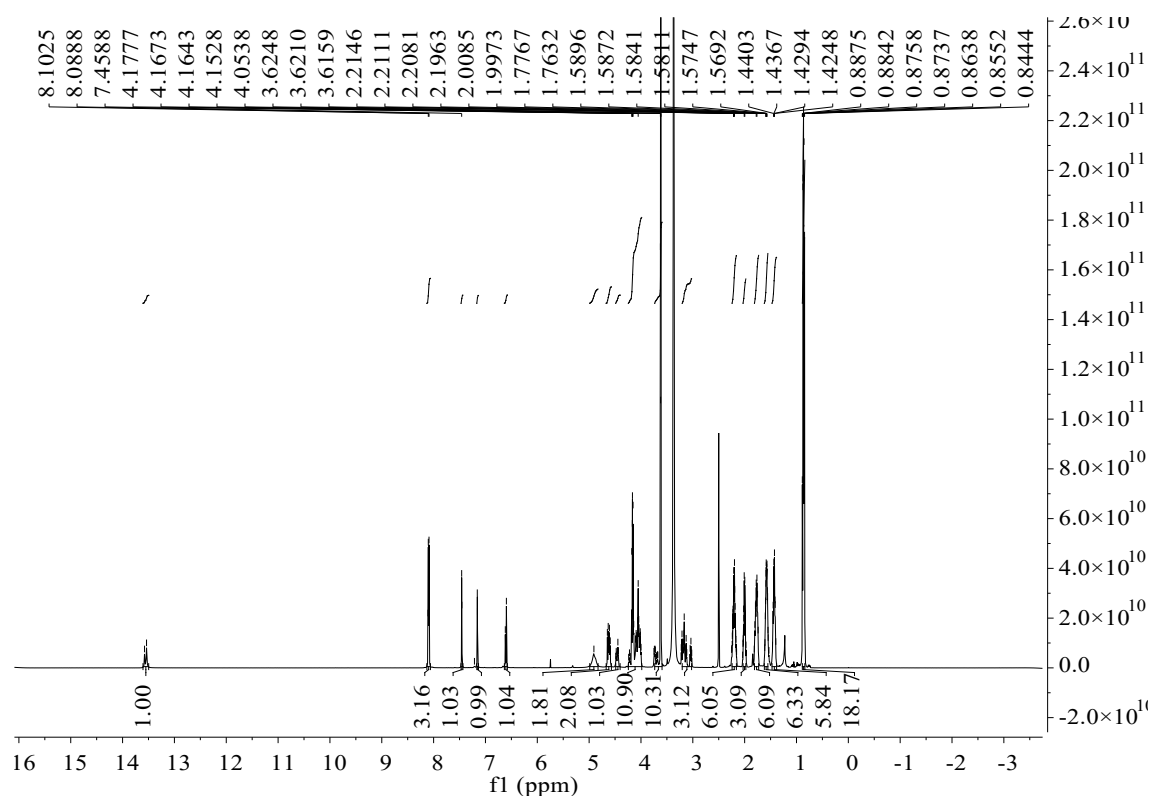
¹³C NMR spectrum of compound G6

YW #288 RT: 1.25 AV: 1 NL: 3.82E7
T: FTMS + p ESI Full ms [850.0000-1500.0000]

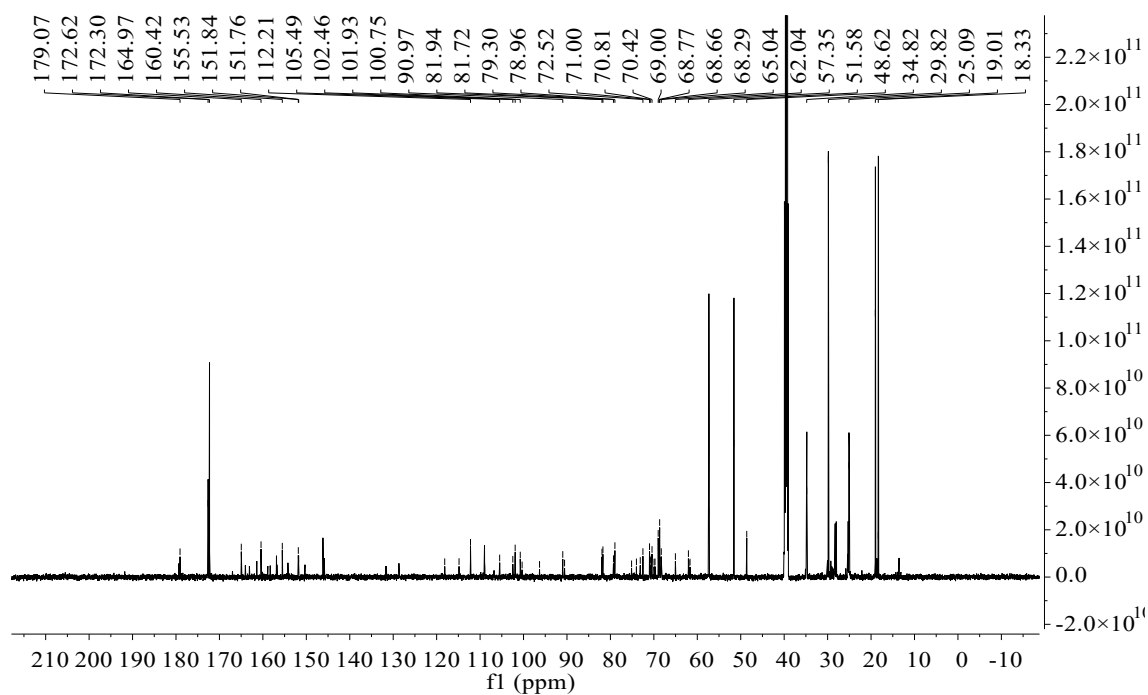


HRESIMS of compound G6

S26. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G7

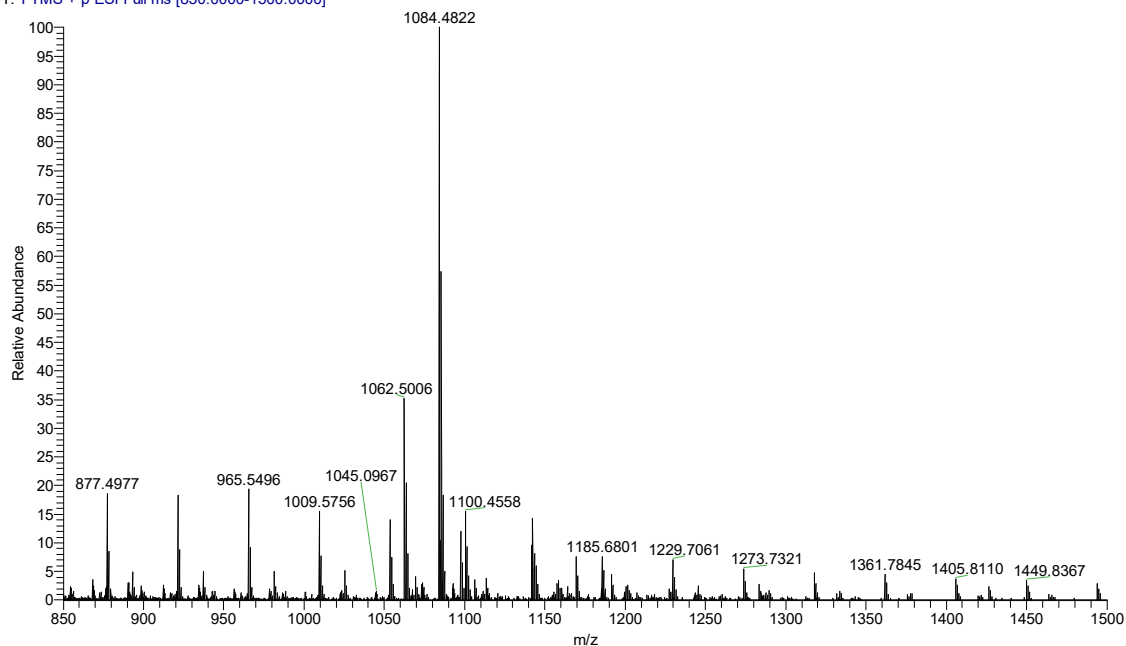


^1H NMR spectrum of compound G7



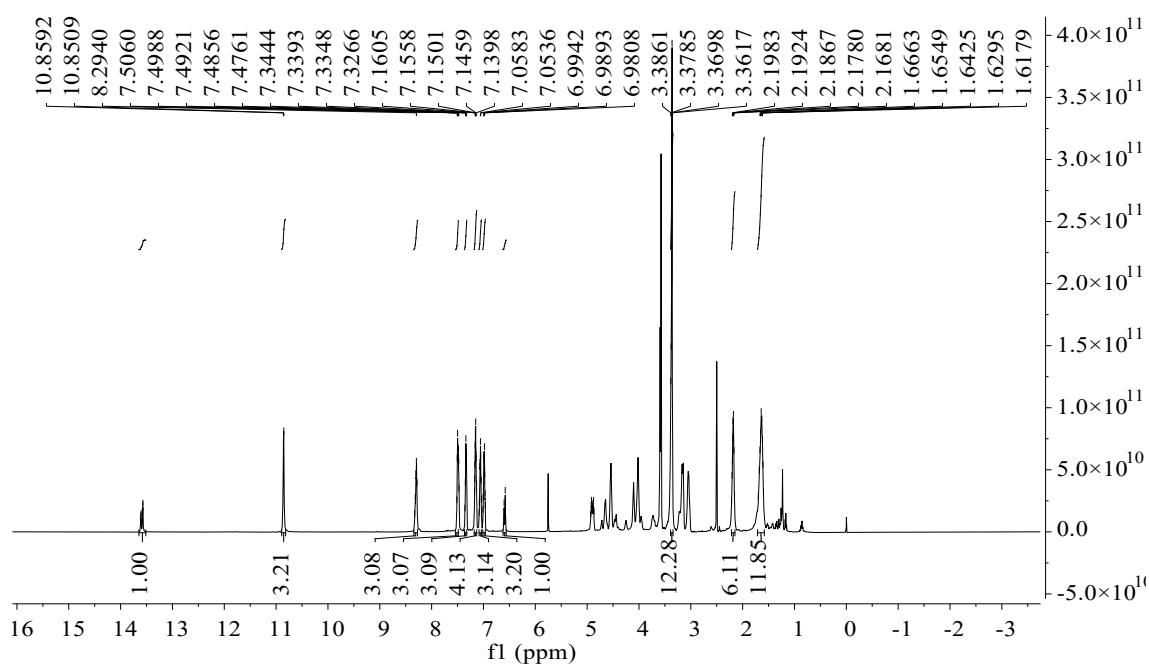
^{13}C NMR spectrum of compound G7

XW #262 RT: 1.14 AV: 1 NL: 4.60E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

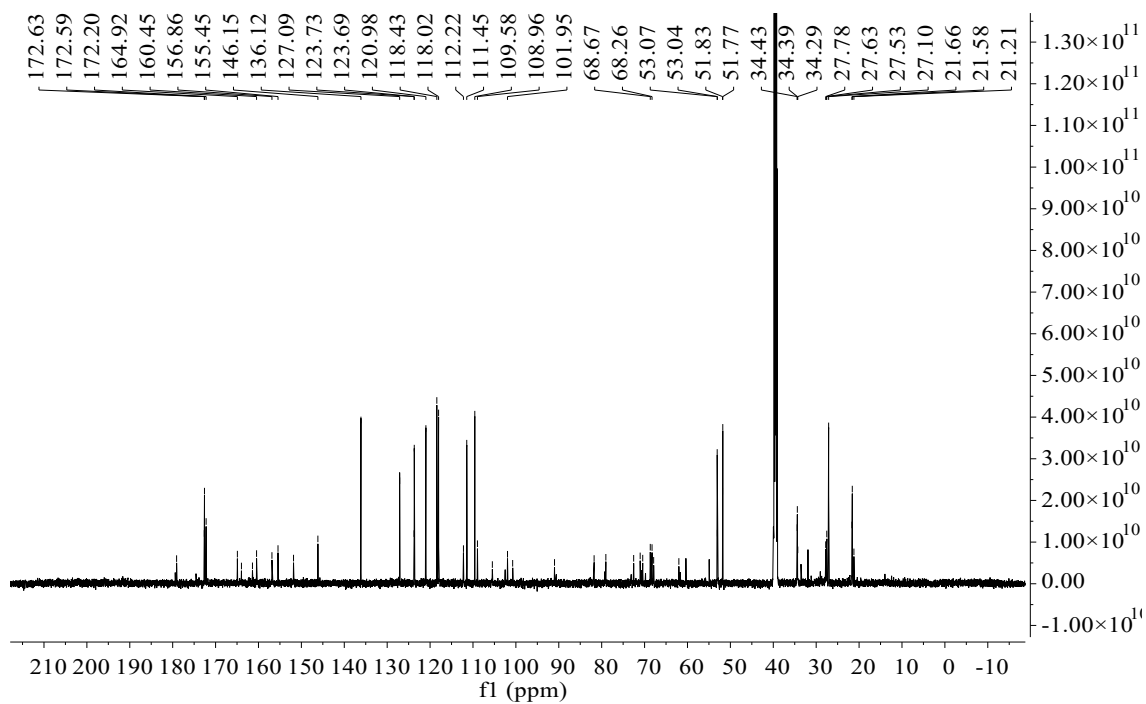


HRESIMS of compound G7

S27. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G8

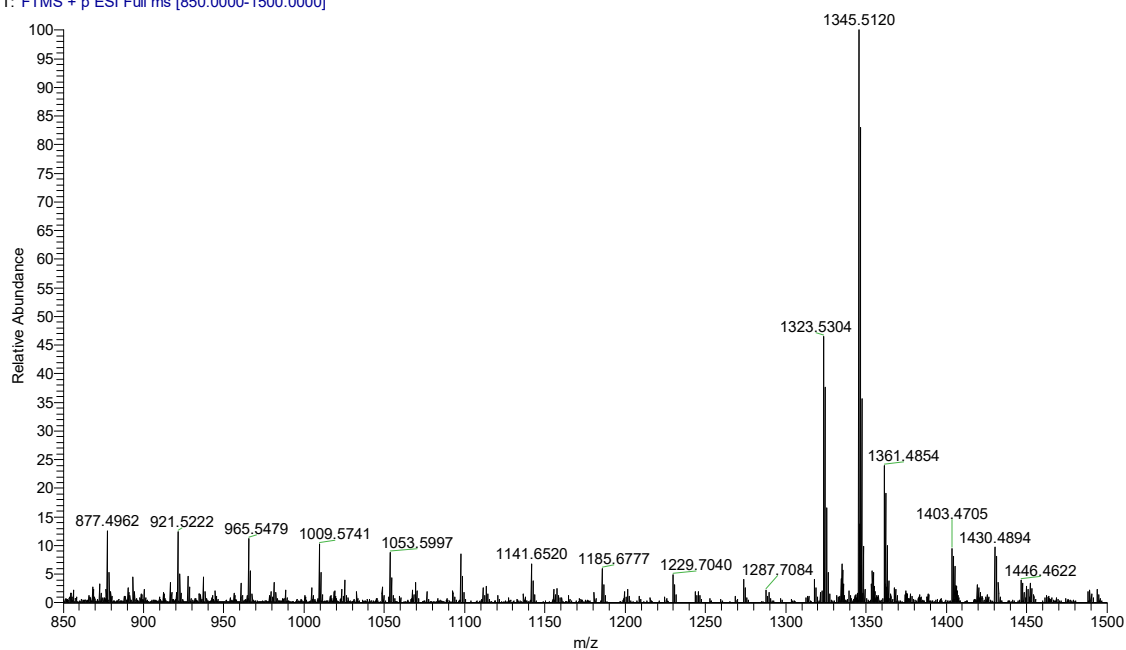


^1H NMR spectrum of compound G8



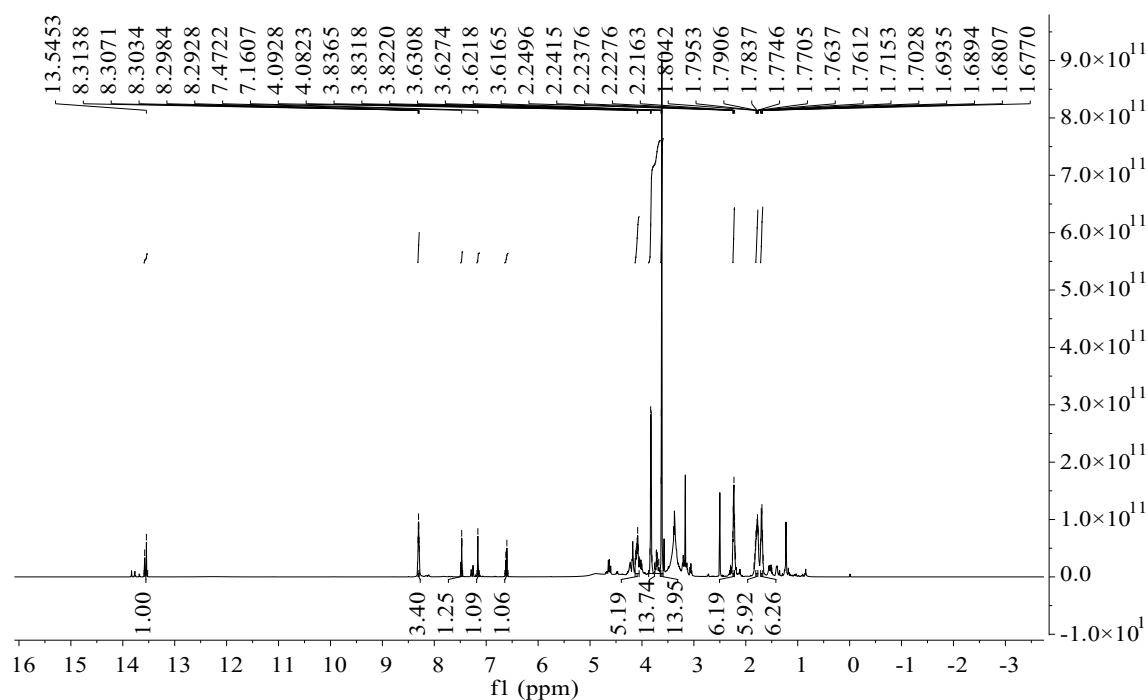
¹³C NMR spectrum of compound G8

SW #260 RT: 1.13 AV: 1 NL: 4.50E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

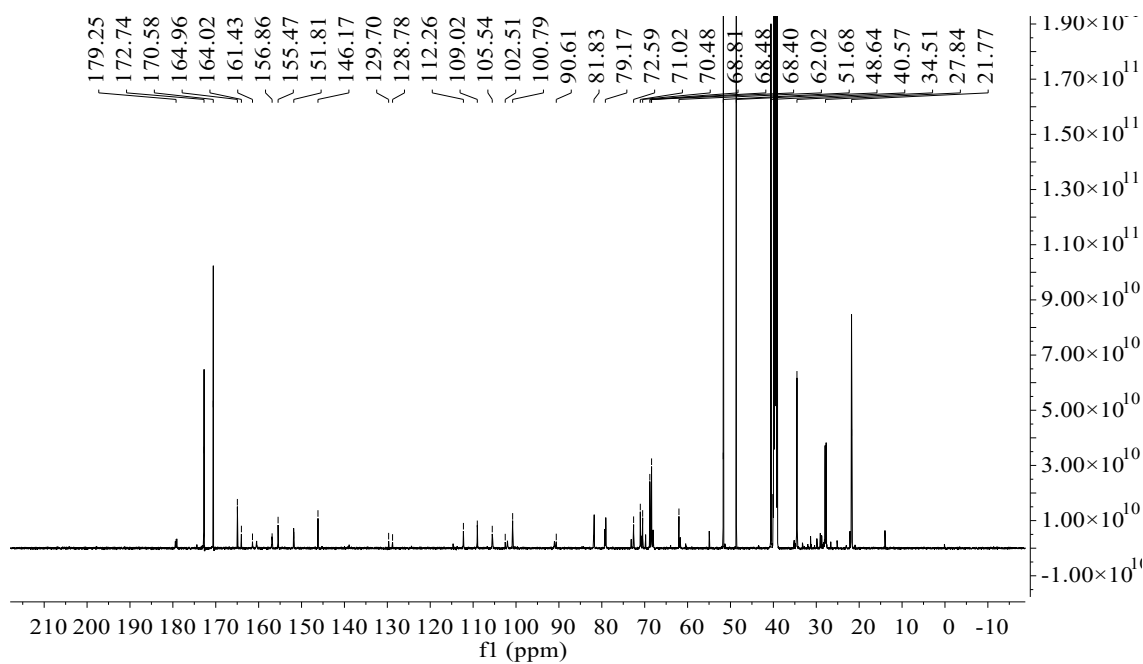


HRESIMS of compound G8

S28. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G9

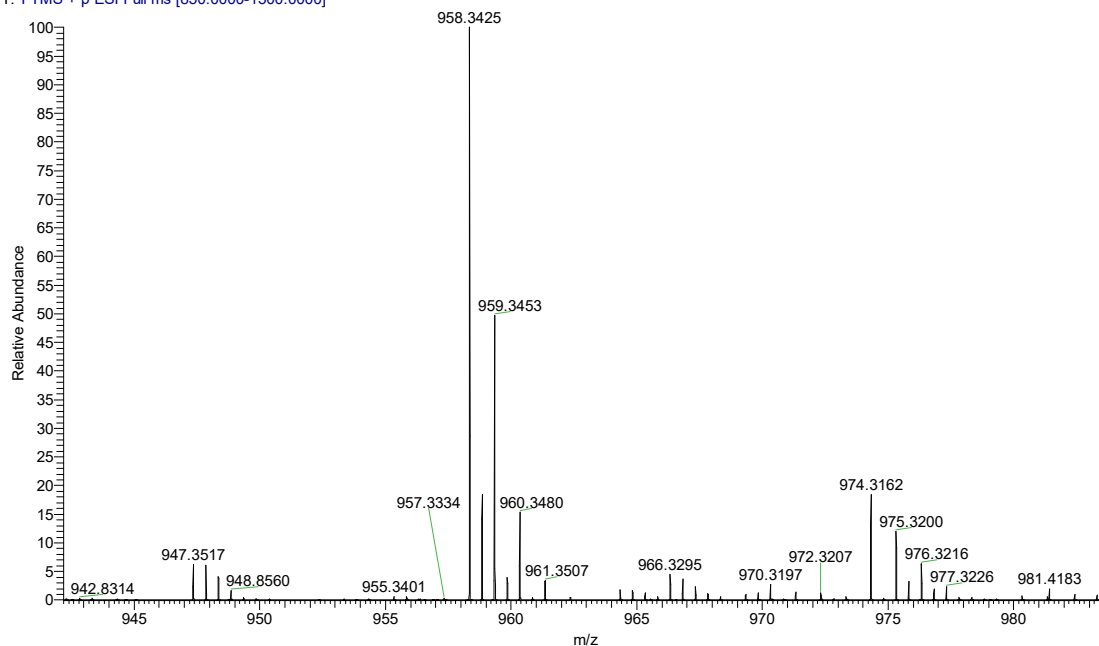


^1H NMR spectrum of compound G9



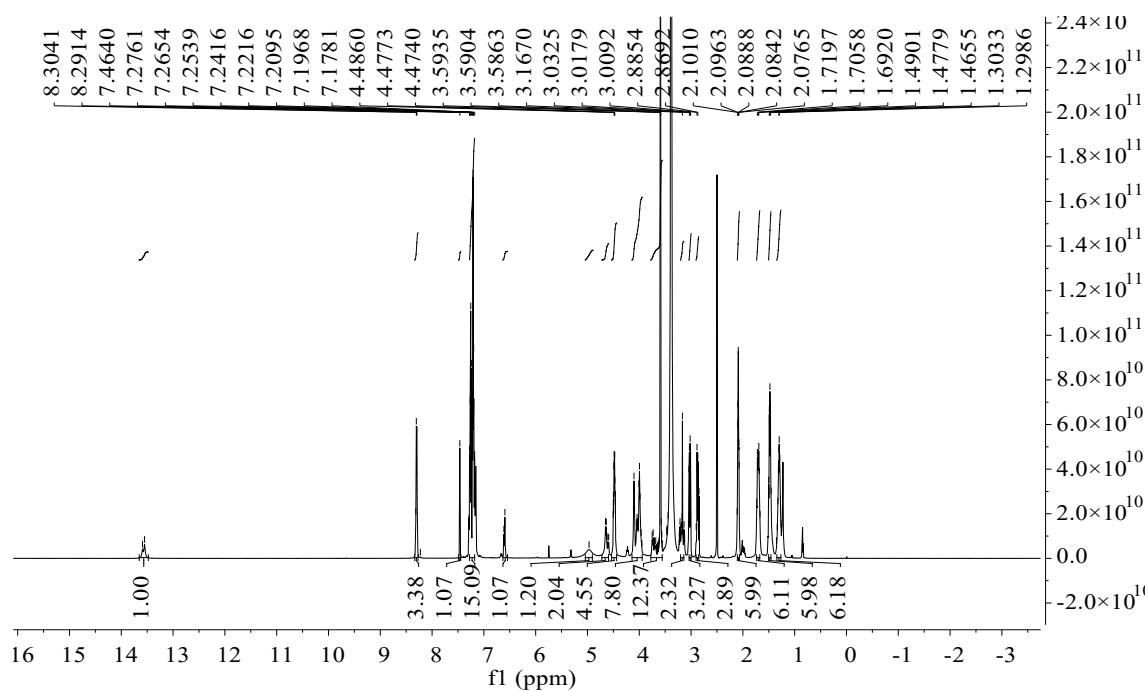
^{13}C NMR spectrum of compound G9

GW #257 RT: 1.12 AV: 1 NL: 4.16E7
T: FTMS + p ESI Full ms [850.0000-1500.0000]

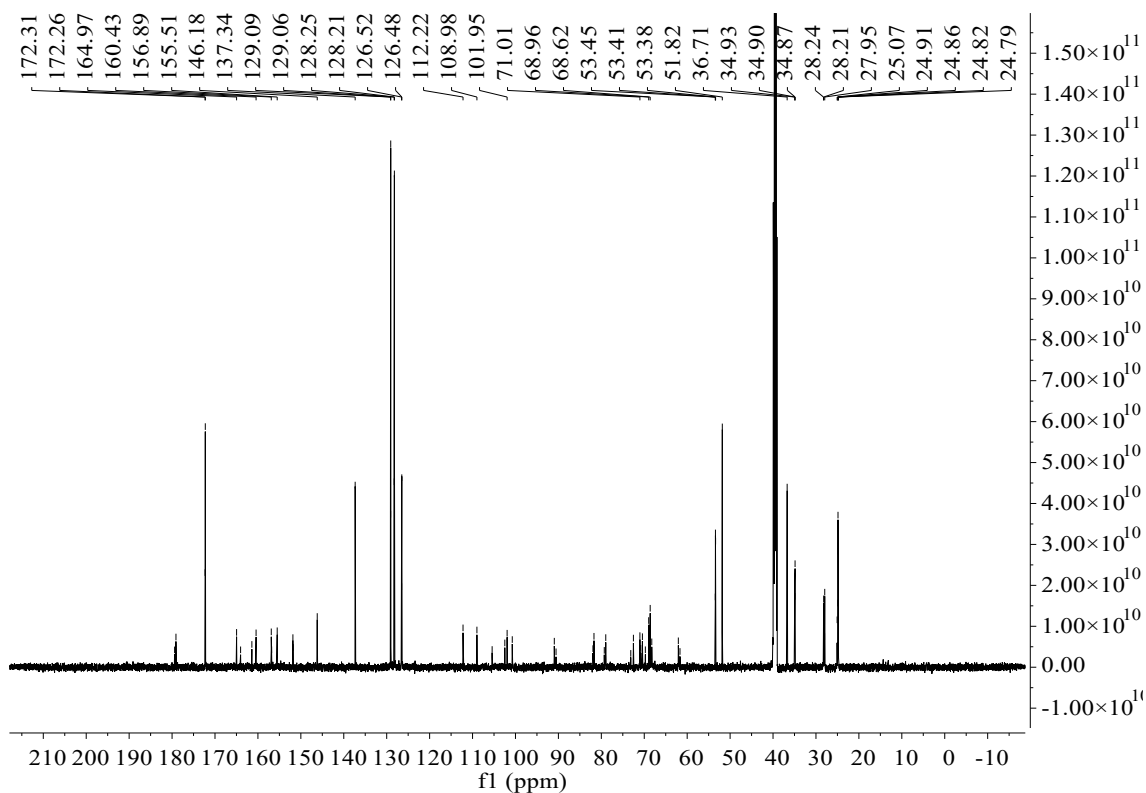


HRESIMS of compound G9

S29. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G10

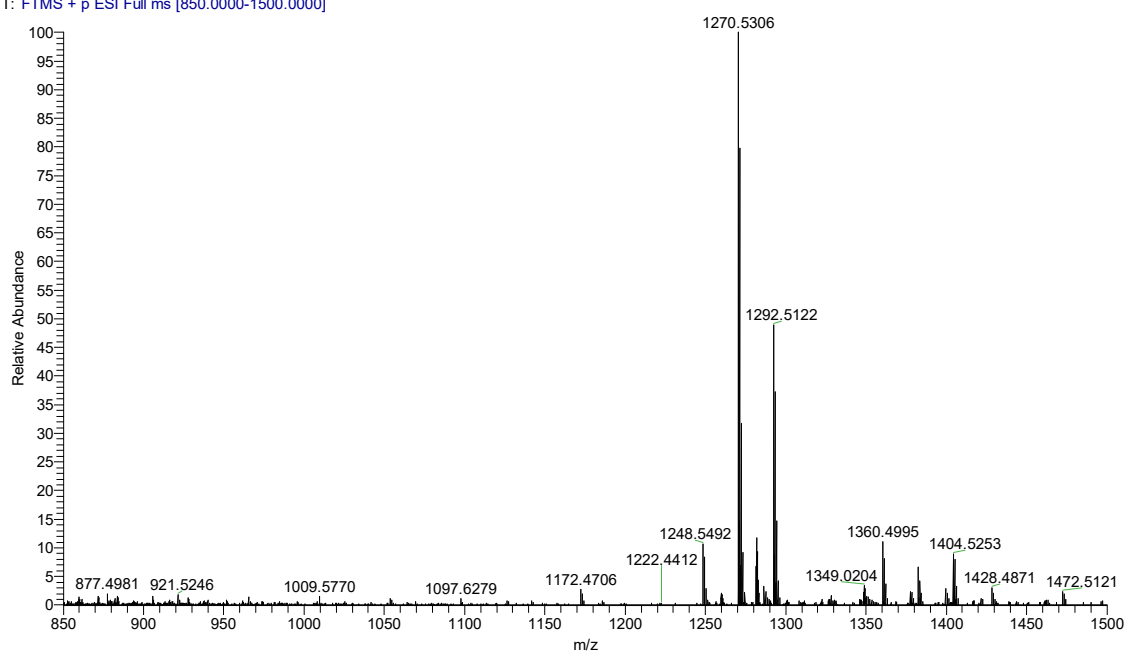


^1H NMR spectrum of compound G10



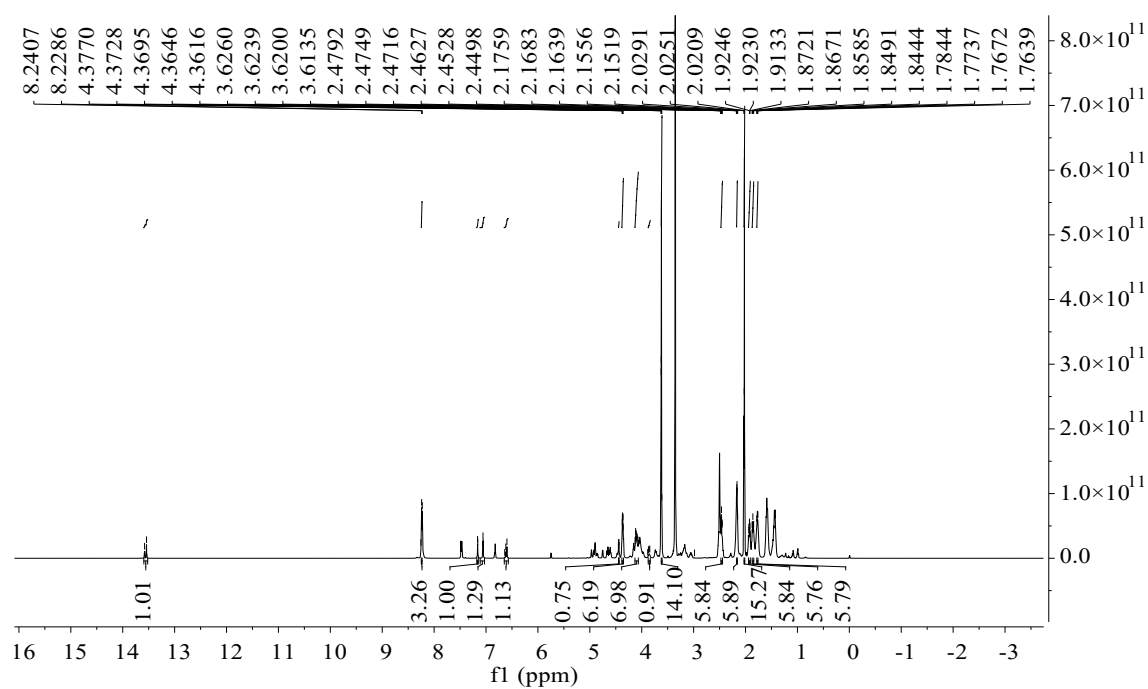
¹³C NMR spectrum of compound G10

LBJ #281 RT: 1.22 AV: 1 NL: 5.45E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

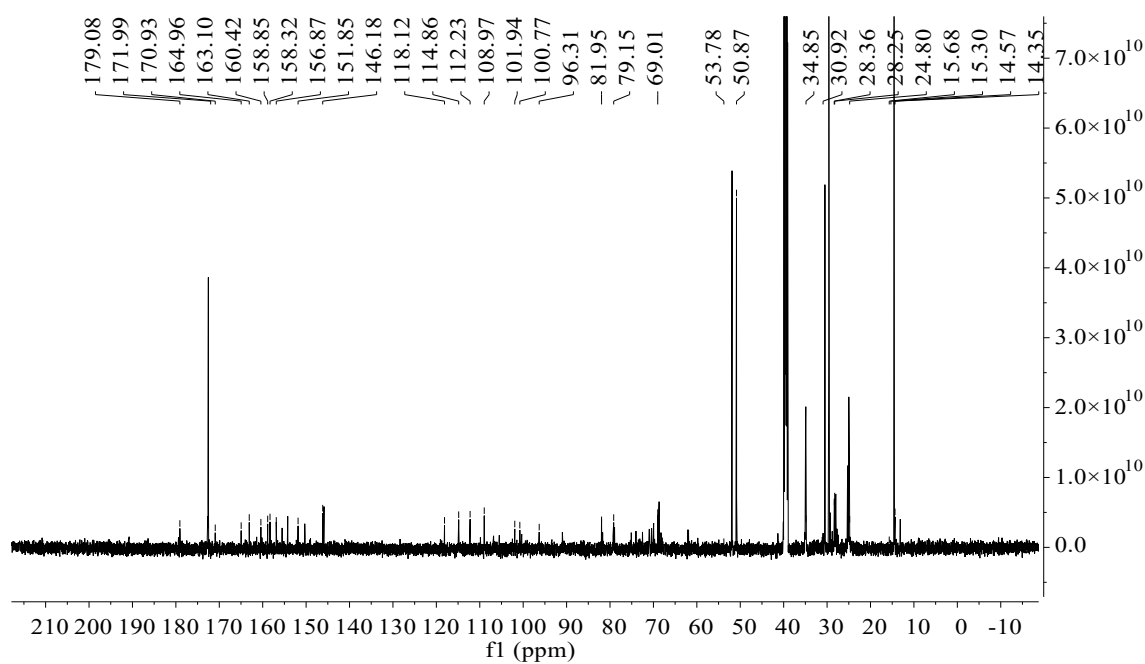


HRESIMS of compound G10

S30. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G11

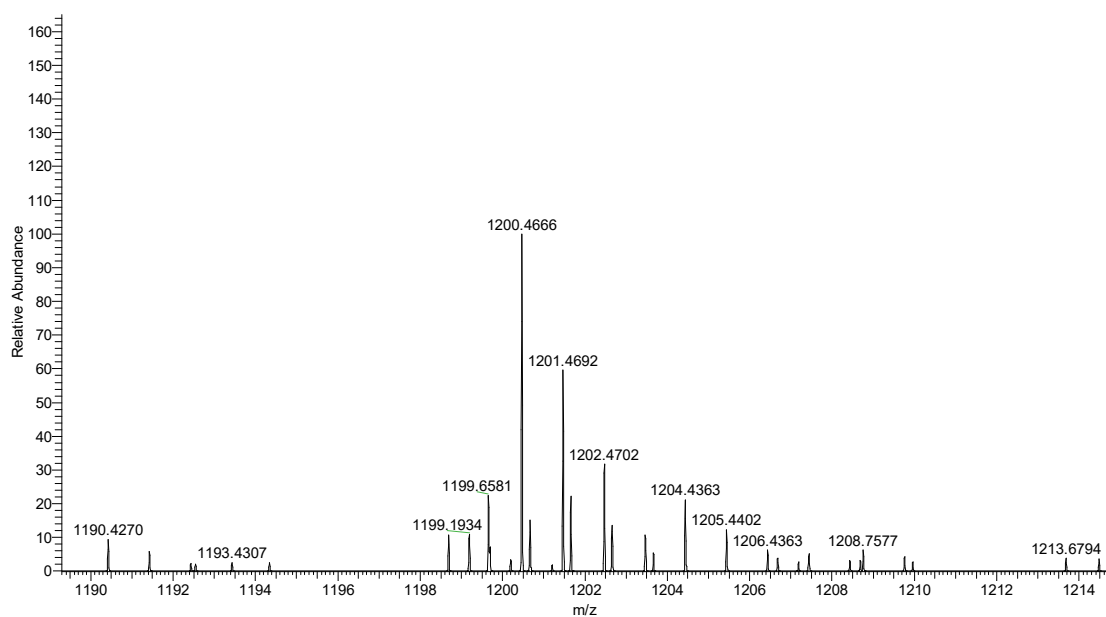


^1H NMR spectrum of compound G11



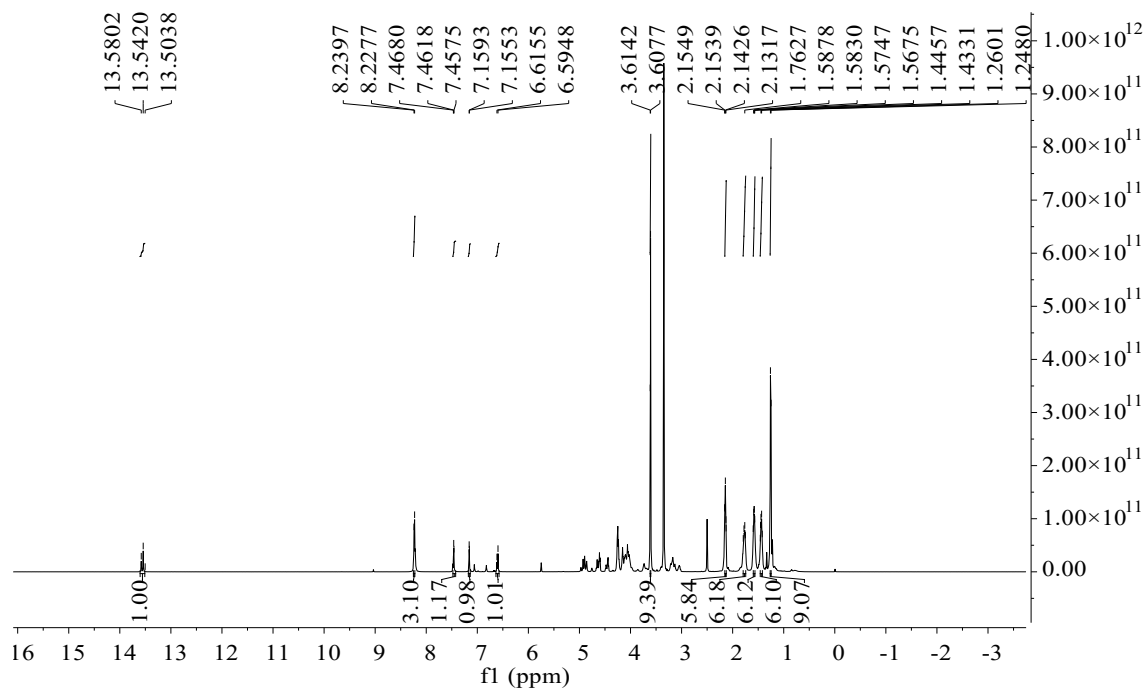
^{13}C NMR spectrum of compound G11

DJ #261 RT: 1.14 AV: 1 NL: 3.88E5
T: FTMS + p ESI Full ms [850.0000-1500.0000]

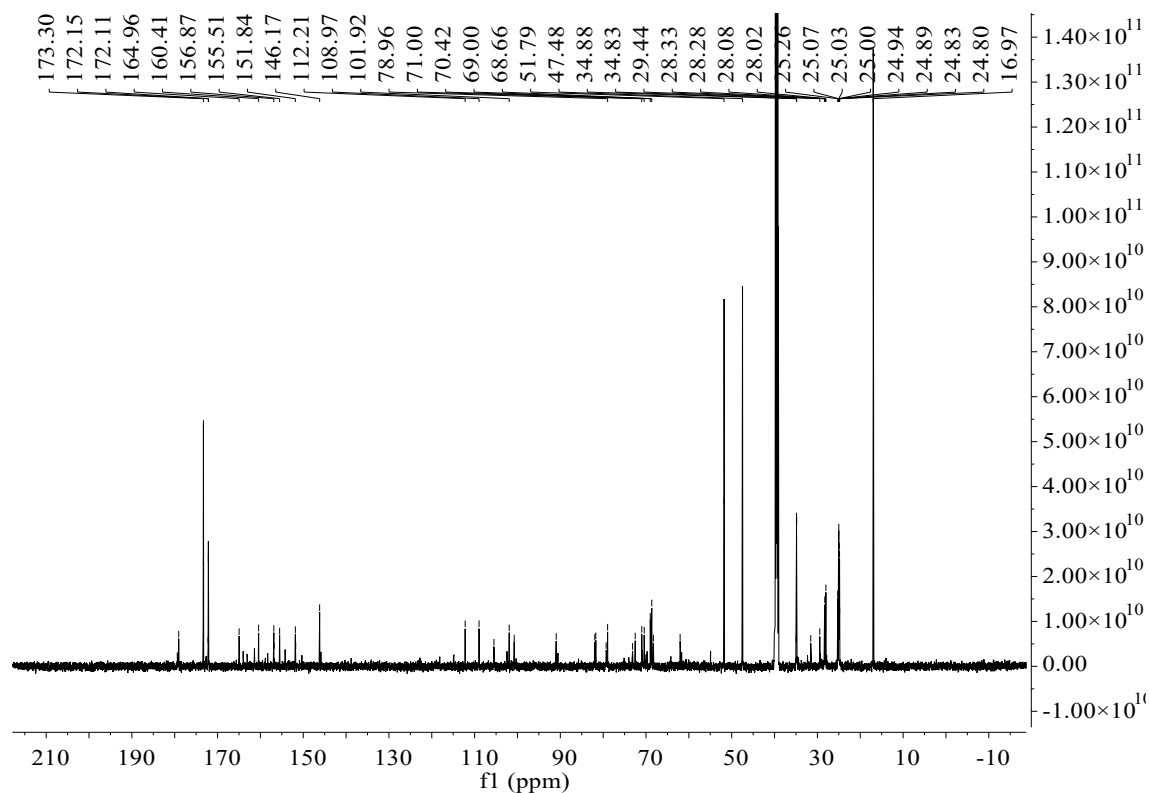


HRESIMS of compound G11

S31. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G12

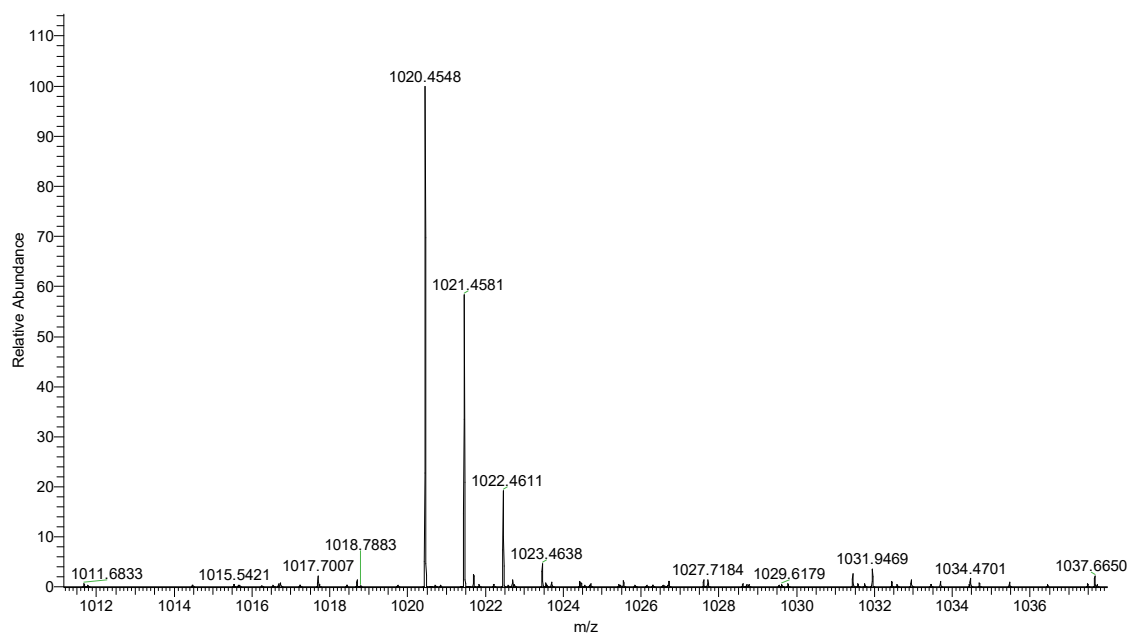


^1H NMR spectrum of compound G12



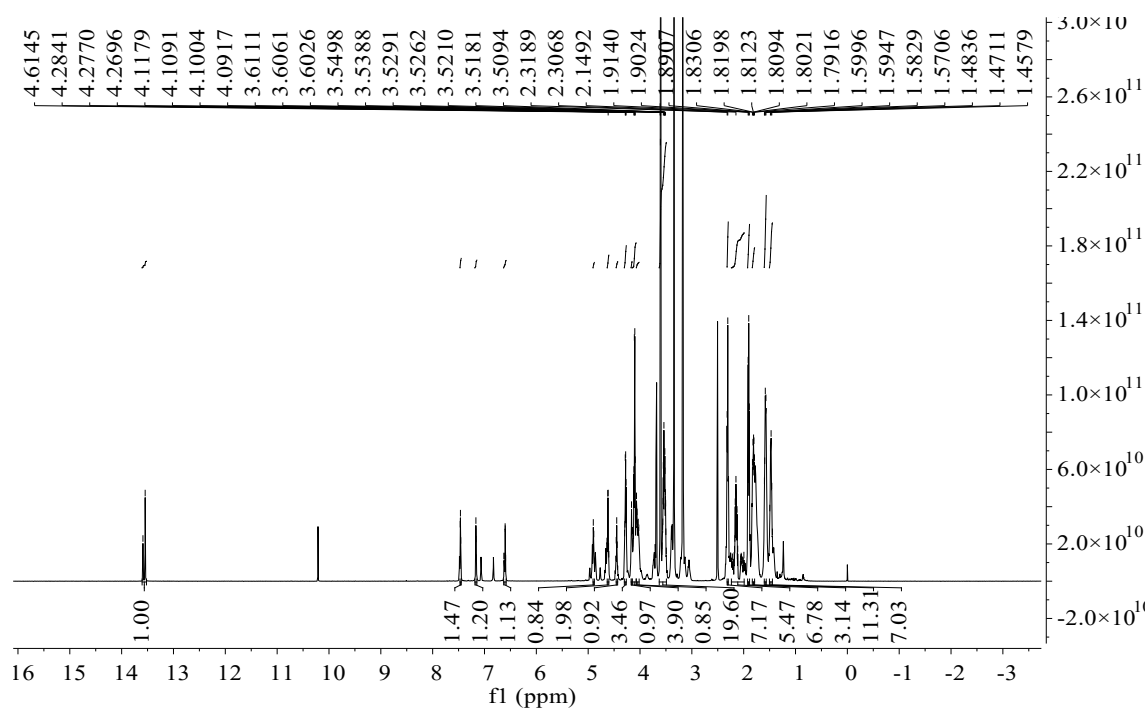
¹³C NMR spectrum of compound G12

BJ #255 RT: 1.11 AV: 1 NL: 6.56E5
T: FTMS + p ESI Full ms [850.0000-1500.0000]

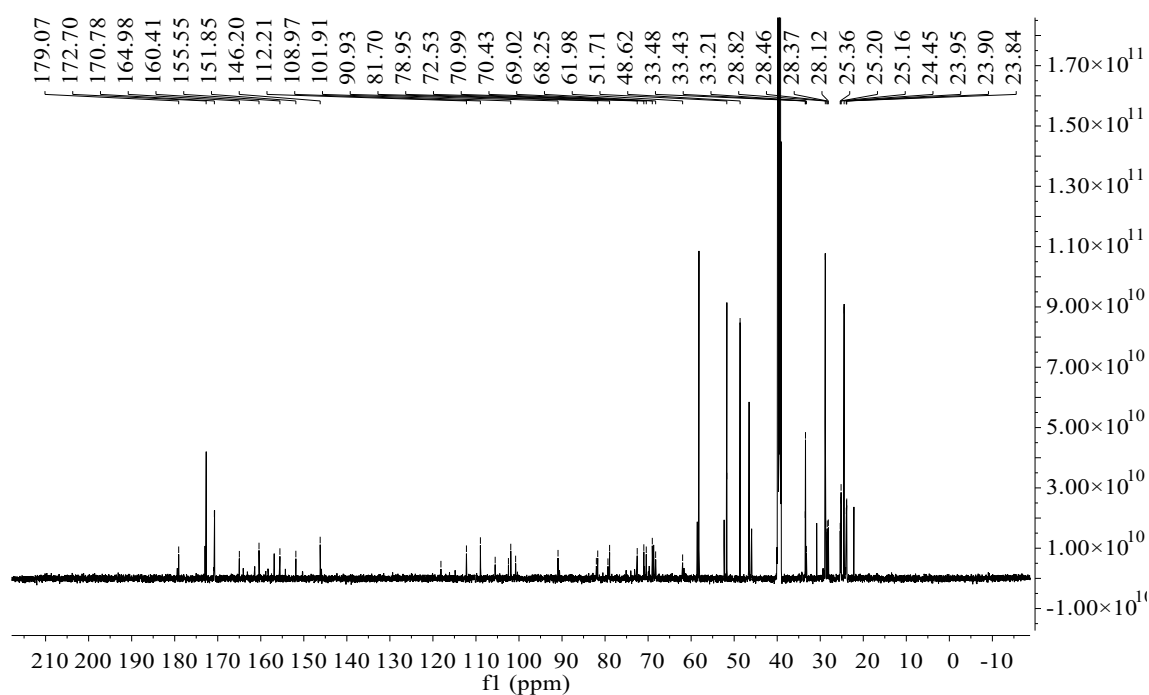


HRESIMS of compound G12

S32. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G13

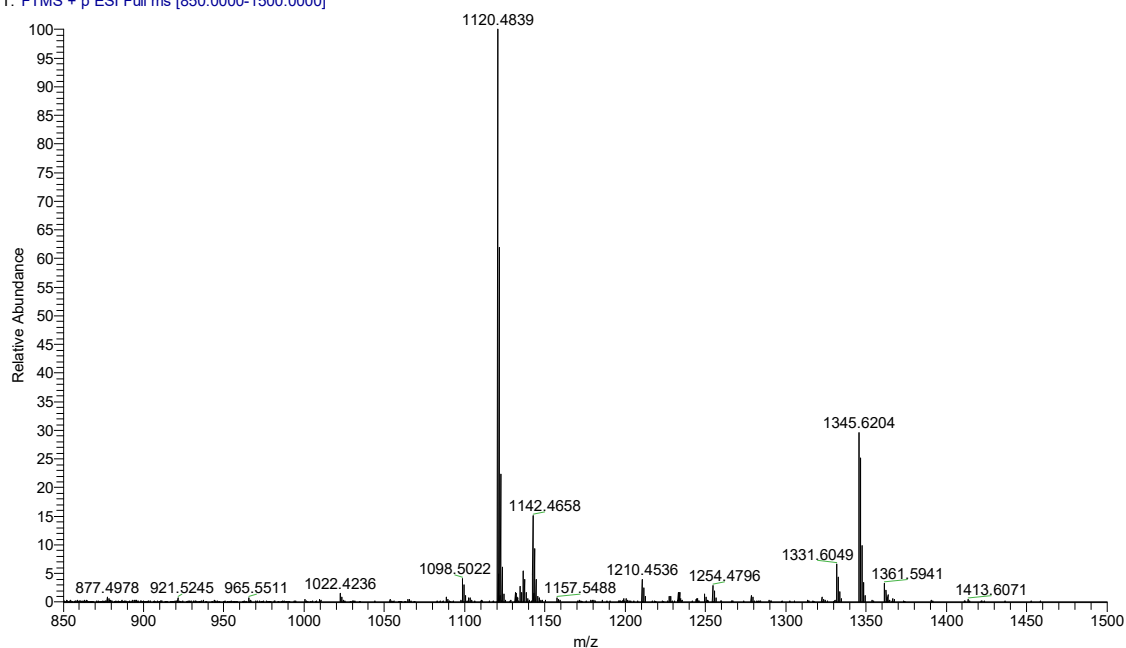


^1H NMR spectrum of compound G13



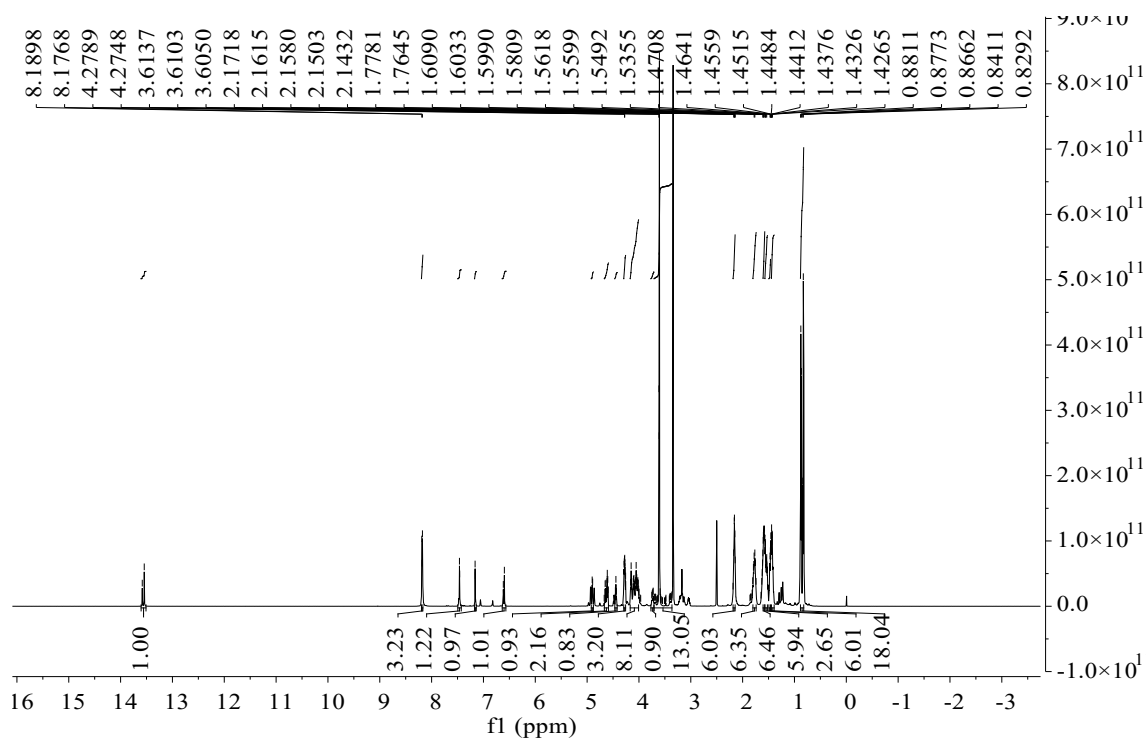
^{13}C NMR spectrum of compound G13

FJ #288 RT: 1.26 AV: 1 NL: 8.59E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

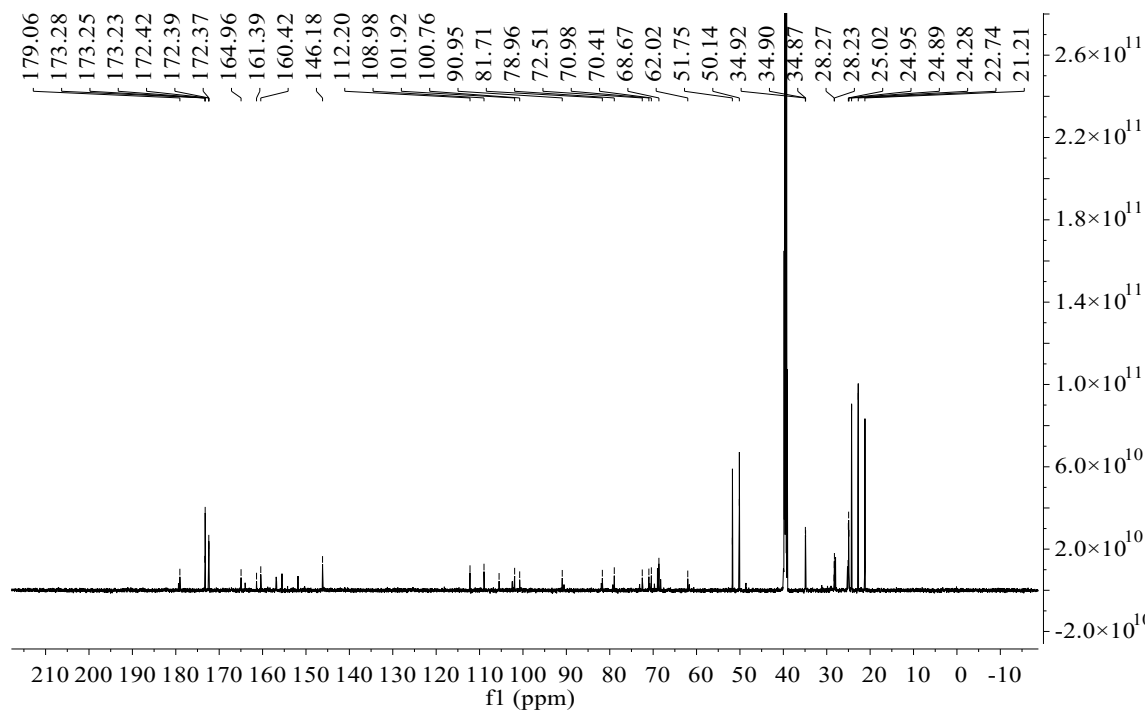


HRESIMS of compound G13

S33. ¹H NMR, ¹³C NMR and HRESIMS of MGF derivatives G14

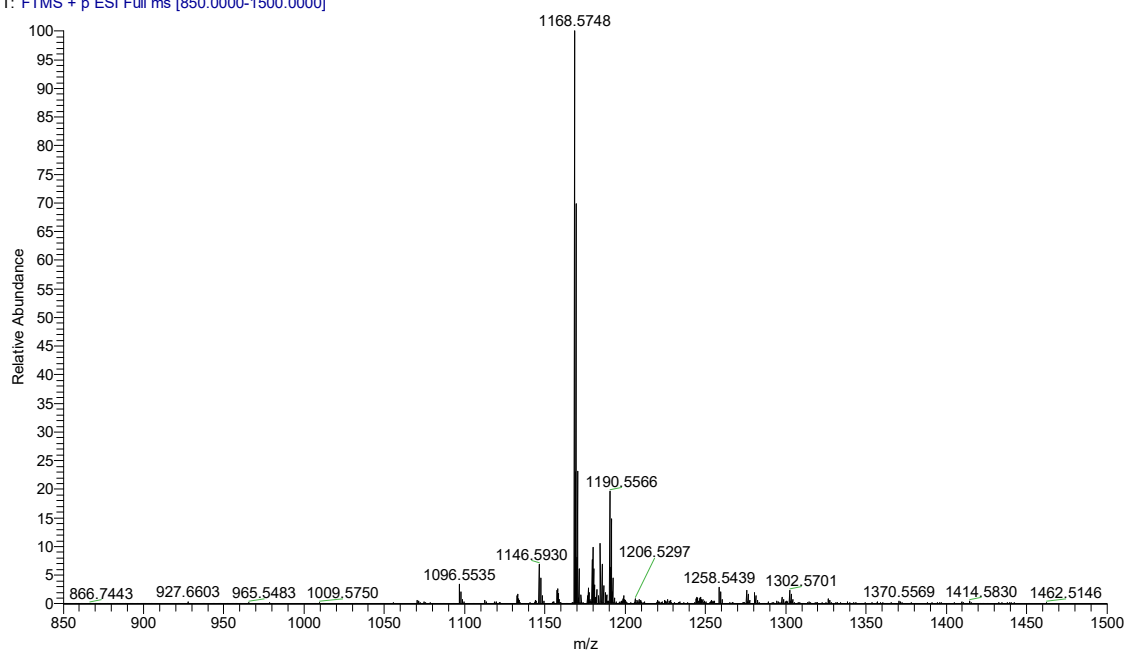


¹H NMR spectrum of compound G14



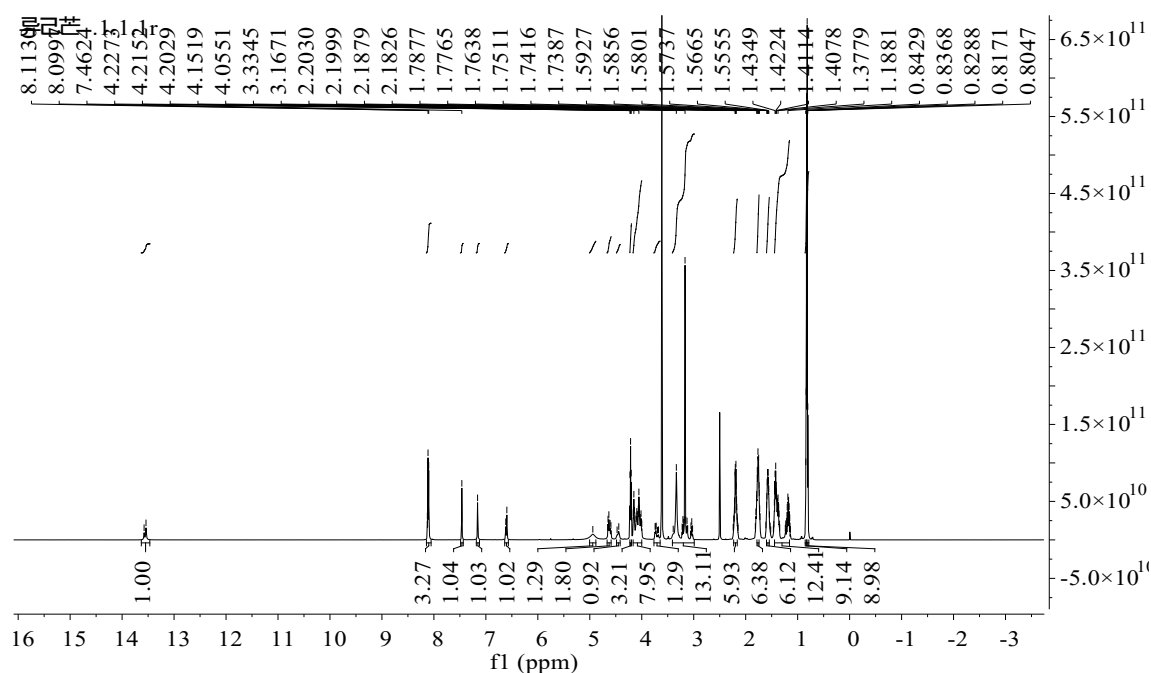
¹³C NMR spectrum of compound G14

LJ #293 RT: 1.28 AV: 1 NL: 3.16E7
T: FTMS + p ESI Full ms [850.0000-1500.0000]

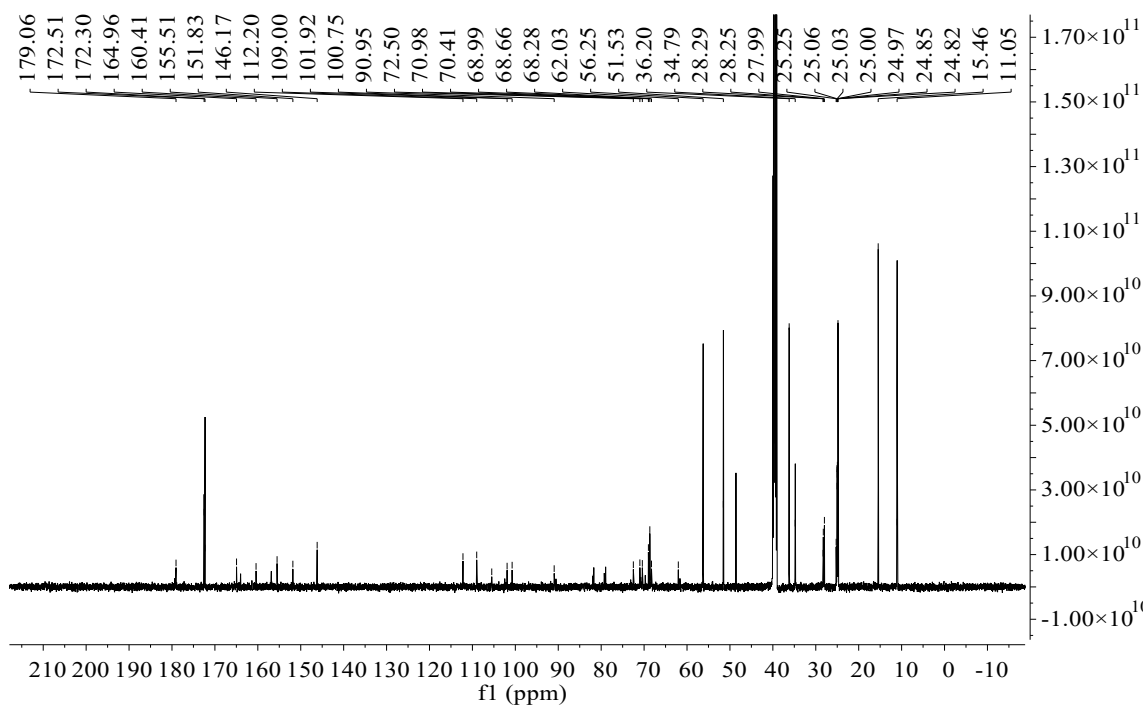


HRESIMS of compound G14

S34. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G15

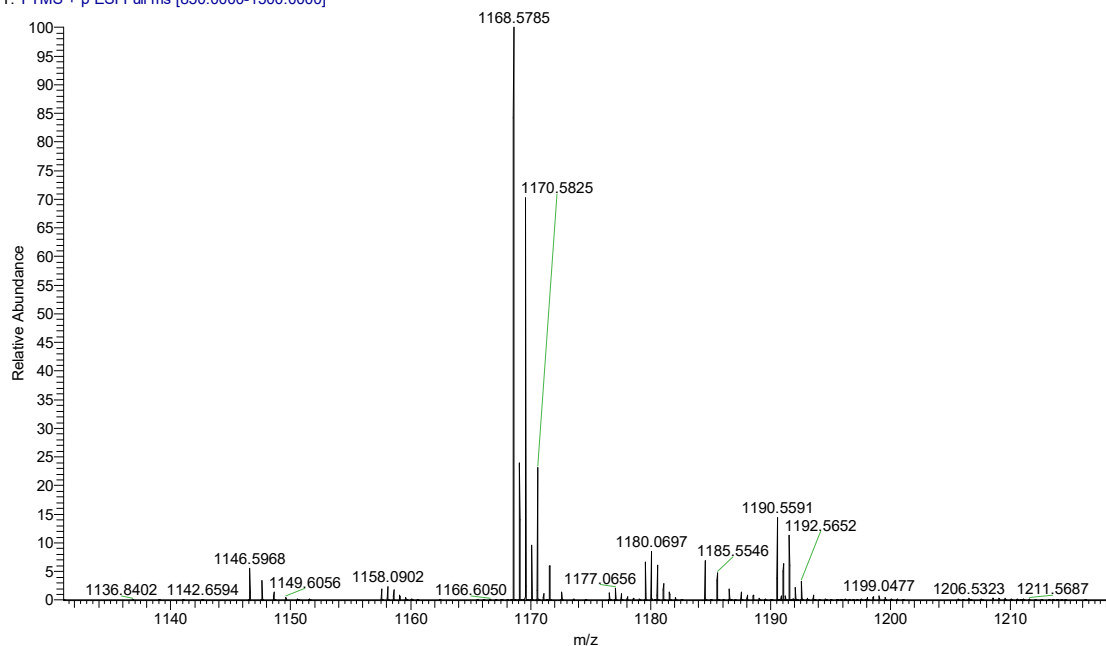


^1H NMR spectrum of compound G15



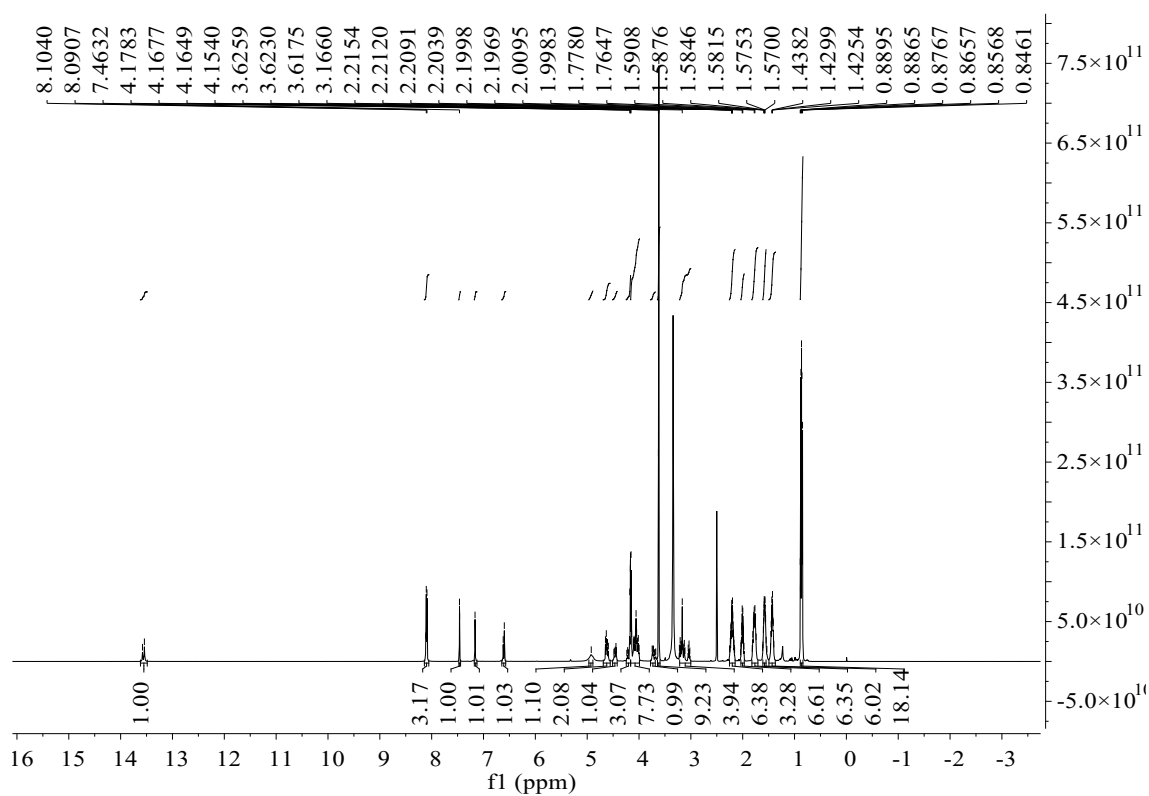
^{13}C NMR spectrum of compound G15

YJ #295 RT: 1.28 AV: 1 NL: 8.40E7
T: FTMS + p ESI Full ms [850.0000-1500.0000]

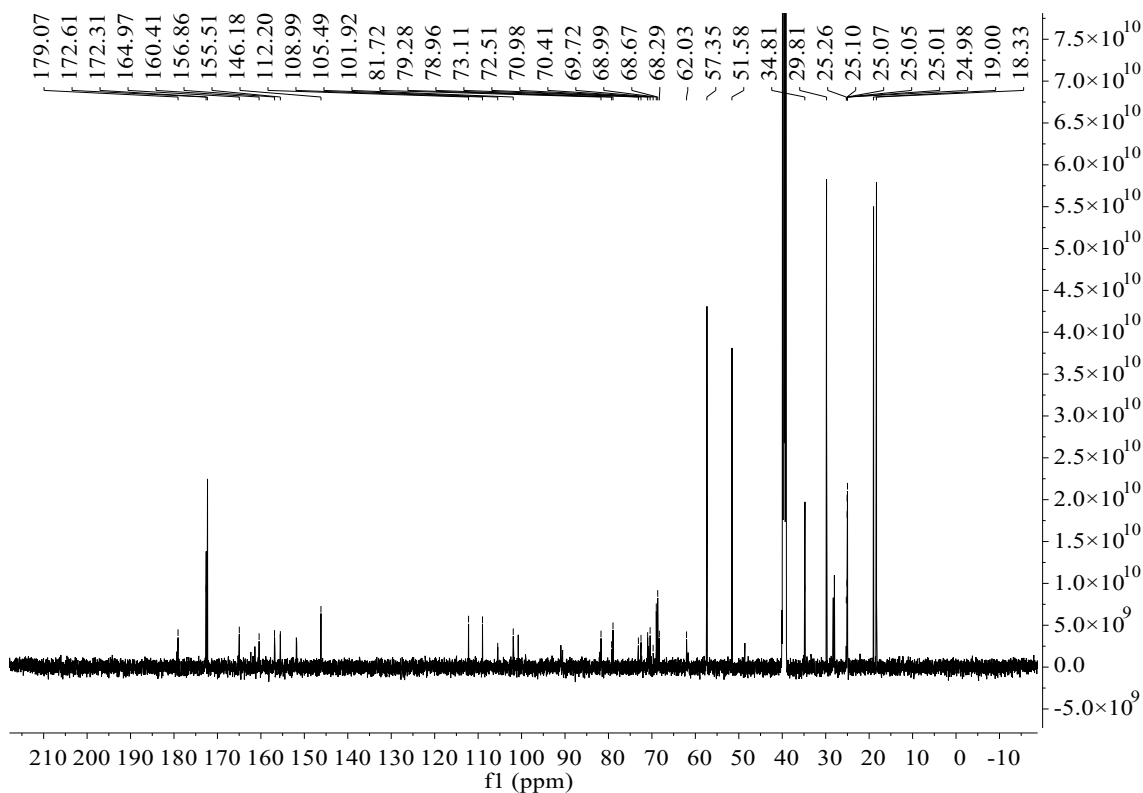


HRESIMS of compound G15

S35. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G16

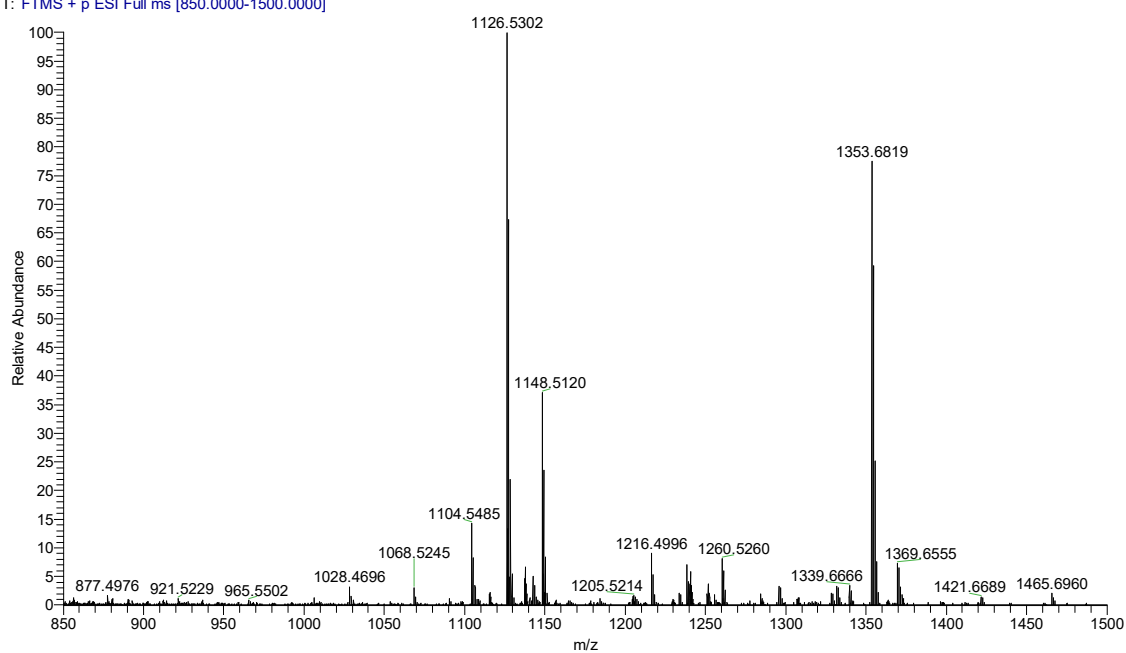


^1H NMR spectrum of compound G16



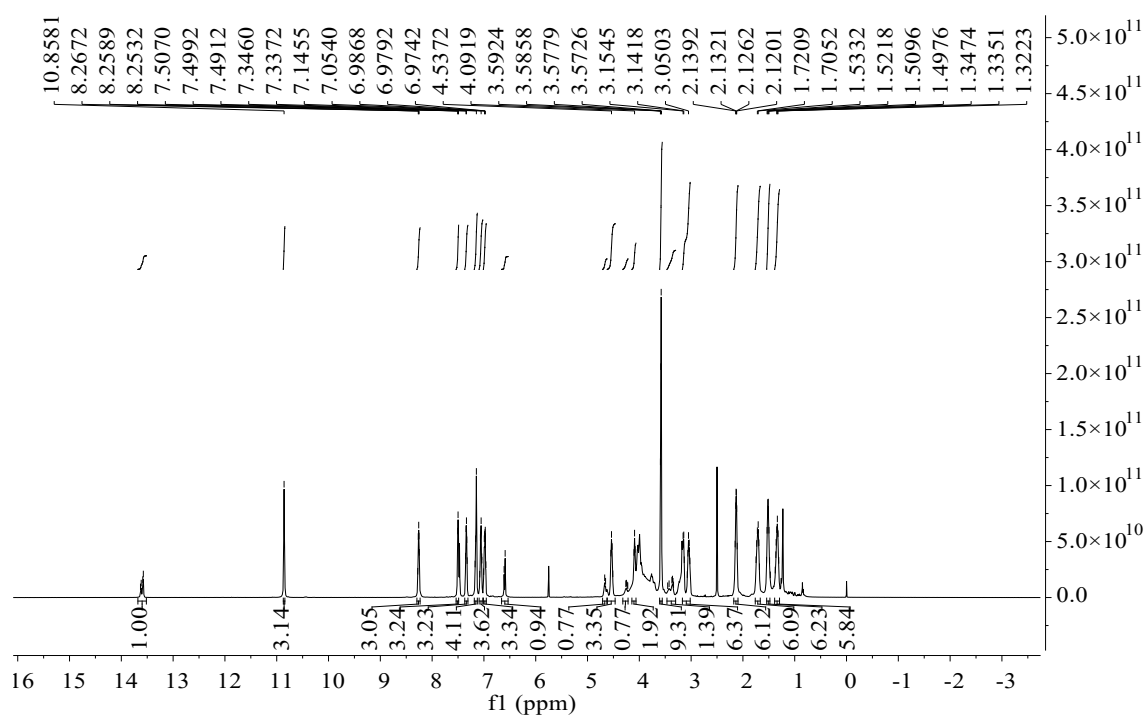
¹³C NMR spectrum of compound G16

XJ #279 RT: 1.22 AV: 1 NL: 6.72E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

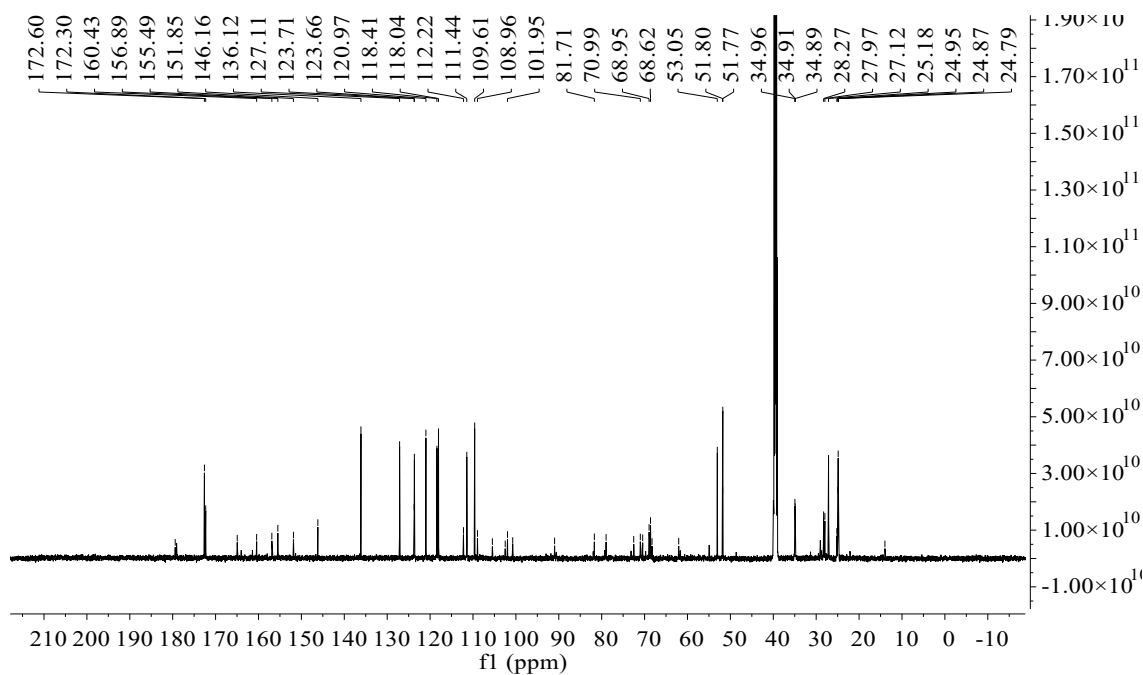


HRESIMS of compound G16

S36. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G17

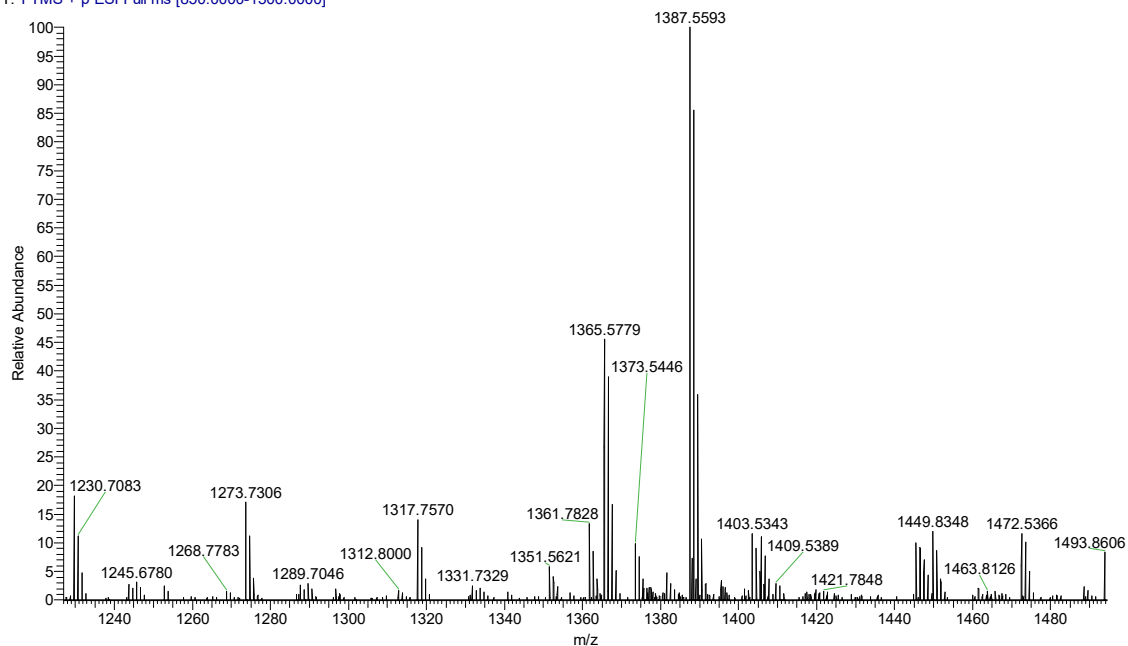


^1H NMR spectrum of compound G17



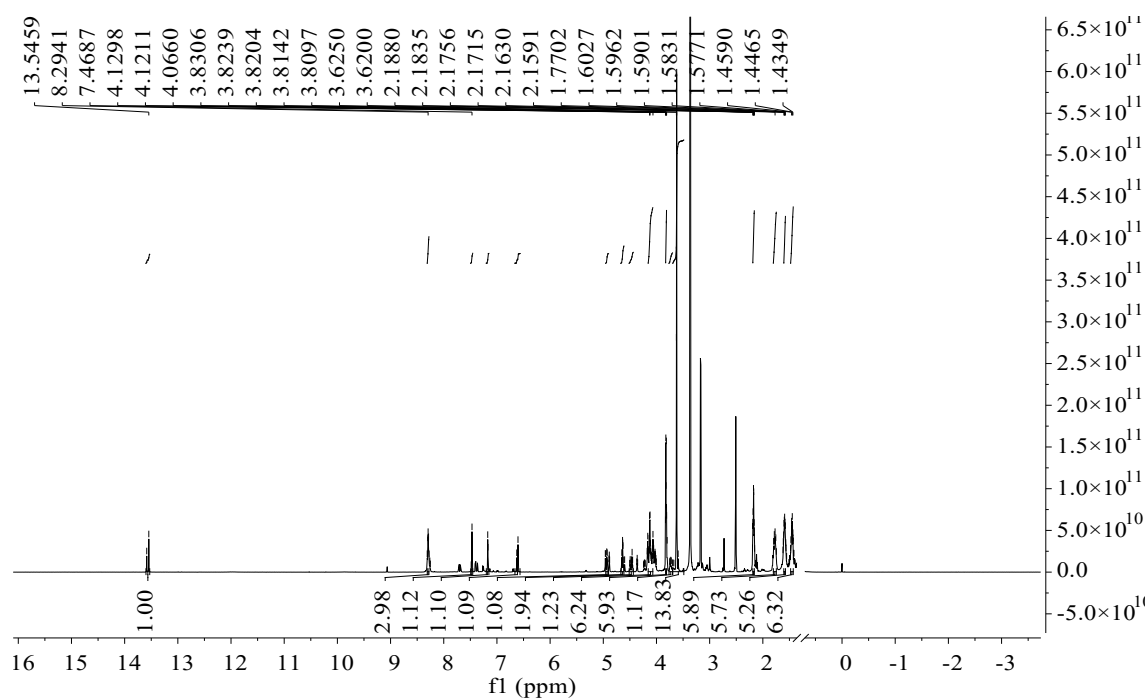
^{13}C NMR spectrum of compound G17

SJ #261 RT: 1.14 AV: 1 NL: 1.71E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]

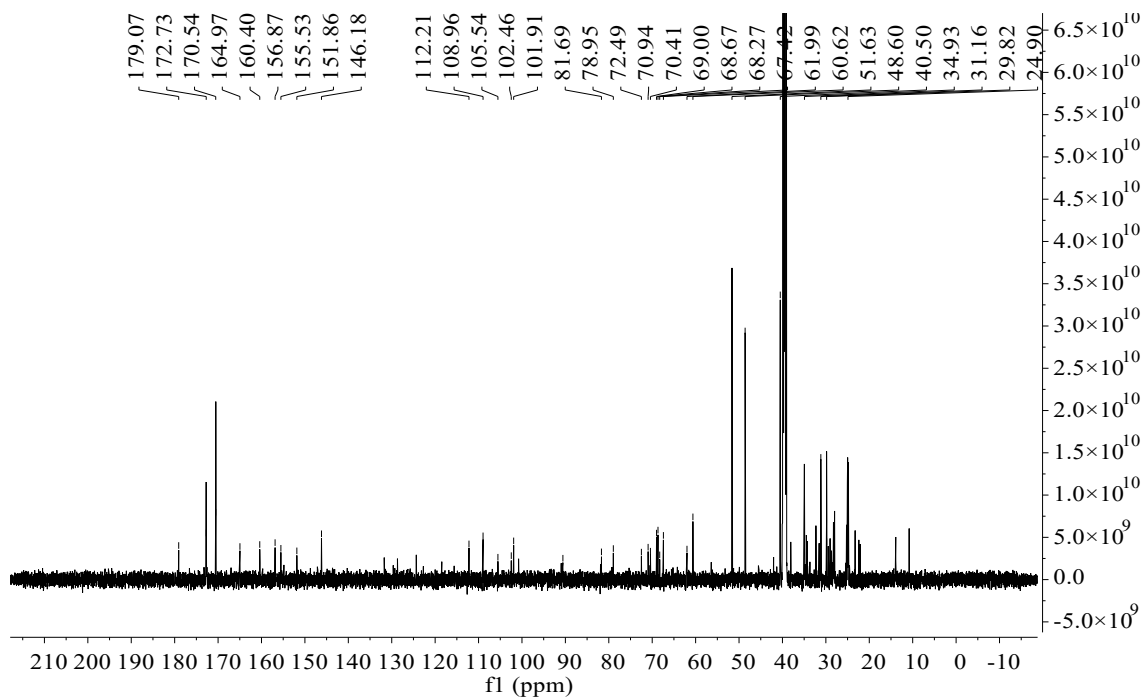


HRESIMS of compound G17

S37. ^1H NMR, ^{13}C NMR and HRESIMS of MGF derivatives G18

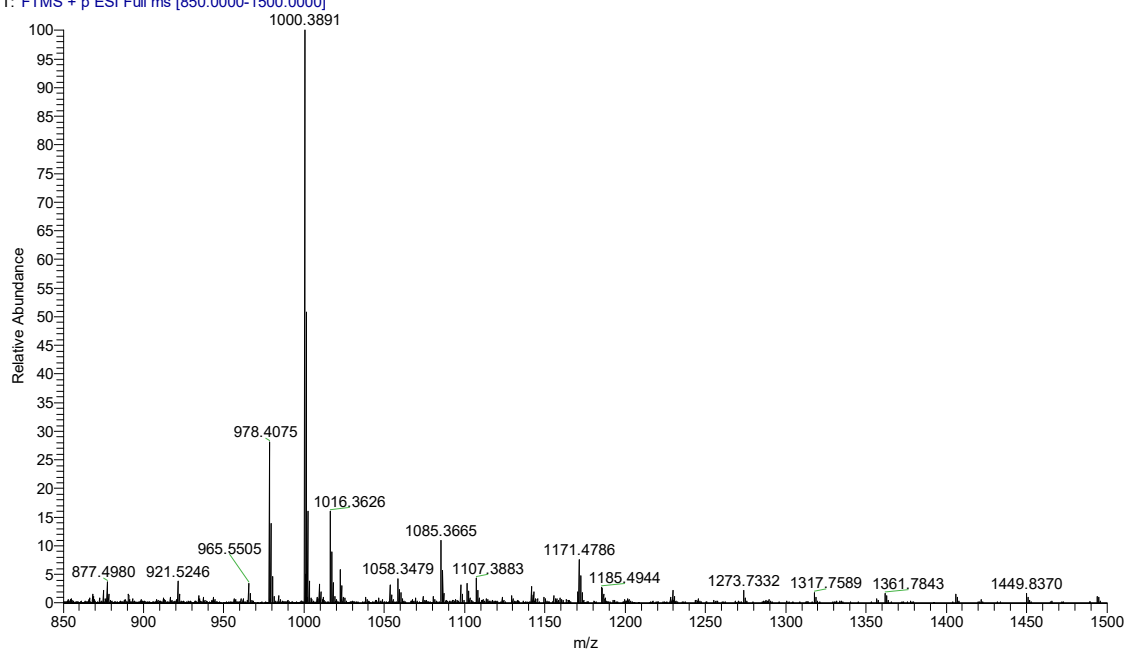


^1H NMR spectrum of compound G18



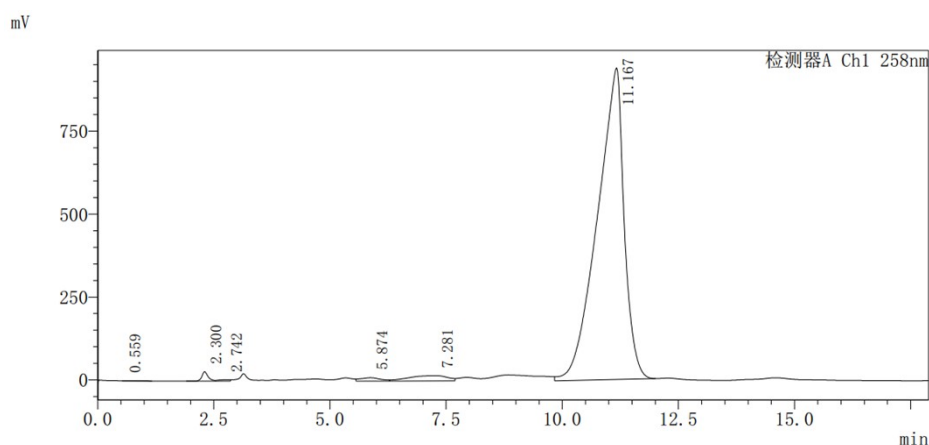
¹³C NMR spectrum of compound G18

GJ #259 RT: 1.13 AV: 1 NL: 7.61E6
T: FTMS + p ESI Full ms [850.0000-1500.0000]



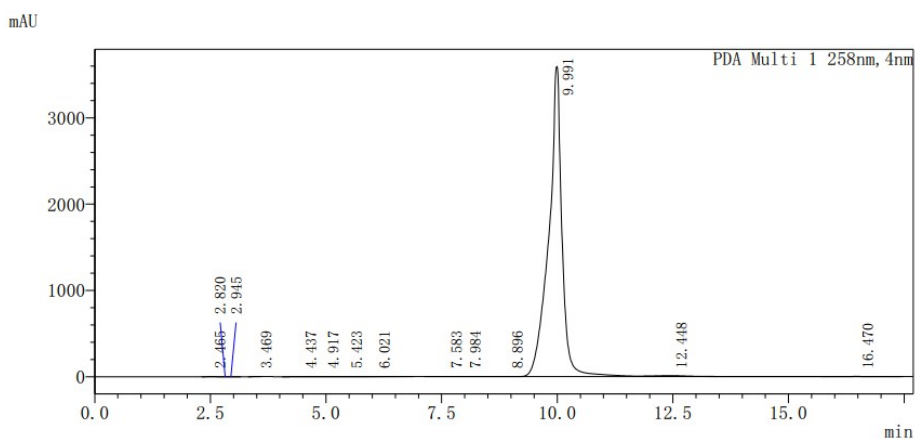
HRESIMS of compound G18

S38. HPLC of G1



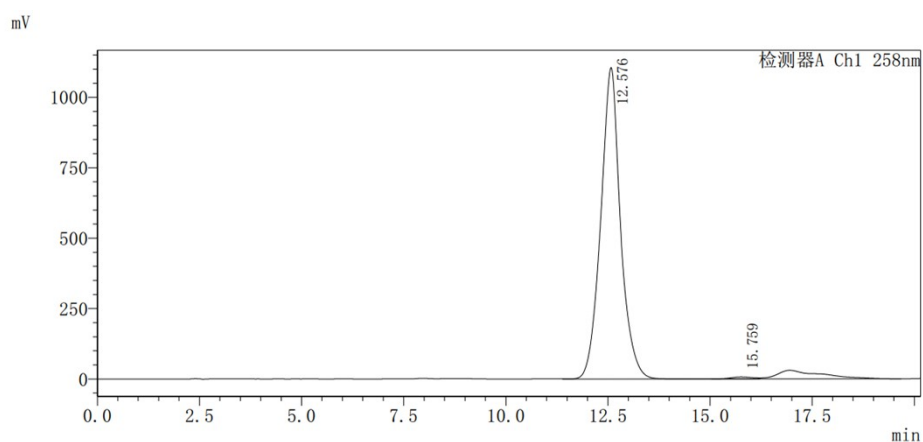
Purity analysis of the G1: 96.01%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S39. HPLC of G2



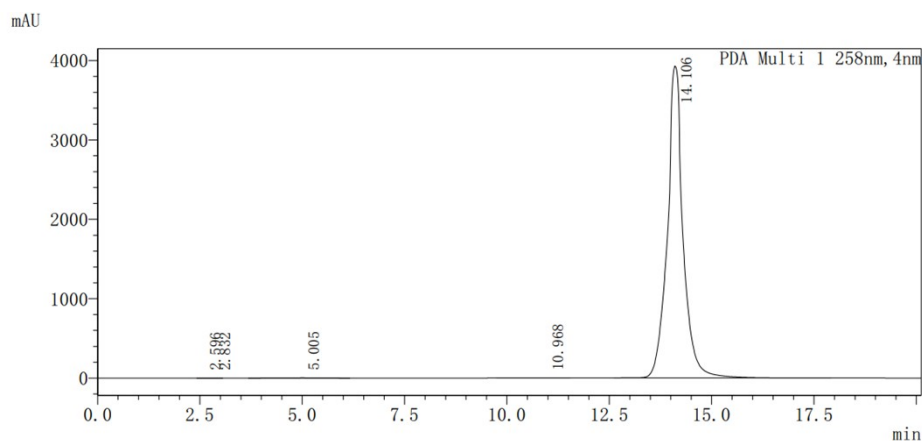
Purity analysis of the G2: 99.06%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 68%: 32%

S40. HPLC of G3



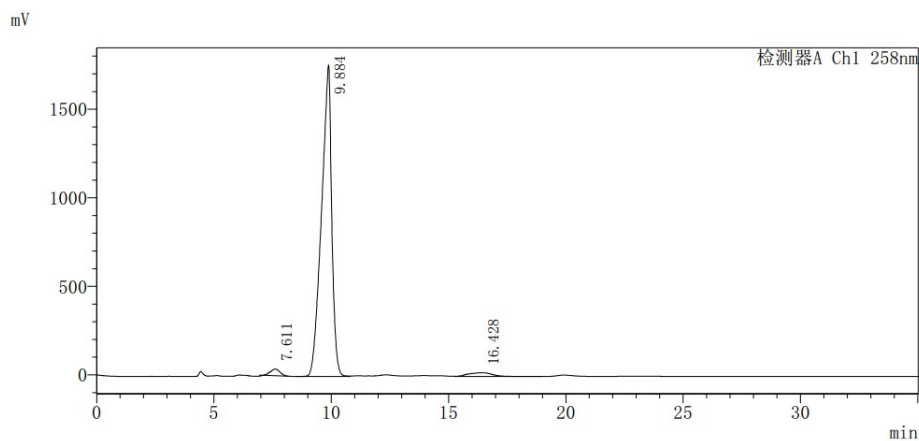
Purity analysis of the G3: 99.31%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S41. HPLC of G4



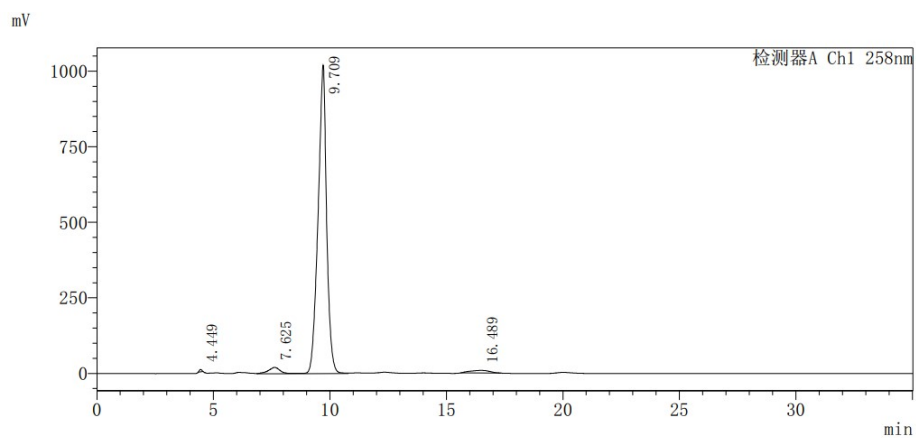
Purity analysis of the G4: 99.76%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S42. HPLC of G5



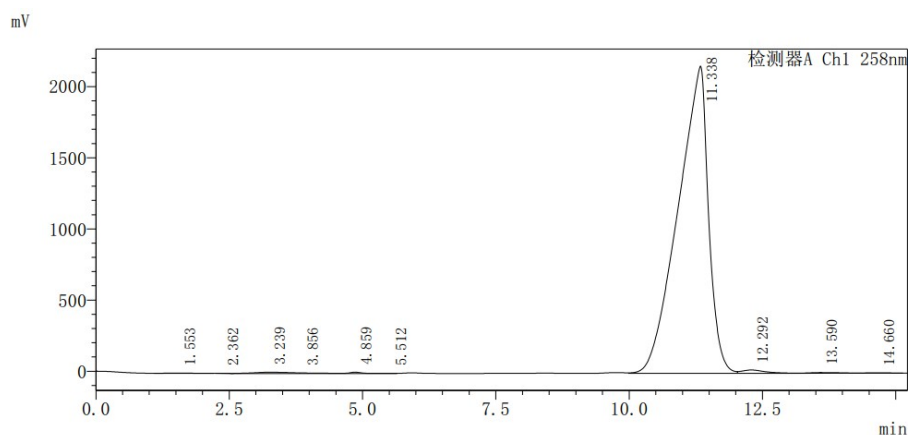
Purity analysis of the G5: 95.35%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S43. HPLC of G6



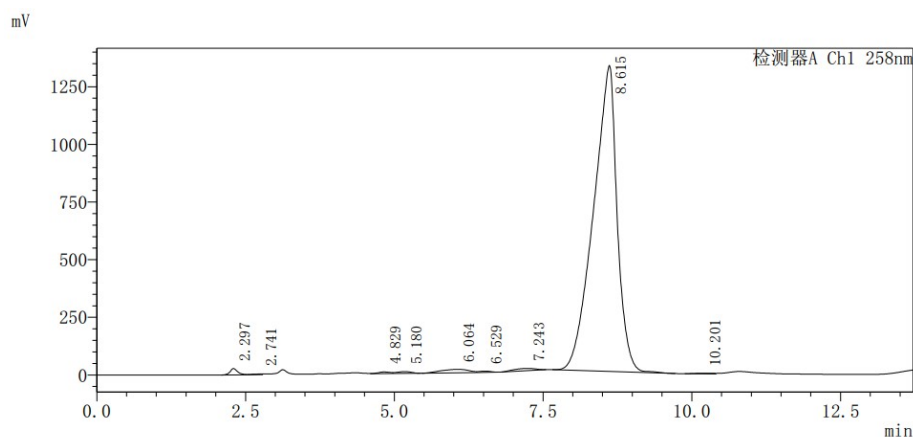
Purity analysis of the G6: 95.37%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S44. HPLC of G7



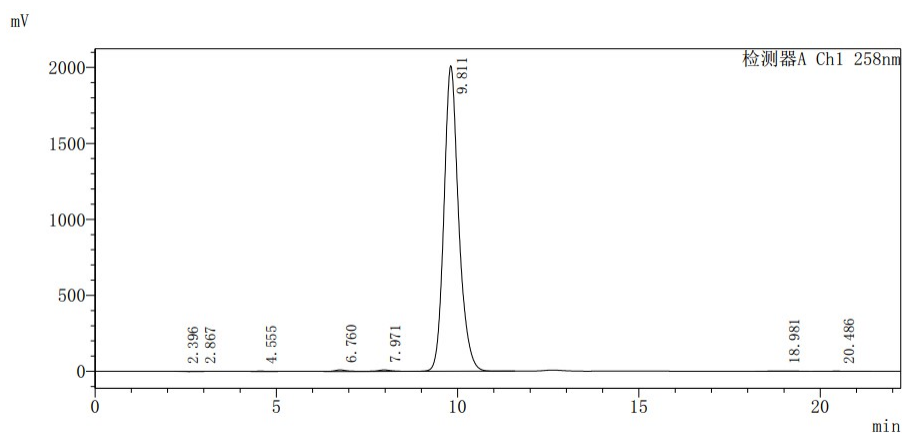
Purity analysis of the G7: 98.04%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 68%: 32%

S45. HPLC of G8



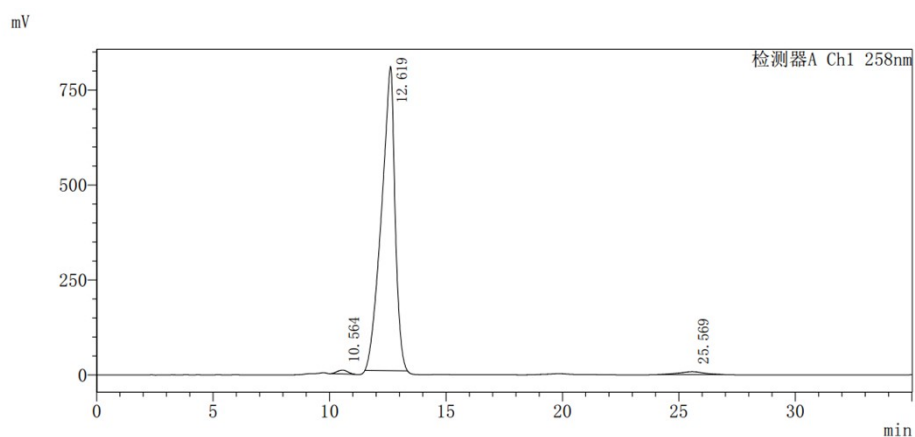
Purity analysis of the G8: 96.32%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 72%: 28%

S46. HPLC of G9



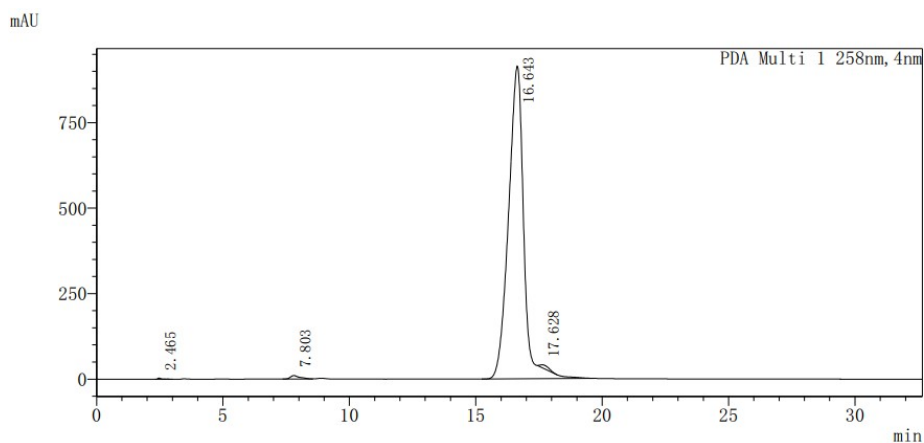
Purity analysis of the G9: 98.76%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 55%: 45%

S47. HPLC of G10



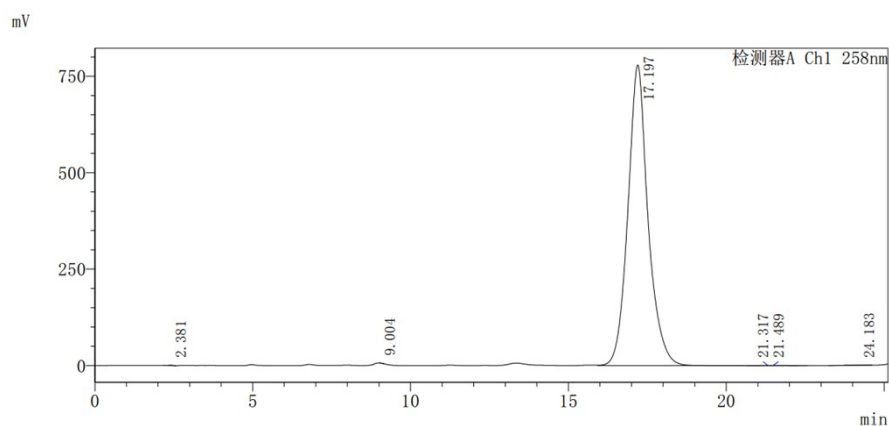
Purity analysis of the G10: 97.32%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S48. HPLC of G11



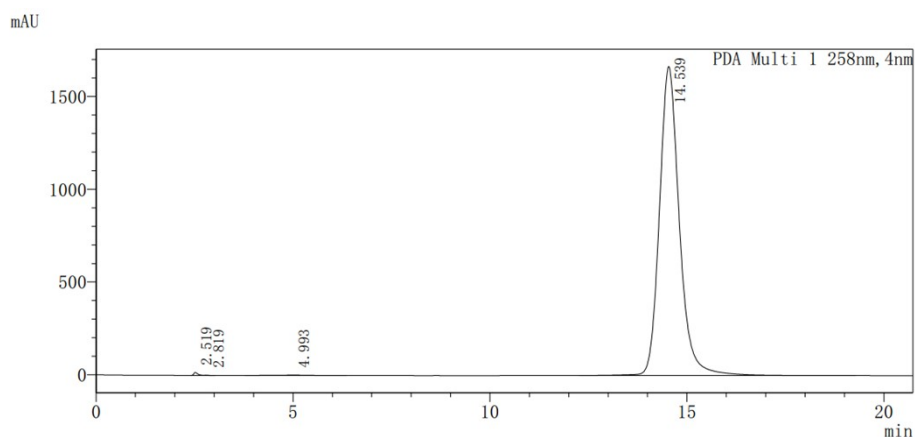
Purity analysis of the G11: 98.59%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 68%: 32%

S49. HPLC of G12



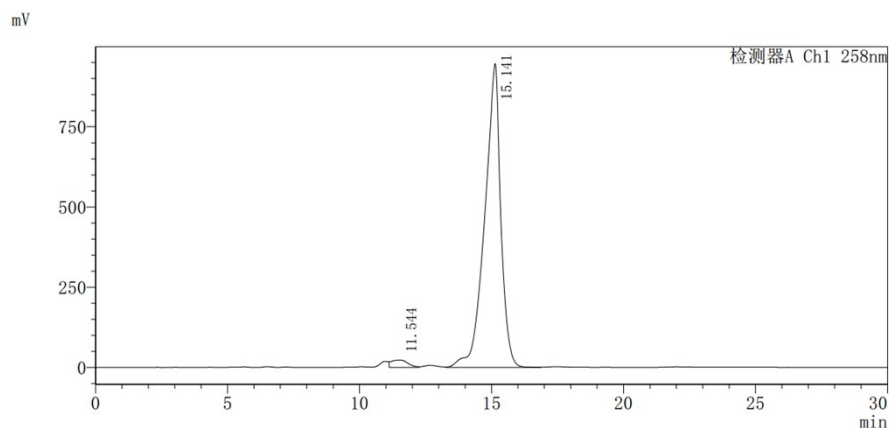
Purity analysis of the G12: 99.76%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 57%: 43%

S50. HPLC of G13



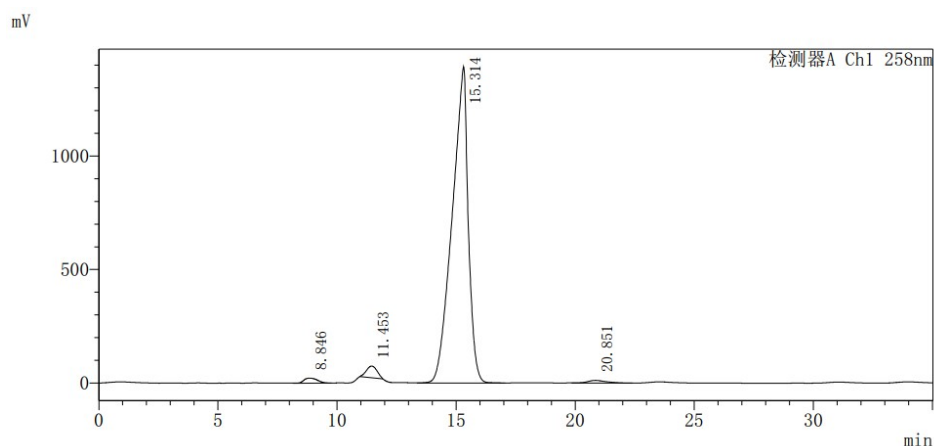
Purity analysis of the G13: 99.56%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 65%: 35%

S51. HPLC of G14



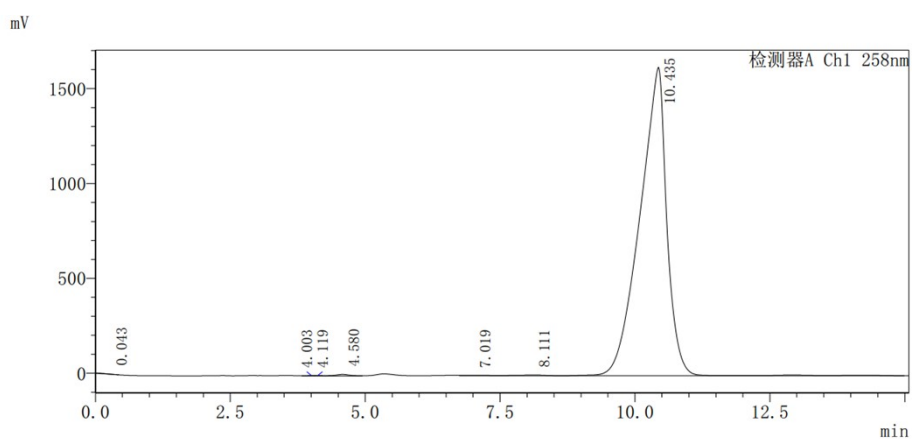
Purity analysis of the G14: 97.50%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S52. HPLC of G15



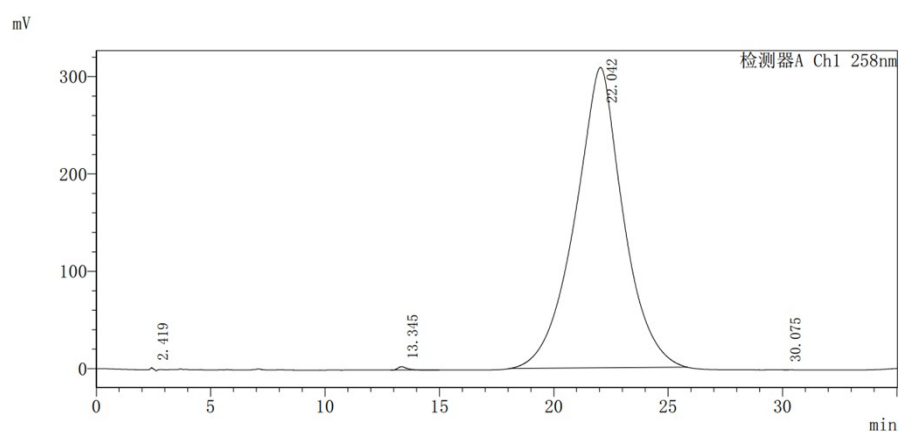
Purity analysis of the G15: 95.40%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S53. HPLC of G16



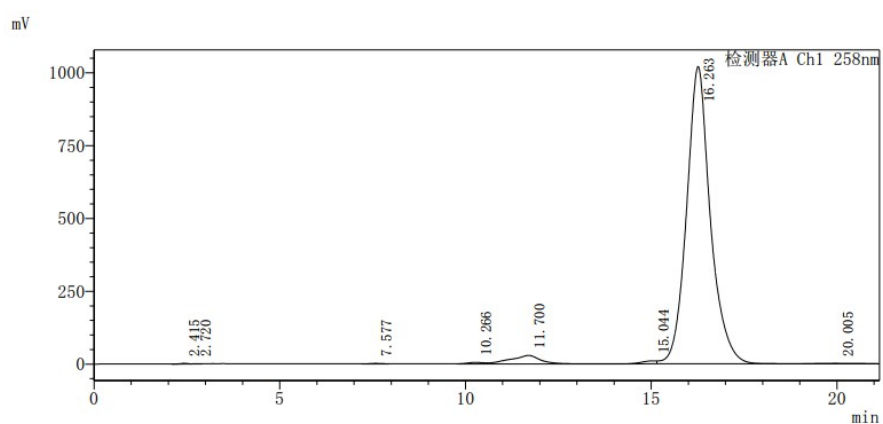
Purity analysis of the G16: 99.17%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 68%: 32%

S54. HPLC of G17



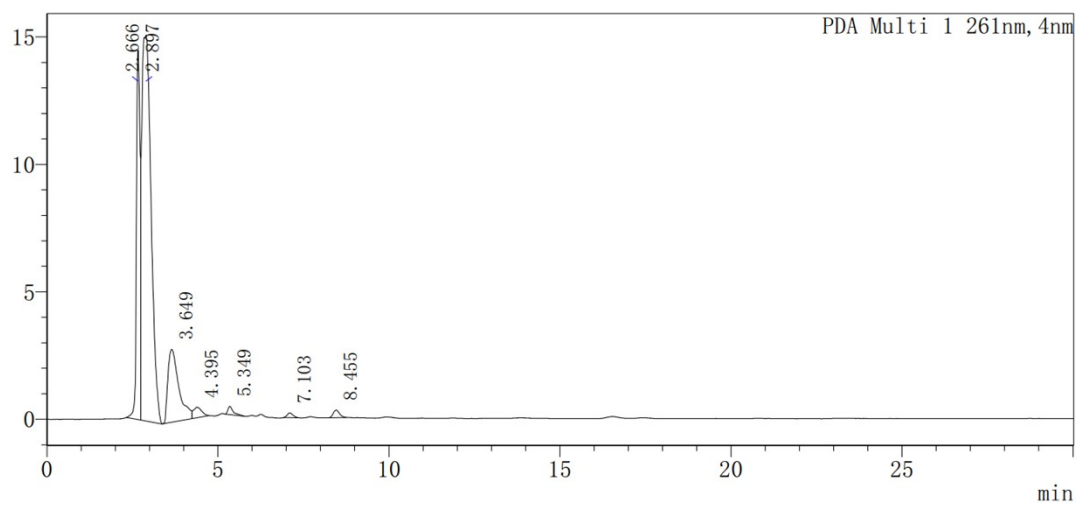
Purity analysis of the G17: 99.78%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

S55. HPLC of G18

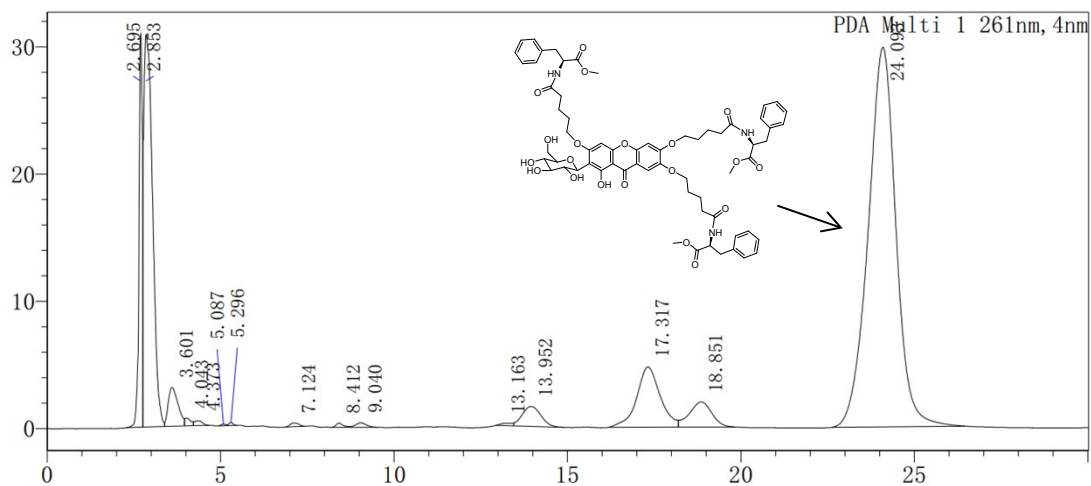


Purity analysis of the G18: 95.14%. The mobile phase was methanol (A)-0.1% formic acid in water (B), and the mobile phase ratio was A: B = 75%: 25%

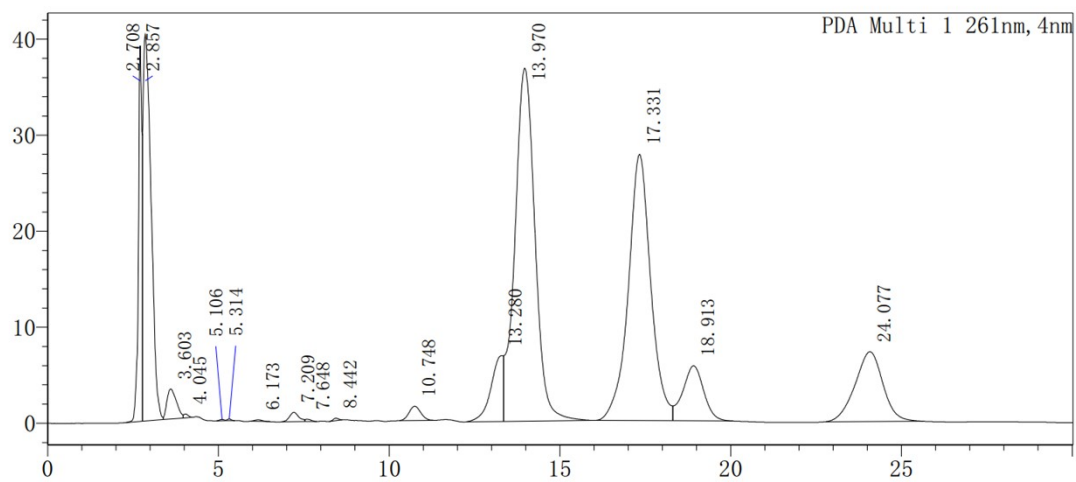
S56. Stability of MGF derivative G1 in mice plasma



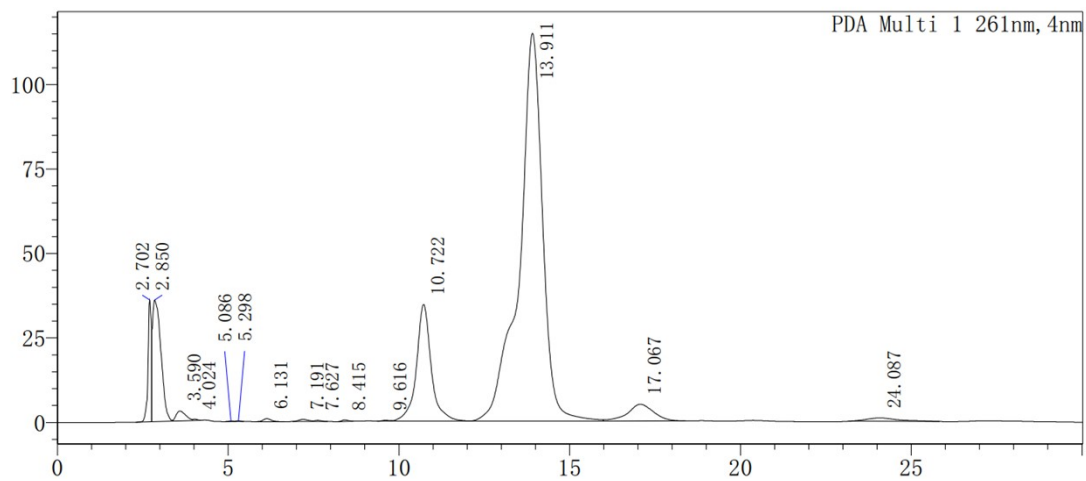
HPLC of blank plasma



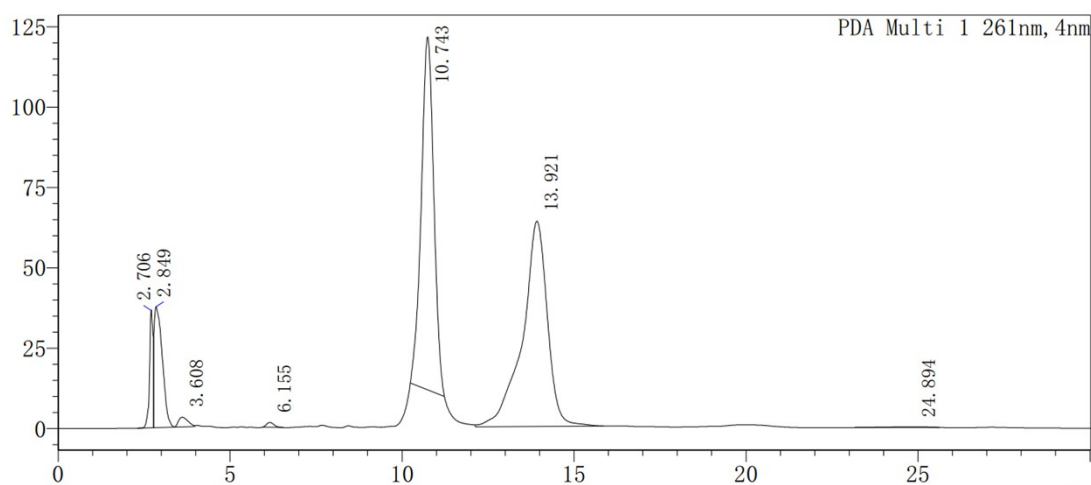
HPLC of G1-0h



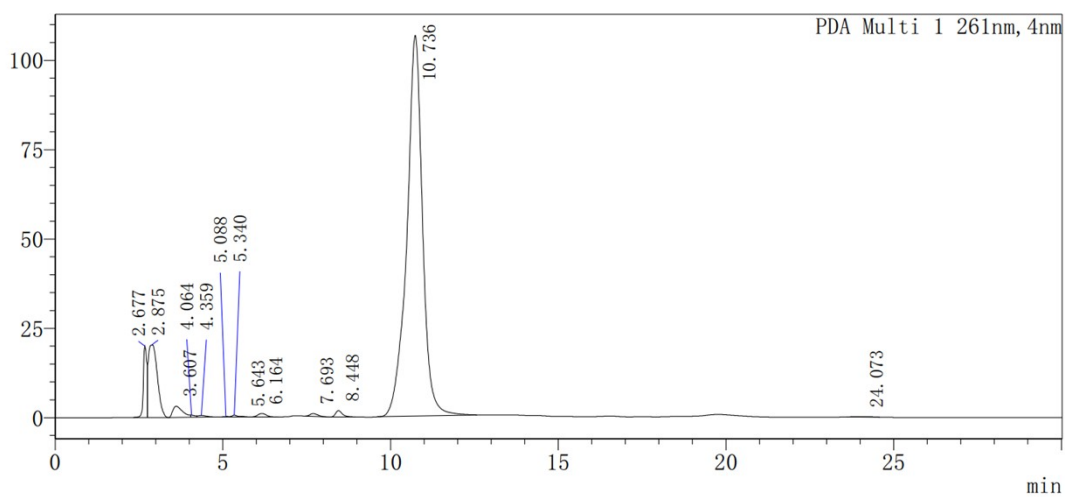
HPLC of G1-1h



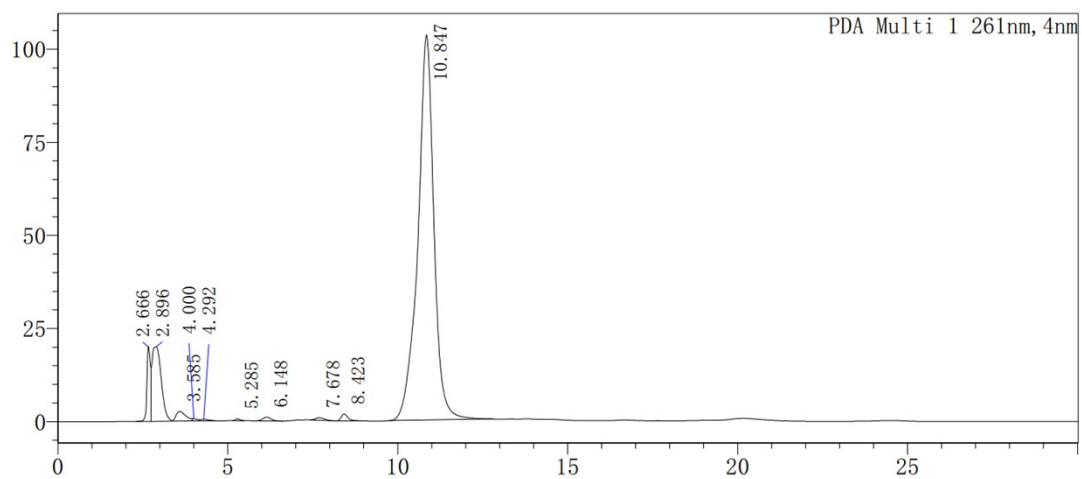
HPLC of G1-3h



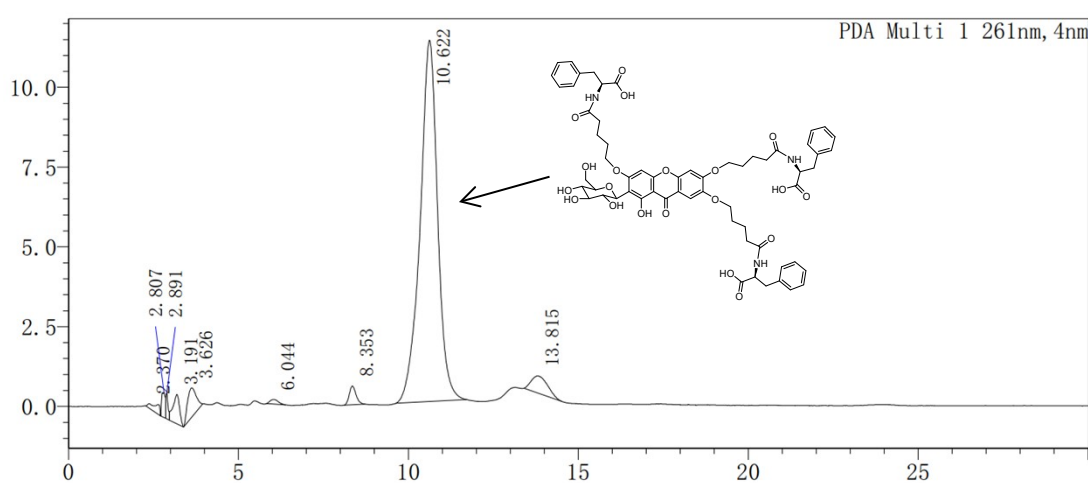
HPLC of G1-6h



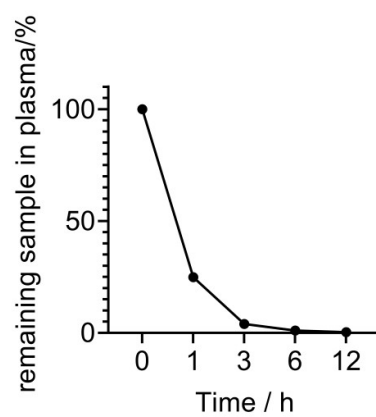
HPLC of G1-12h



HPLC of G1-24h



HPLC of the product of the complete hydrolysis of methyl ester



The curve of incubation time and residual substrate concentration