

Supporting Information

Synthesis of 3-Hydroxy-4-arylquinolin-2-ones Including Viridicatol via a Darzens Condensation – Friedel-Crafts Alkylation Strategy

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HRMS (MALDI-TOF) of 3

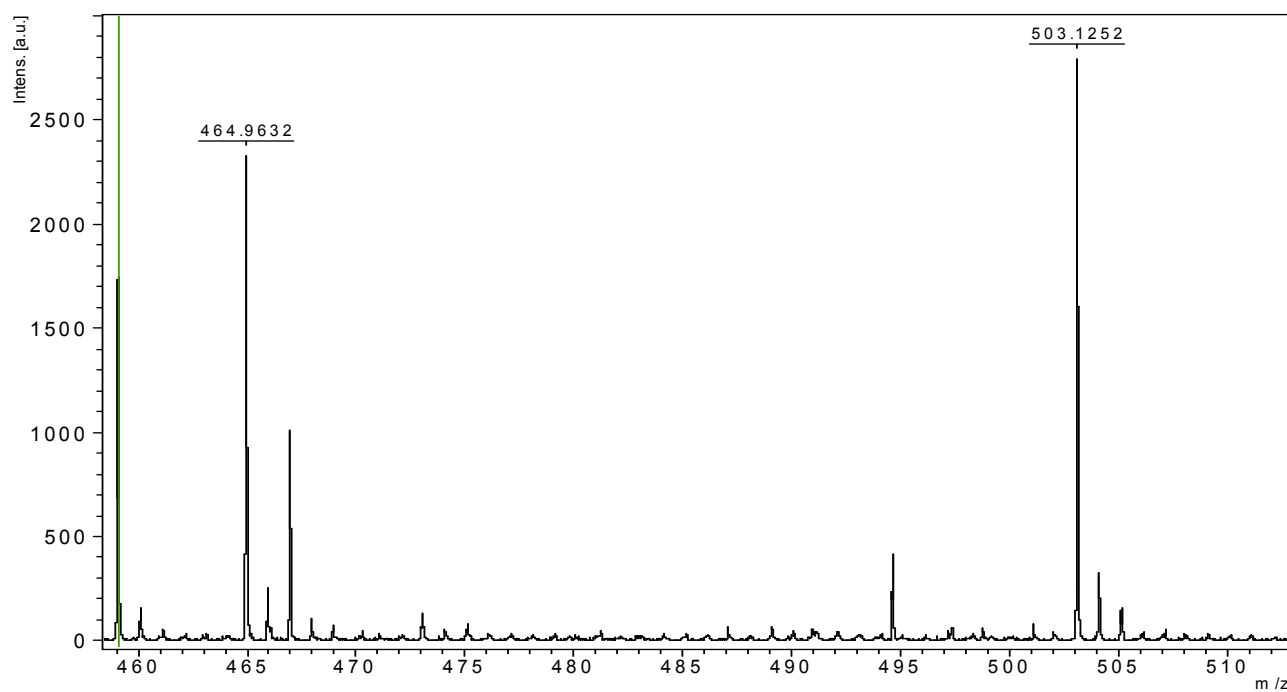


Figure S1. HRMS (MALDI-TOF) of **3d**, m/z : $[M + Cs]^+$ calcd for $C_{16}H_{13}ClN_2O_4Cs$ 464.9613; found 464.9632.

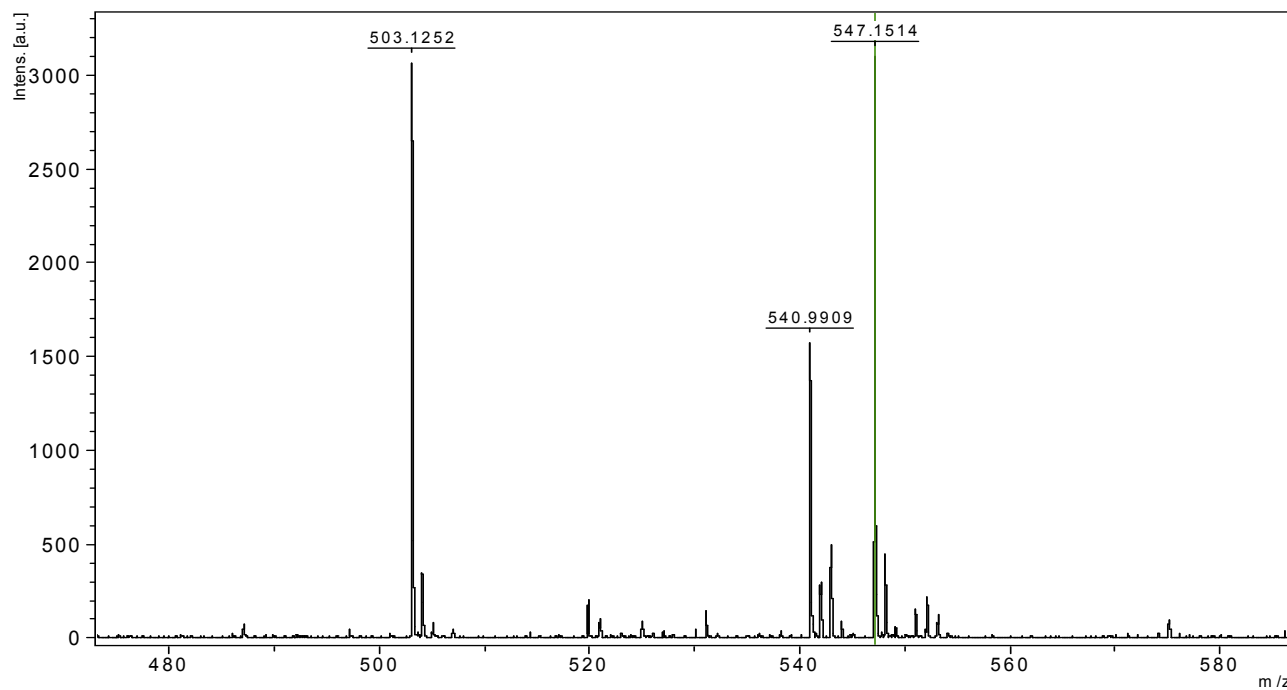


Figure S2. HRMS (MALDI-TOF) of **3e**, m/z : $[M + Cs]^+$ calcd for $C_{22}H_{17}ClN_2O_4Cs$ 540.9926; found 540.9909.

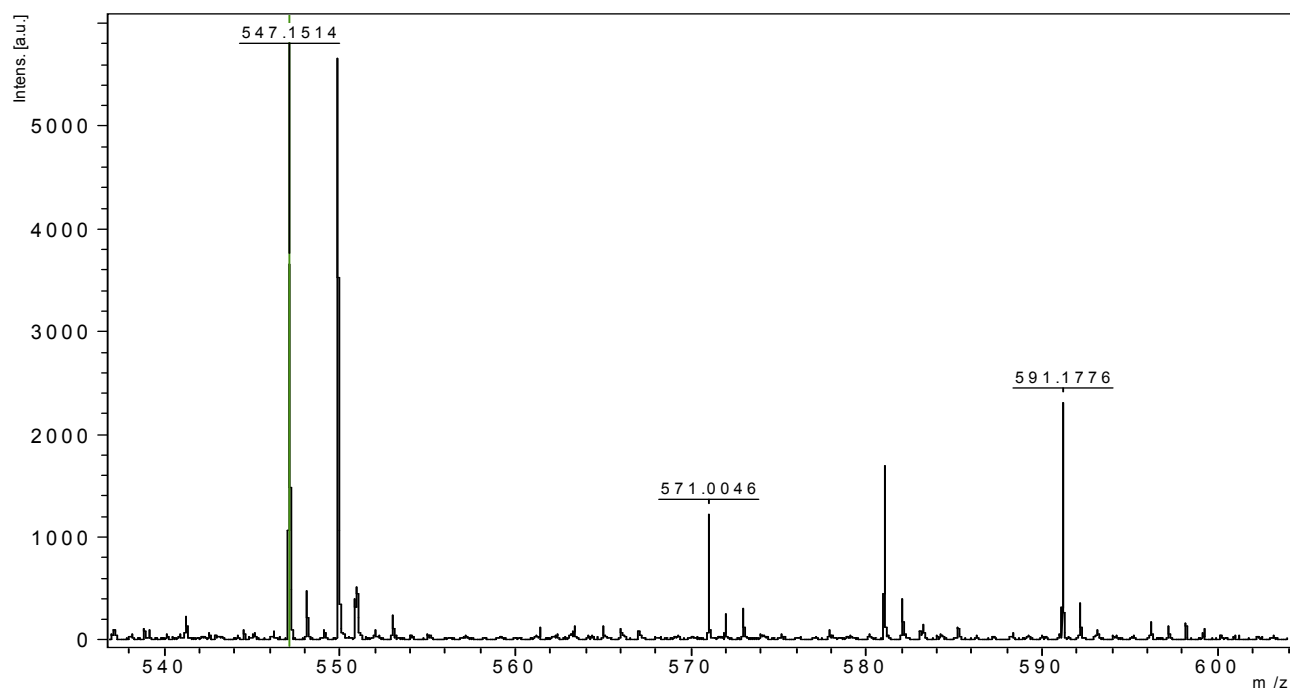


Figure S3. HRMS (MALDI-TOF) of **3f**, m/z : $[M + Cs]^+$ calcd for $C_{23}H_{19}ClN_2O_5Cs$ 571.0031; found 571.0046.

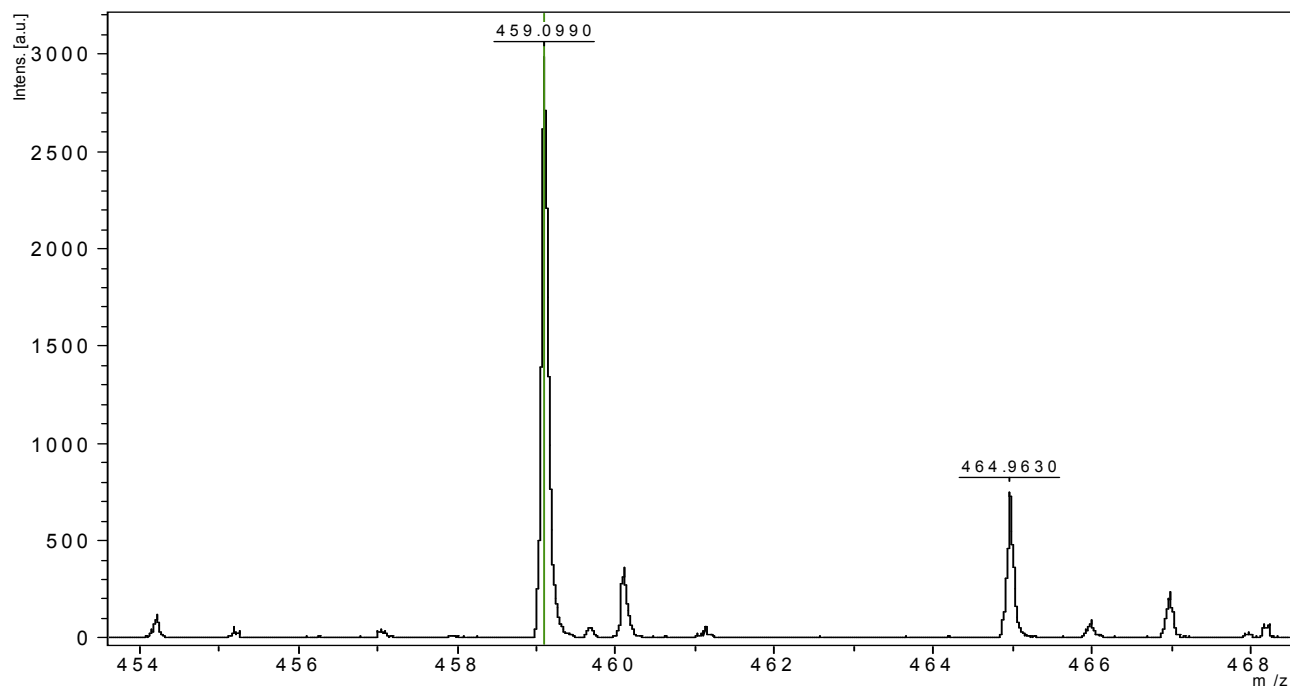


Figure S4. HRMS (MALDI-TOF) of **3g**, m/z : $[M + Cs]^+$ calcd for $C_{16}H_{13}ClN_2O_4Cs$ 464.9613; found 464.9630.

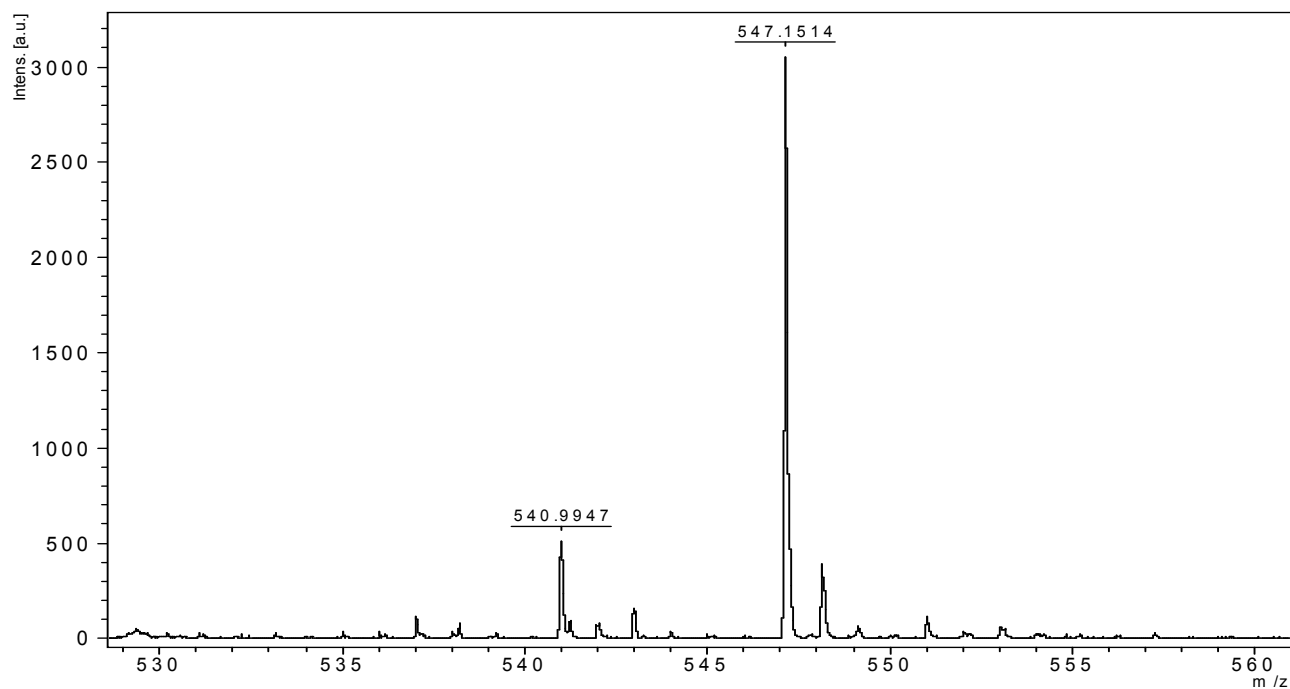


Figure S5. HRMS (MALDI-TOF) of **3h**, m/z : $[M + Cs]^+$ calcd for $C_{22}H_{17}ClN_2O_4Cs$ 540.9926; found 540.9947.

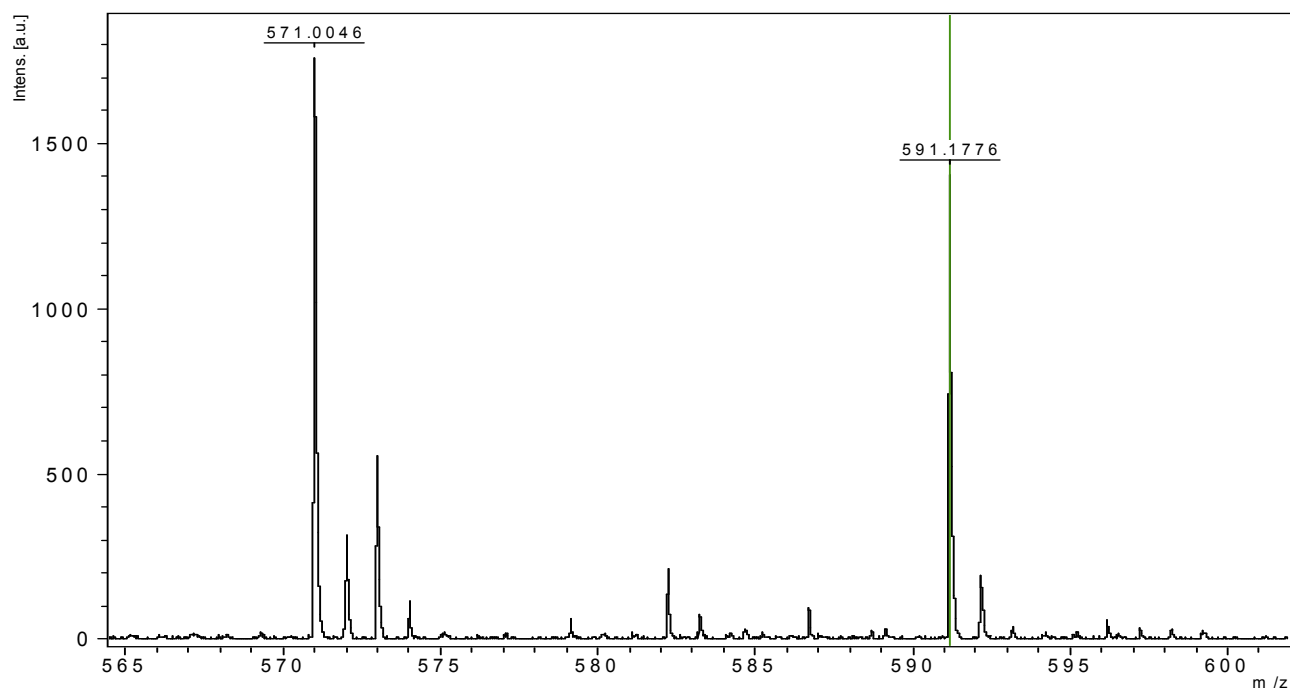


Figure S6. HRMS (MALDI-TOF) of **3f**, m/z : $[M + Cs]^+$ calcd for $C_{23}H_{19}ClN_2O_5Cs$ 571.0031; found 571.0046.

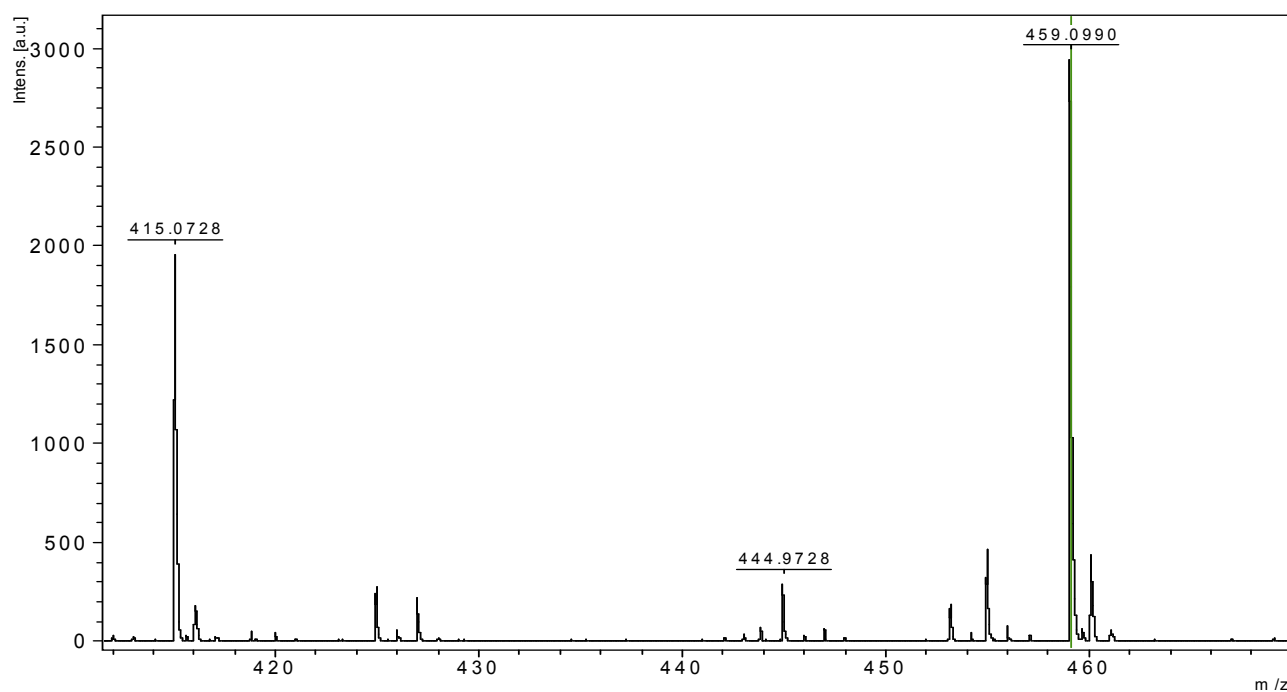


Figure S7. HRMS (MALDI-TOF) of **3j**, m/z : $[M + Cs]^+$ calcd for $C_{17}H_{13}ClN_2O_2Cs$ 444.9715; found 444.9728.

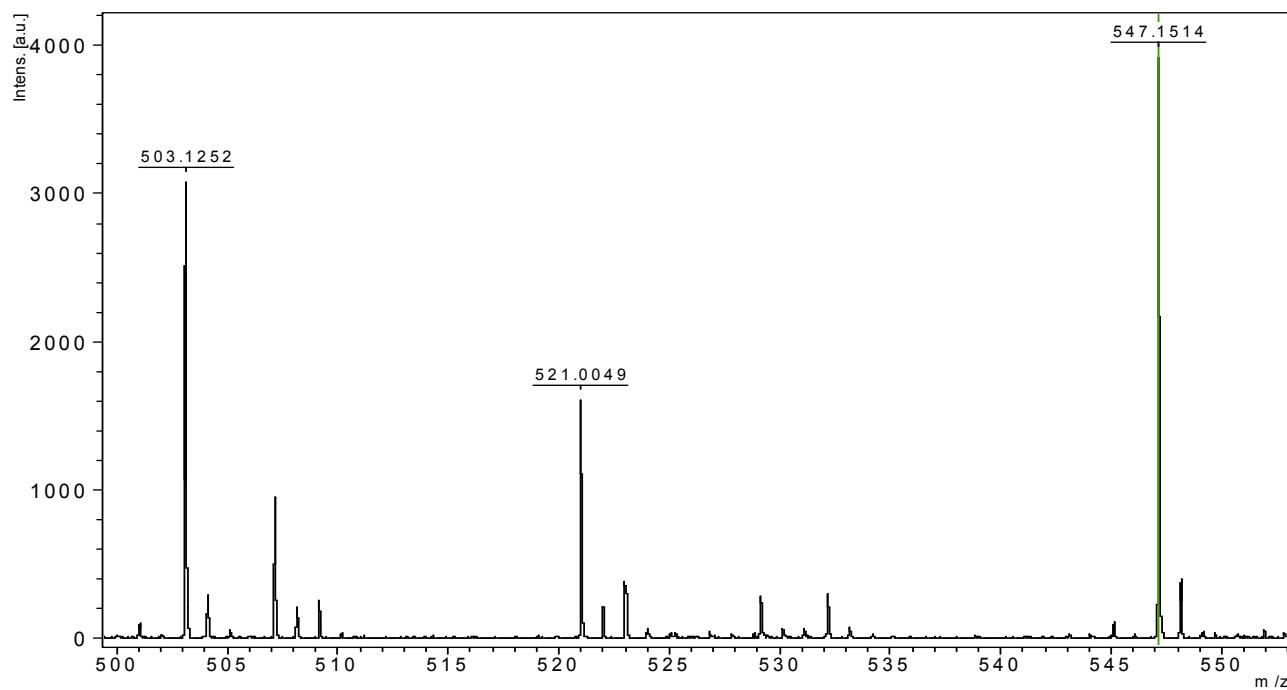


Figure S8. HRMS (MALDI-TOF) of **3k**, m/z : $[M + Cs]^+$ calcd for $C_{23}H_{17}ClN_2O_2Cs$ 521.0028; found 521.0049.

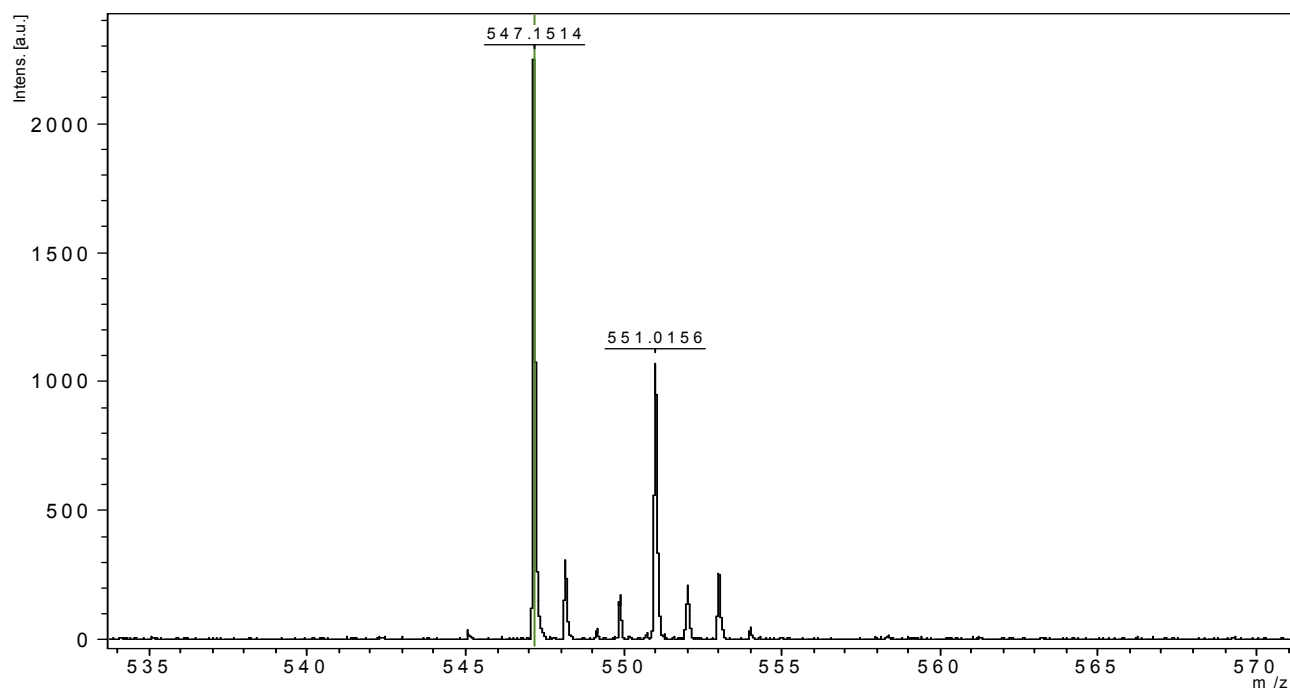


Figure S9. HRMS (MALDI-TOF) of **3l**, m/z : $[M + Cs]^+$ calcd for $C_{24}H_{19}ClN_2O_3Cs$ 551.0133; found 551.0156.

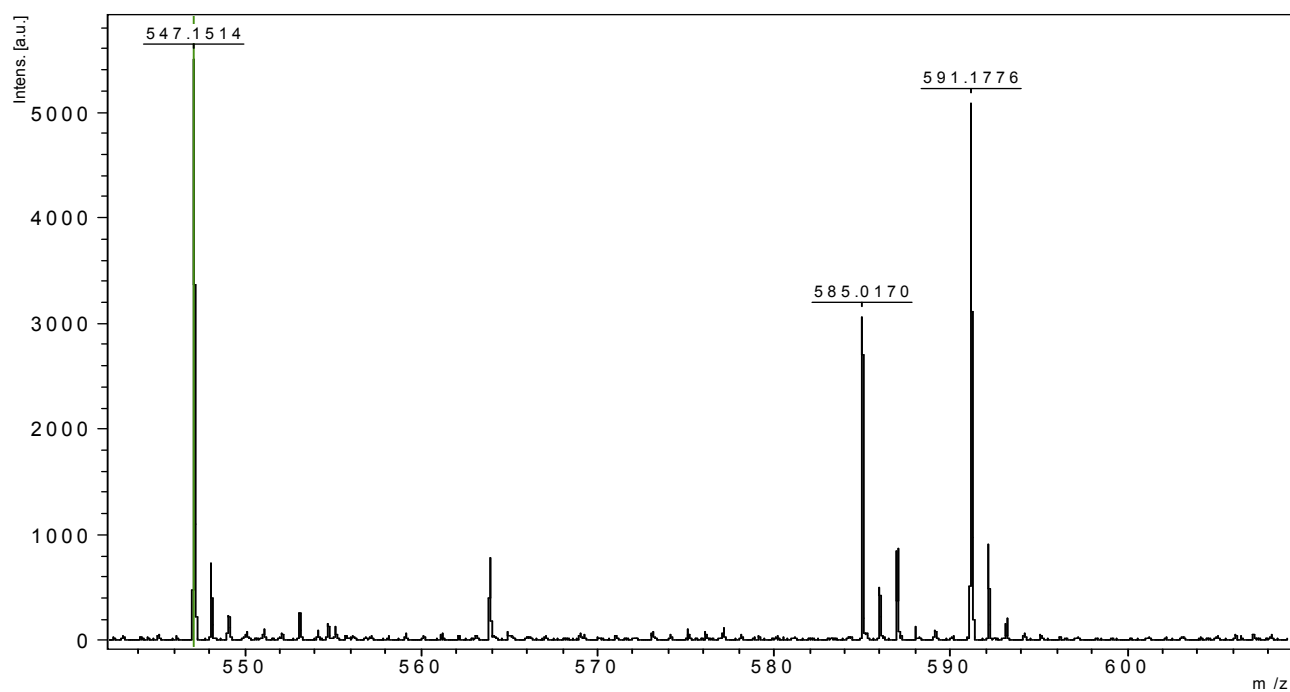


Figure S10. HRMS (MALDI-TOF) of **3m**, m/z : $[M + Cs]^+$ calcd for $C_{24}H_{21}ClN_2O_5Cs$ 585.0188; found 585.0170.

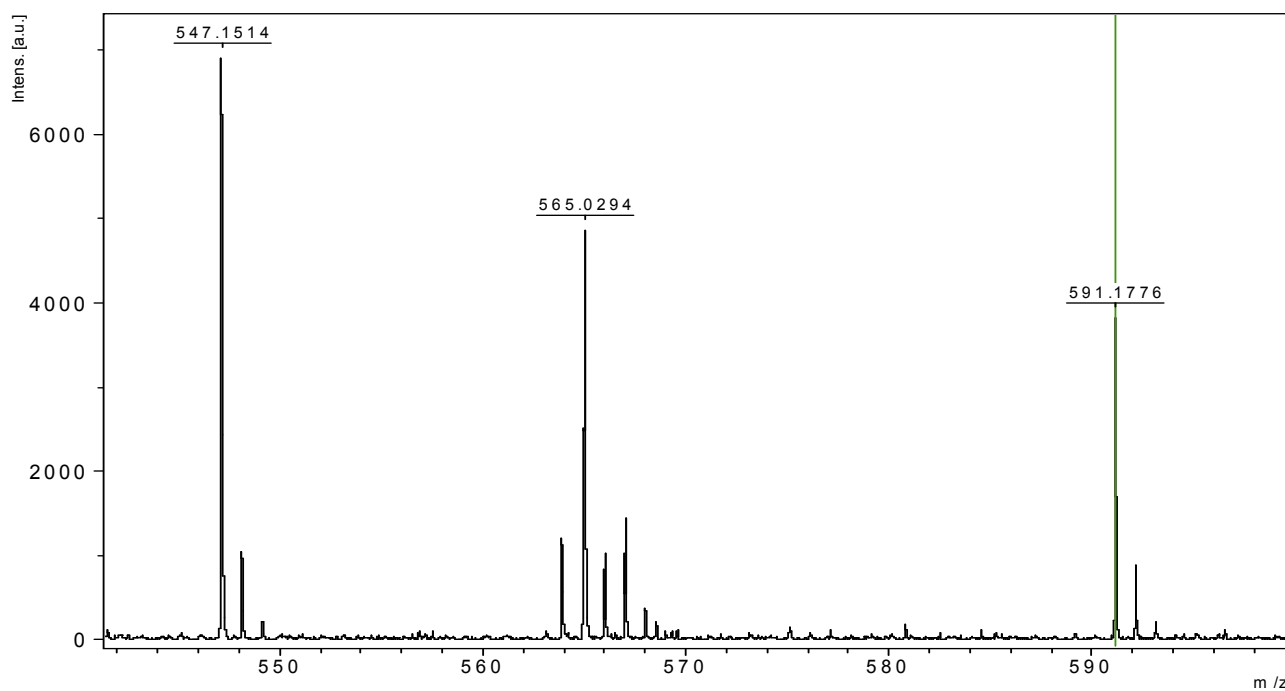


Figure S11. HRMS (MALDI-TOF) of **3n**, m/z : calcd for $[M + Cs]^+$ $C_{25}H_{21}ClN_2O_3Cs$ 565.0290; found 565.0294.

HRMS (MALDI-TOF) of **4**

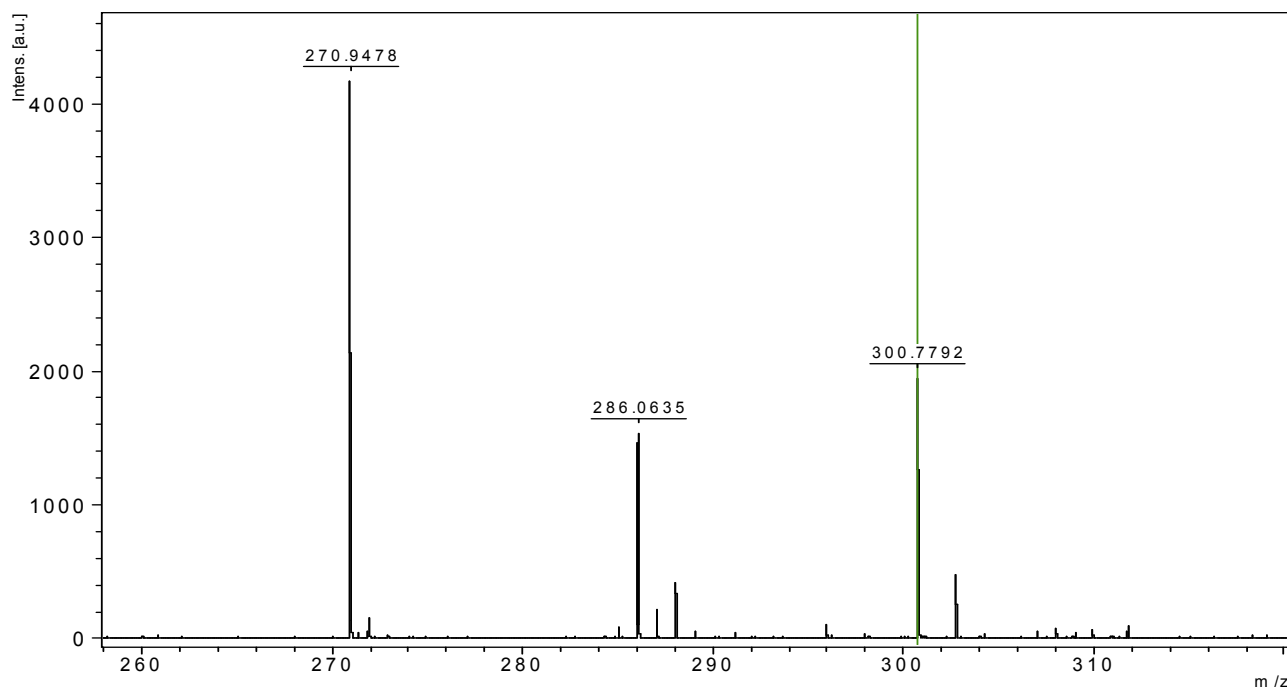


Figure S12. HRMS (MALDI-TOF) of **4b**, m/z : $[M + H]^+$ calcd for $C_{16}H_{13}ClNO_2$ 286.0629; found 286.0635.

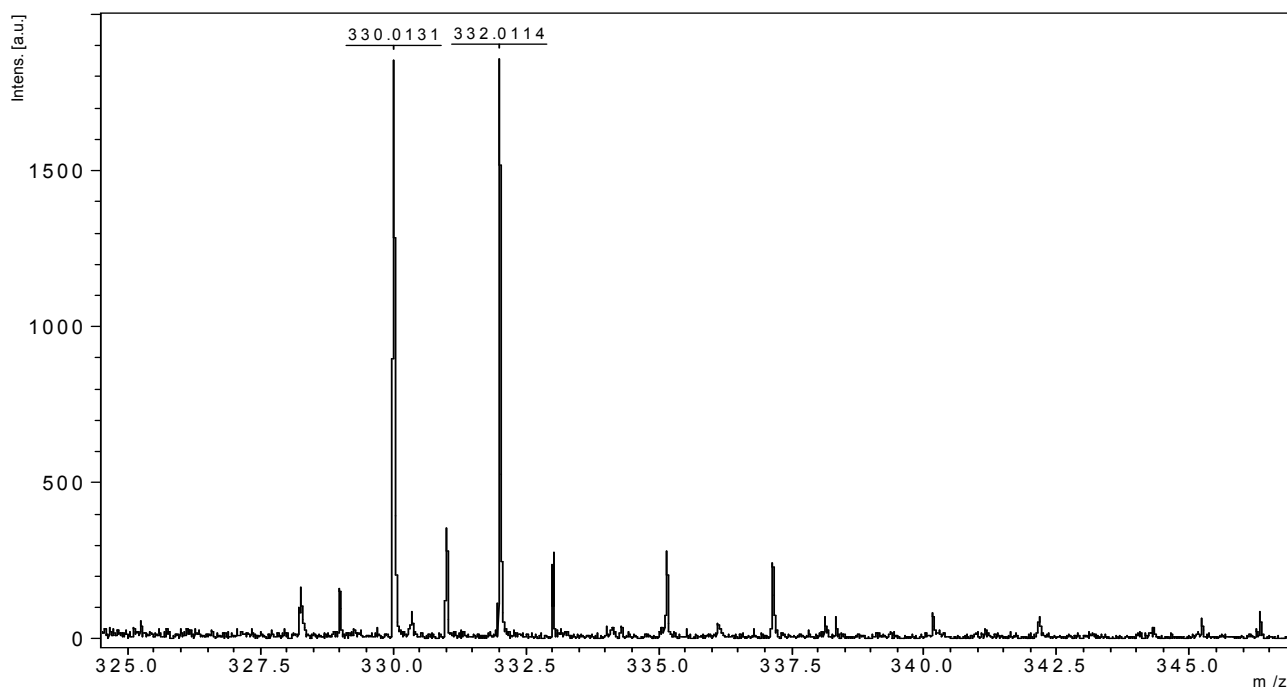


Figure S13. HRMS (MALDI-TOF) of **4c**, m/z : $[M + H]^+$ calcd for $C_{16}H_{13}BrNO_2$ 330.0124, 332.0105; found 330.0131, 332.0114.

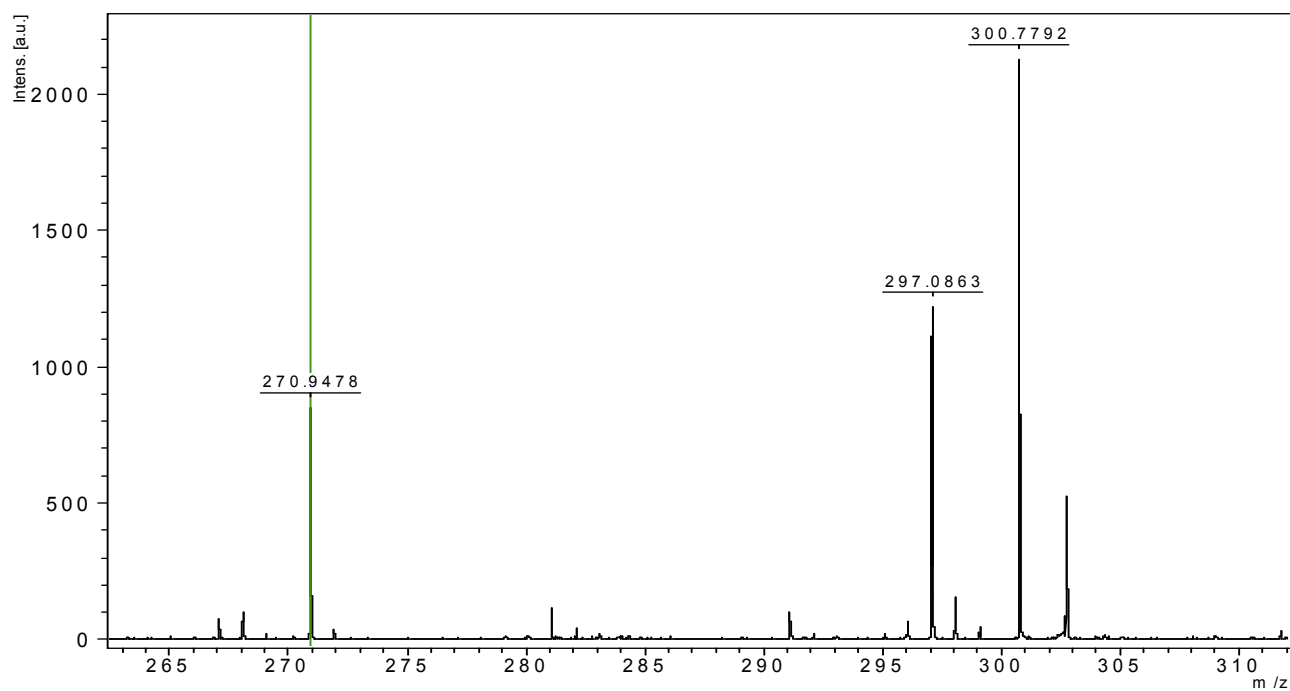


Figure S14. HRMS (MALDI-TOF) of **4d**, m/z : $[M + H]^+$ calcd for $C_{16}H_{13}N_2O_4$ 297.0870; found 297.0863.

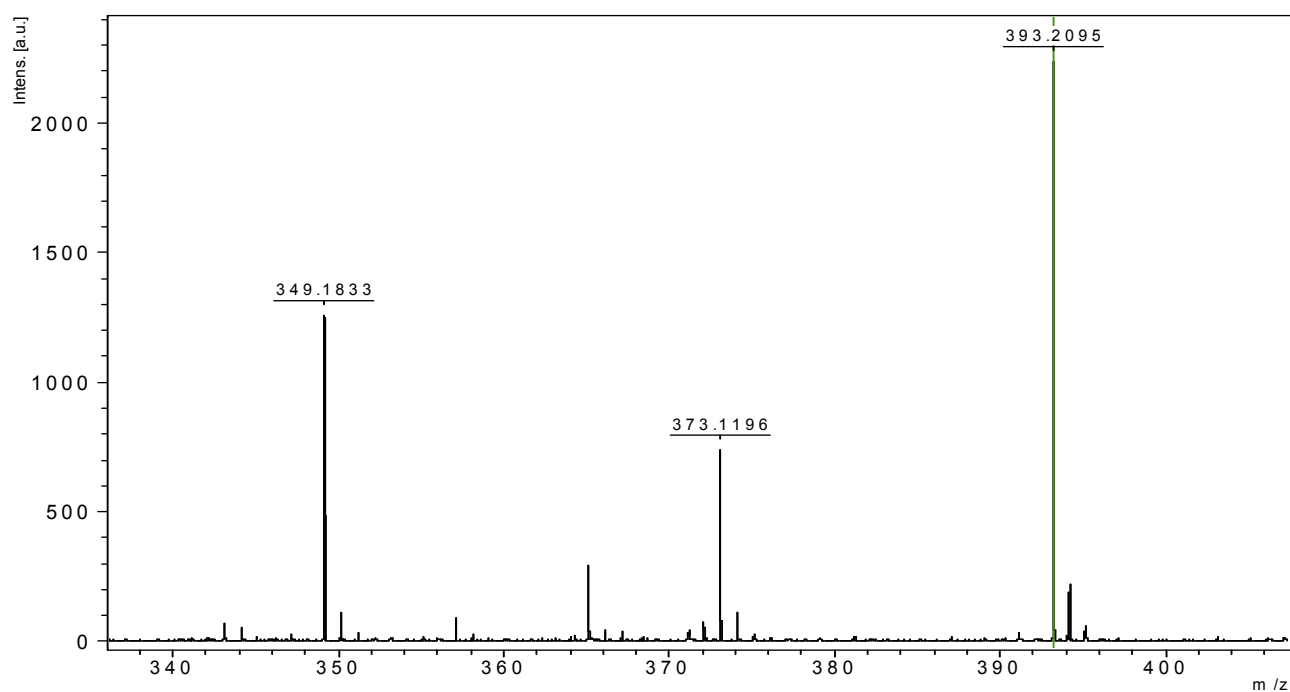


Figure S15. HRMS (MALDI-TOF) of **4e**, m/z : $[M + H]^+$ calcd for $C_{22}H_{17}N_2O_4$ 373.1183; found 373.1196.

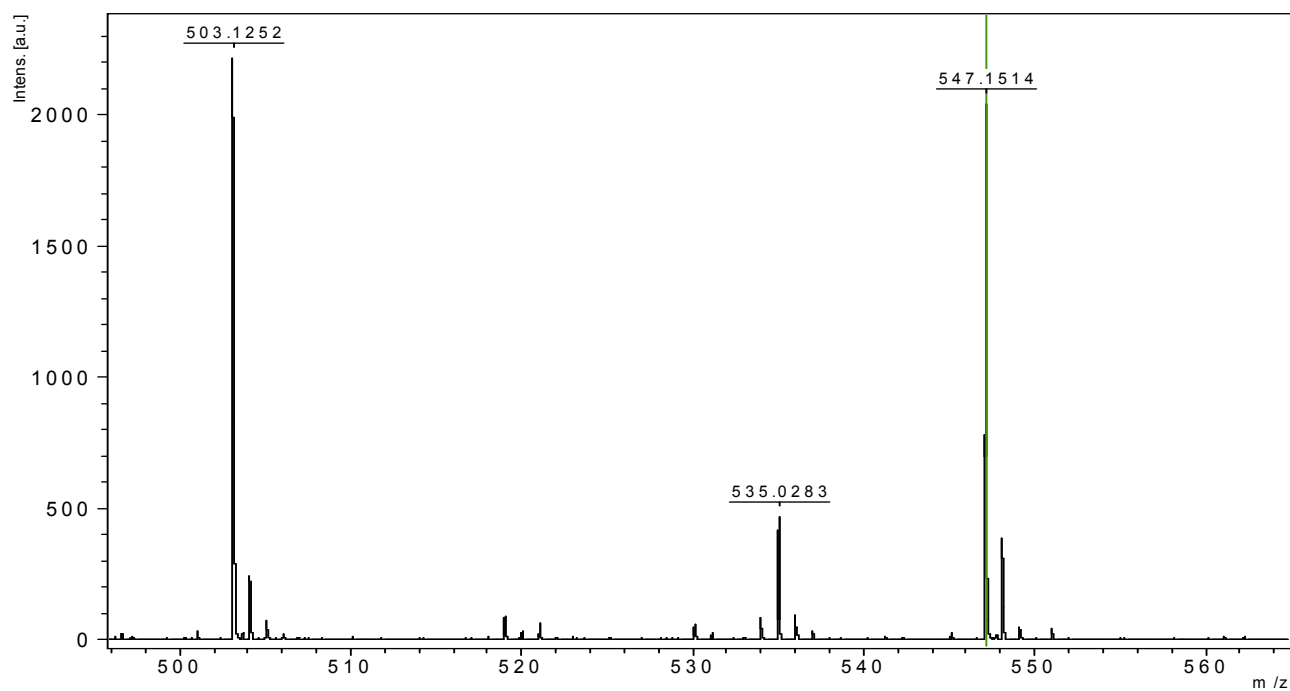


Figure S16. HRMS (MALDI-TOF) of **4f**, m/z : calcd for $[M + Cs]^+ C_{23}H_{18}N_2O_5Cs$ 535.0265; found 535.0283.

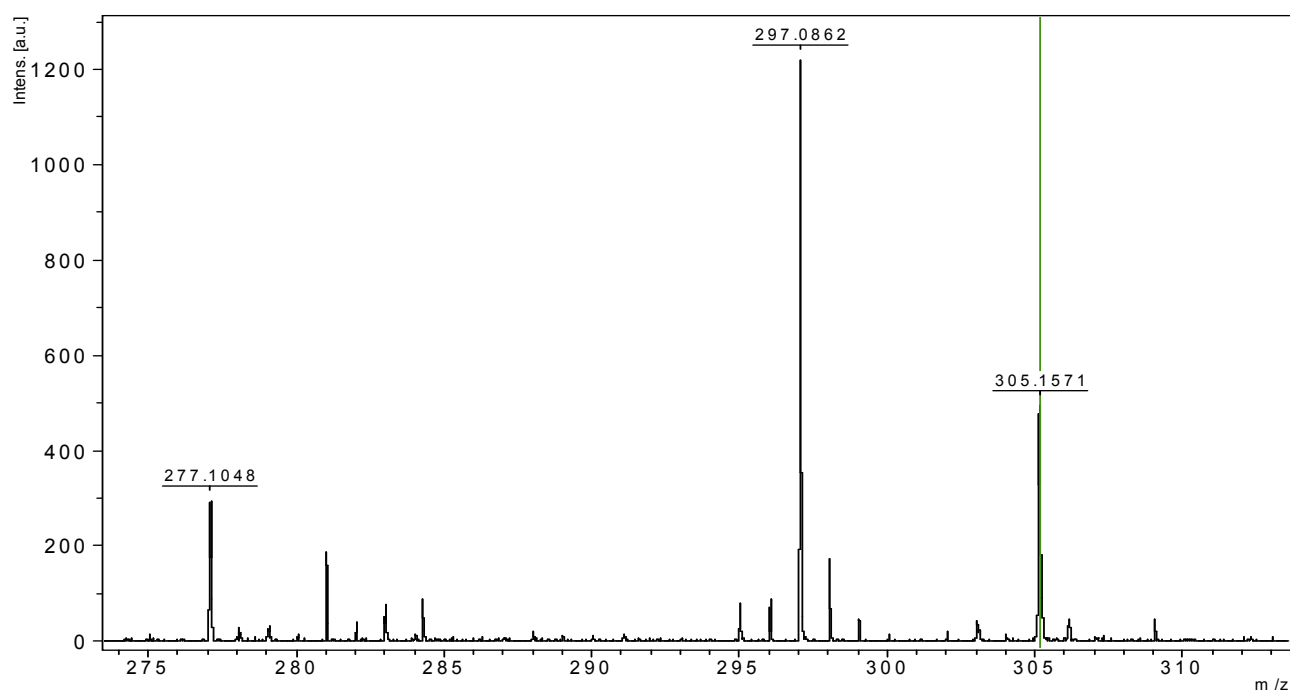


Figure S17. HRMS (MALDI-TOF) of **4g**, m/z : calcd for $[M + H]^+ C_{16}H_{13}N_2O_4$ 297.0870; found 297.0862.

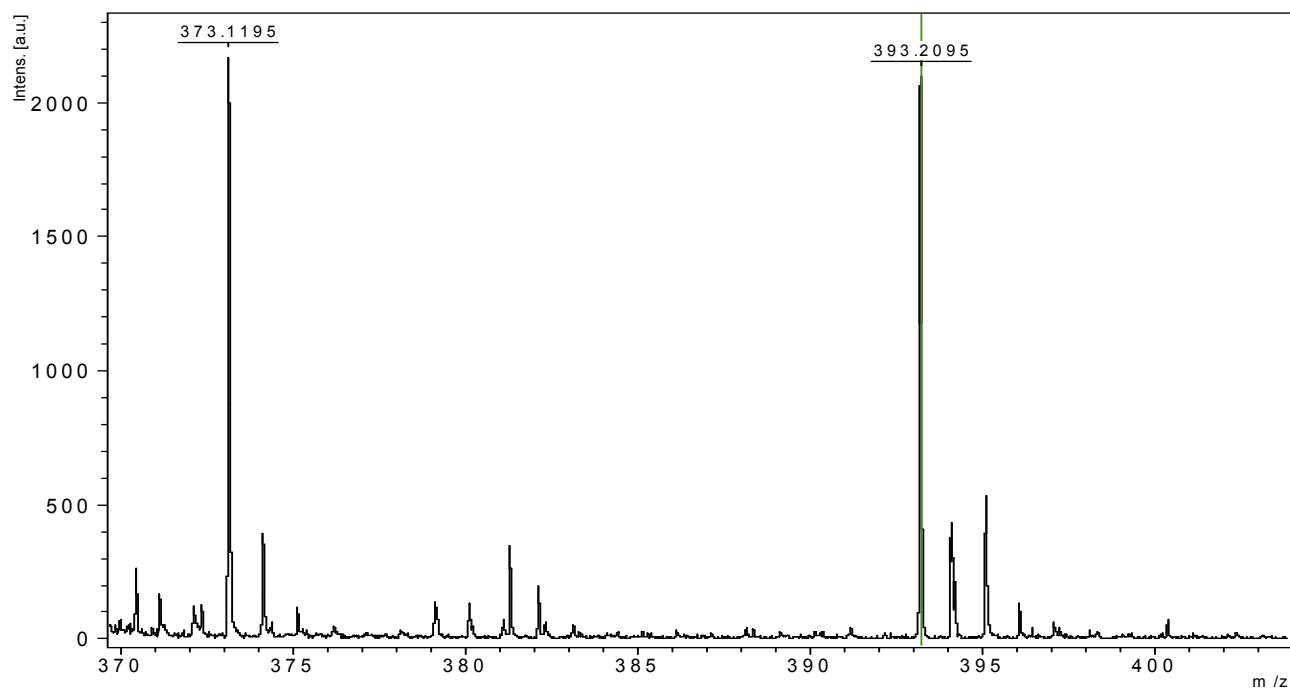


Figure S18. HRMS (MALDI-TOF) of **4h**, m/z : $[M + H]^+$ calcd for $C_{22}H_{17}N_2O_4$ 373.1183; found 373.1195.

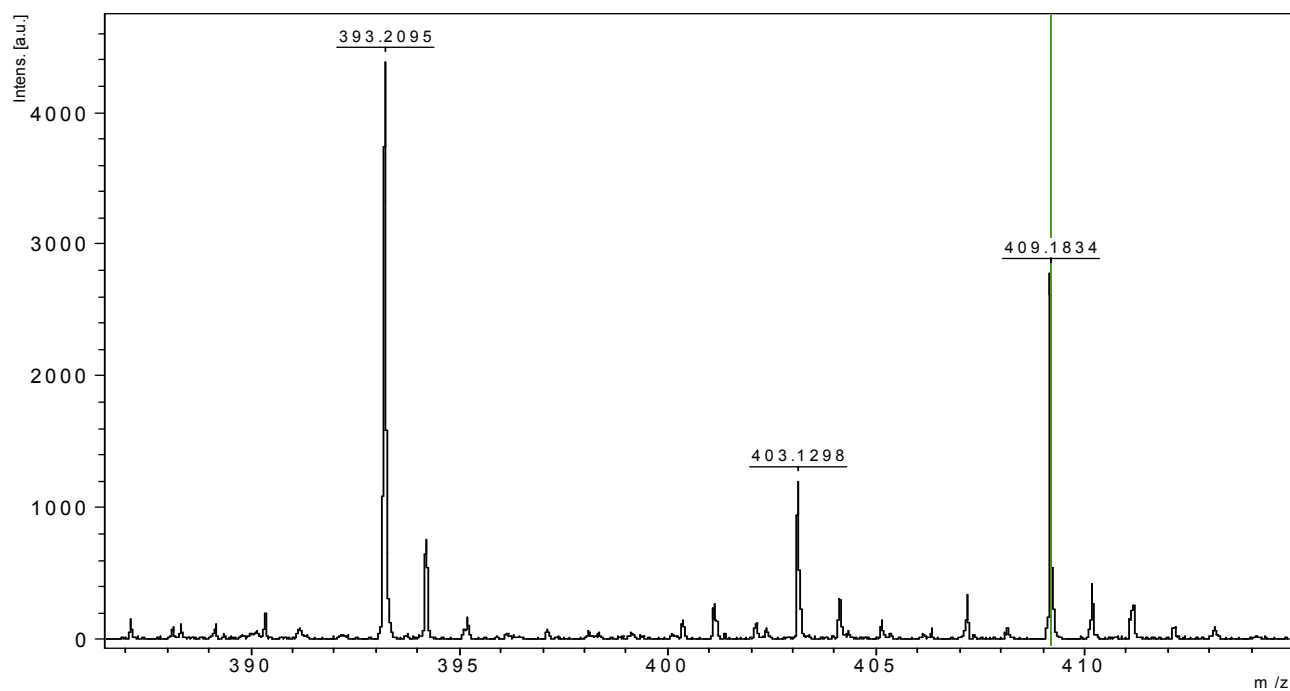


Figure S19. HRMS (MALDI-TOF) of **4i**, m/z : $[M + H]^+$ calcd for $C_{23}H_{19}N_2O_5$ 403.1288; found 403.1298.

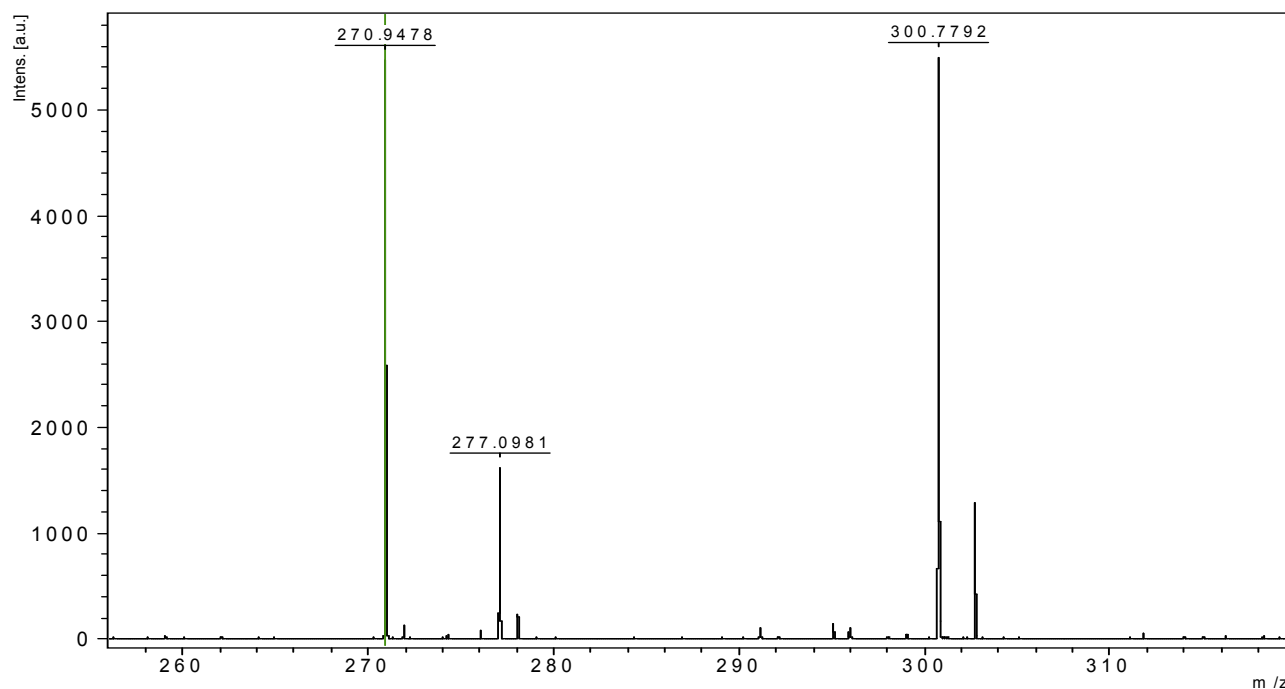


Figure S20. HRMS (MALDI-TOF) of **4j**, m/z : $[M + H]^+$ calcd for $C_{17}H_{13}N_2O_2$ 277.0972; found 277.0981.

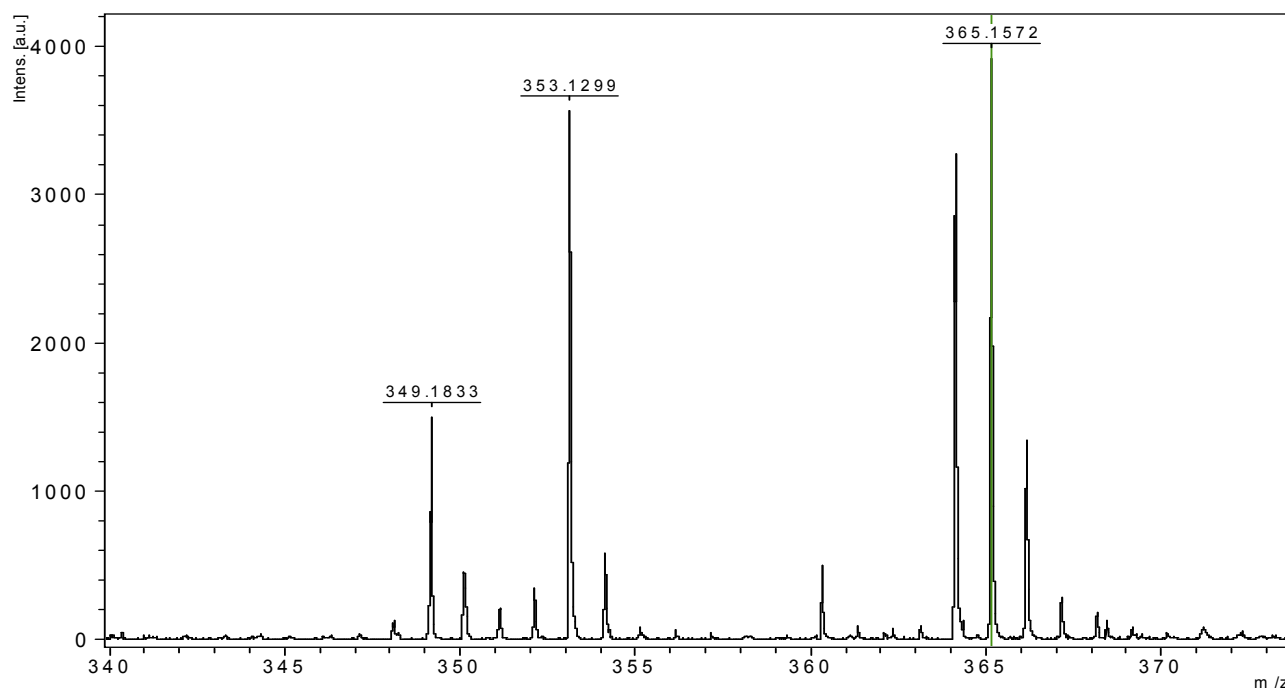


Figure S21. HRMS (MALDI-TOF) of **4k**, m/z : $[M + H]^+$ calcd for $C_{23}H_{17}N_2O_2$ 353.1285; found 353.1299.

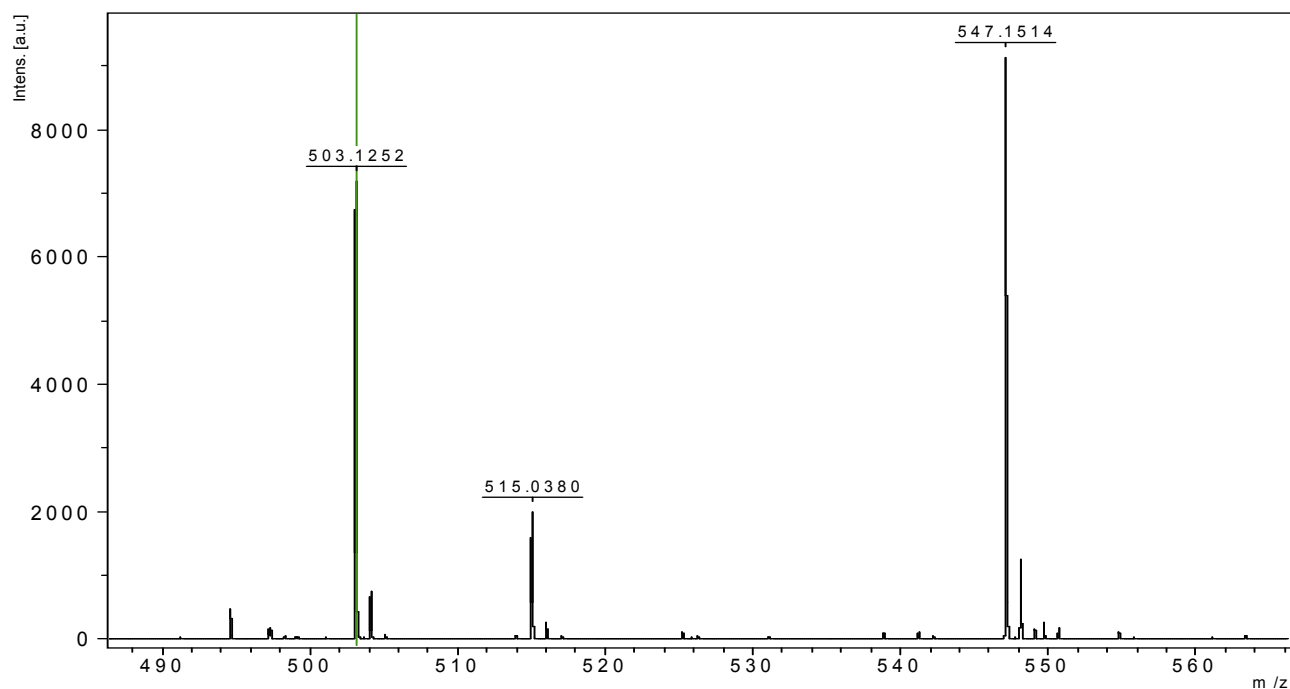


Figure S22. HRMS (MALDI-TOF) of **4l**, m/z : $[M + Cs]^+$ calcd for $C_{24}H_{18}N_2O_3Cs$ 515.0366; found 515.0380.

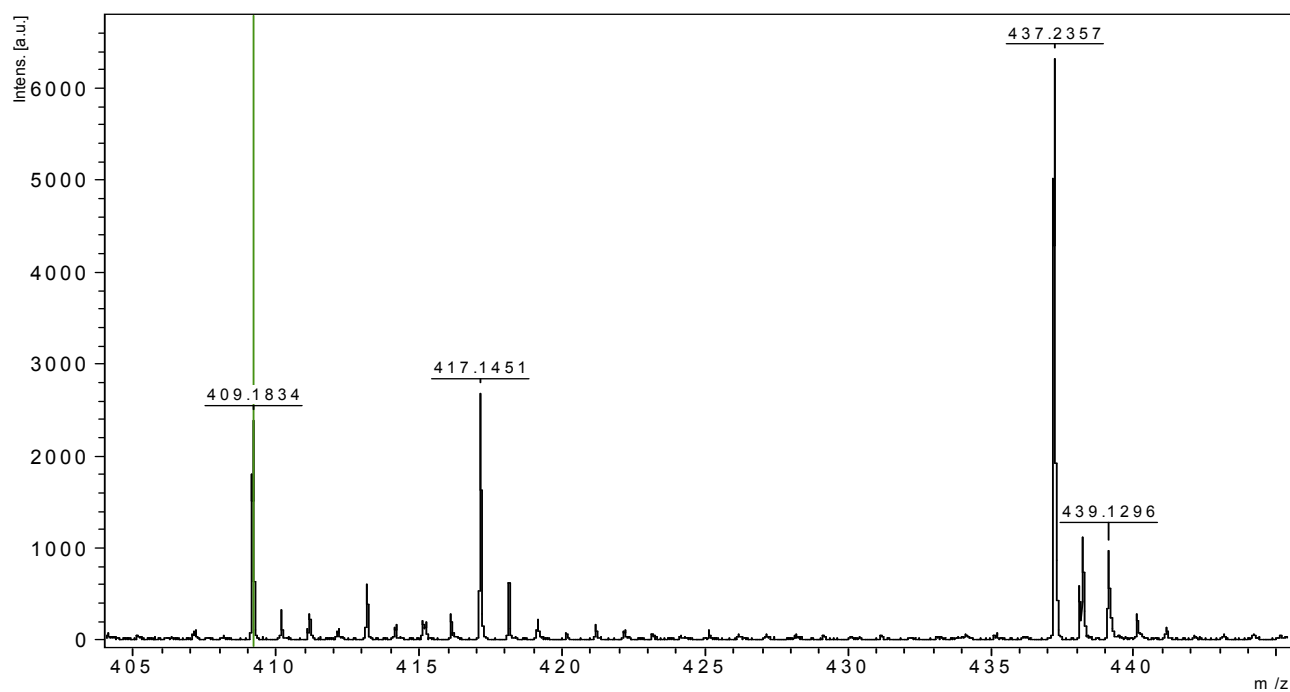


Figure S23. HRMS (MALDI-TOF) of **4m**, m/z : $[M + H]^+$ calcd for $C_{24}H_{21}N_2O_5$ 417.1445; found 417.1451.

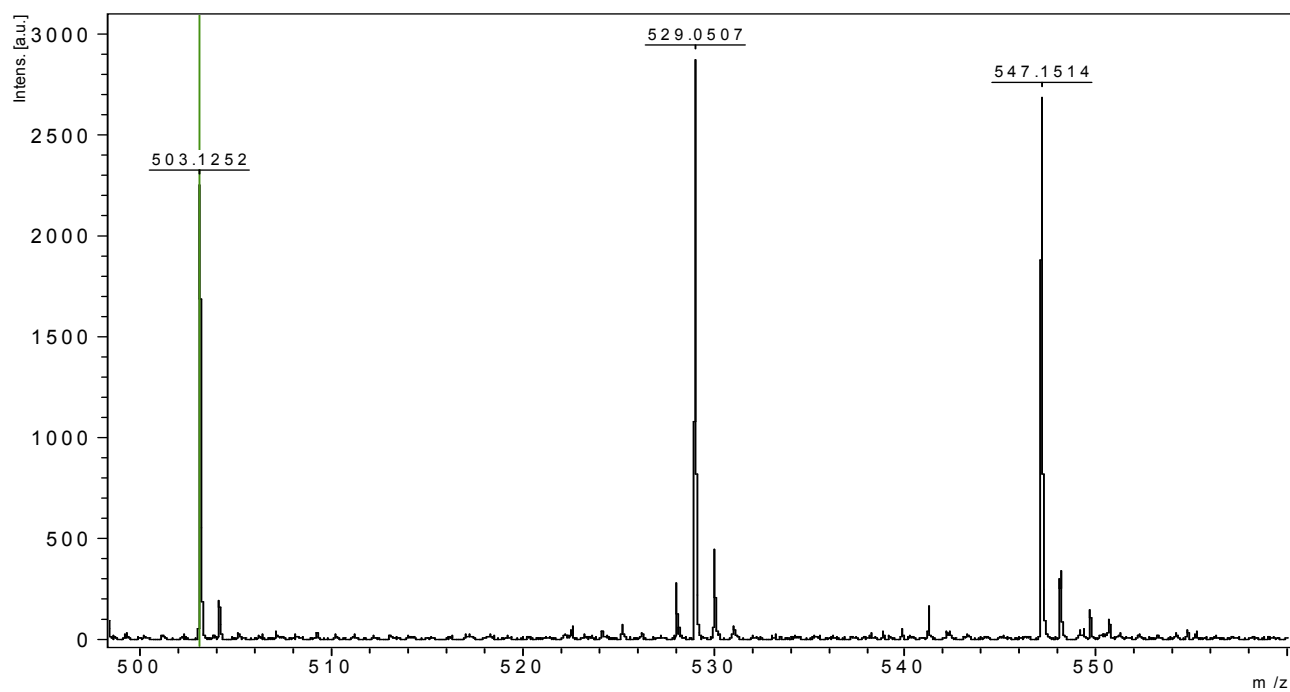


Figure S24. HRMS (MALDI-TOF) of **4n**, m/z : $[M + Cs]^+$ calcd for $C_{25}H_{20}N_2O_3Cs$ 529.0523; found 529.0507.

HRMS (MALDI-TOF) of **5**

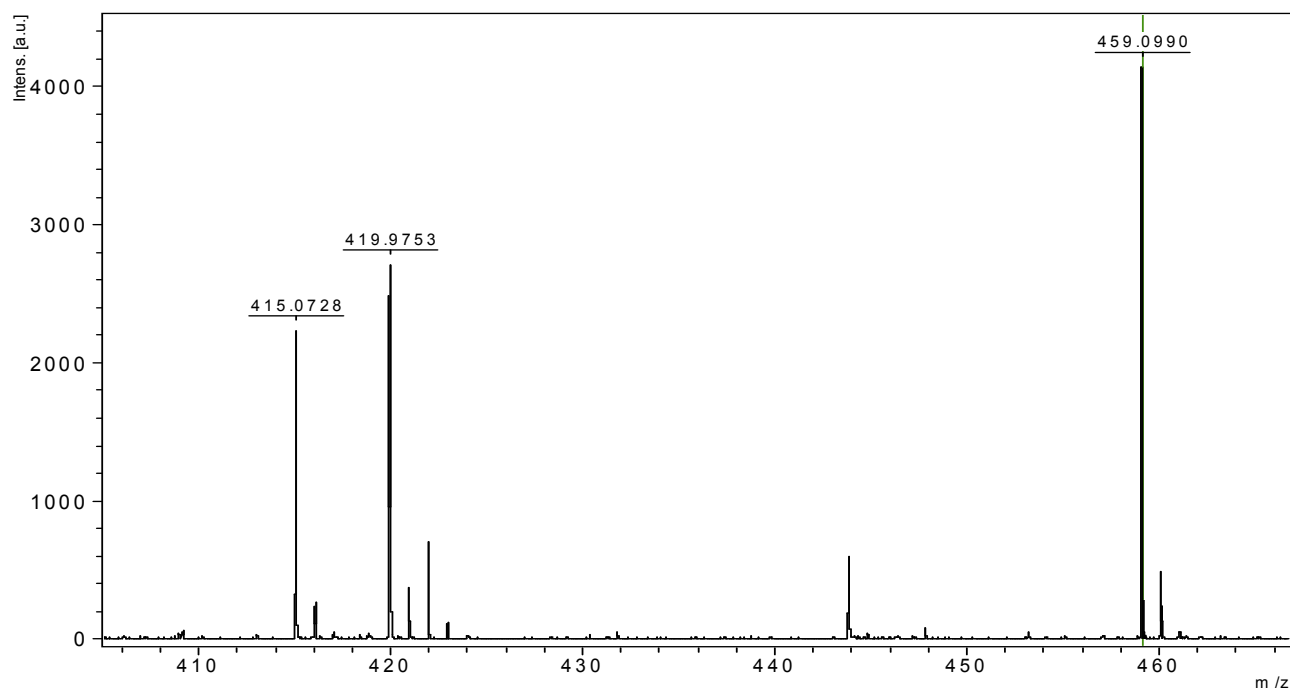


Figure S25. HRMS (MALDI-TOF) of **5a**, m/z : $[M + Cs]^+$ calcd for $C_{16}H_{14}ClNO_2Cs$ 419.9762; found 419.9753.

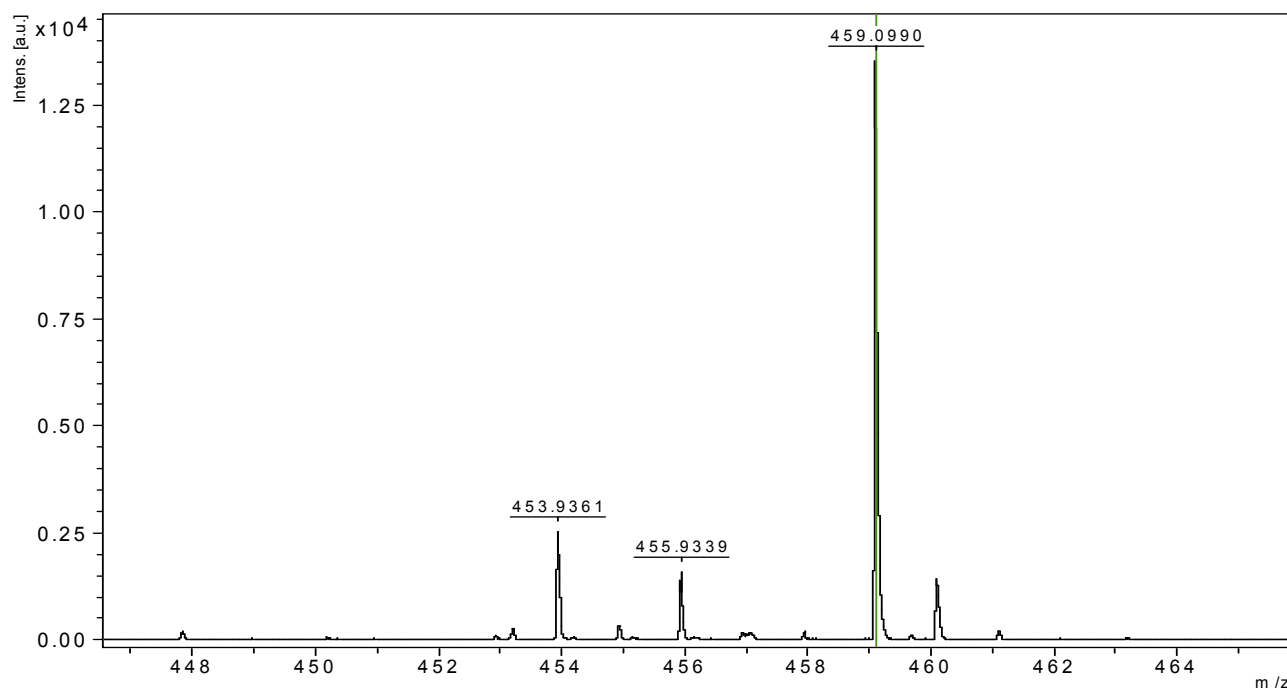


Figure S26. HRMS (MALDI-TOF) of **5b**, m/z : $[M + Cs]^+$ calcd for $C_{16}H_{13}Cl_2NO_2Cs$ 453.9372, 455.9345; found 453.9361, 455.9339.

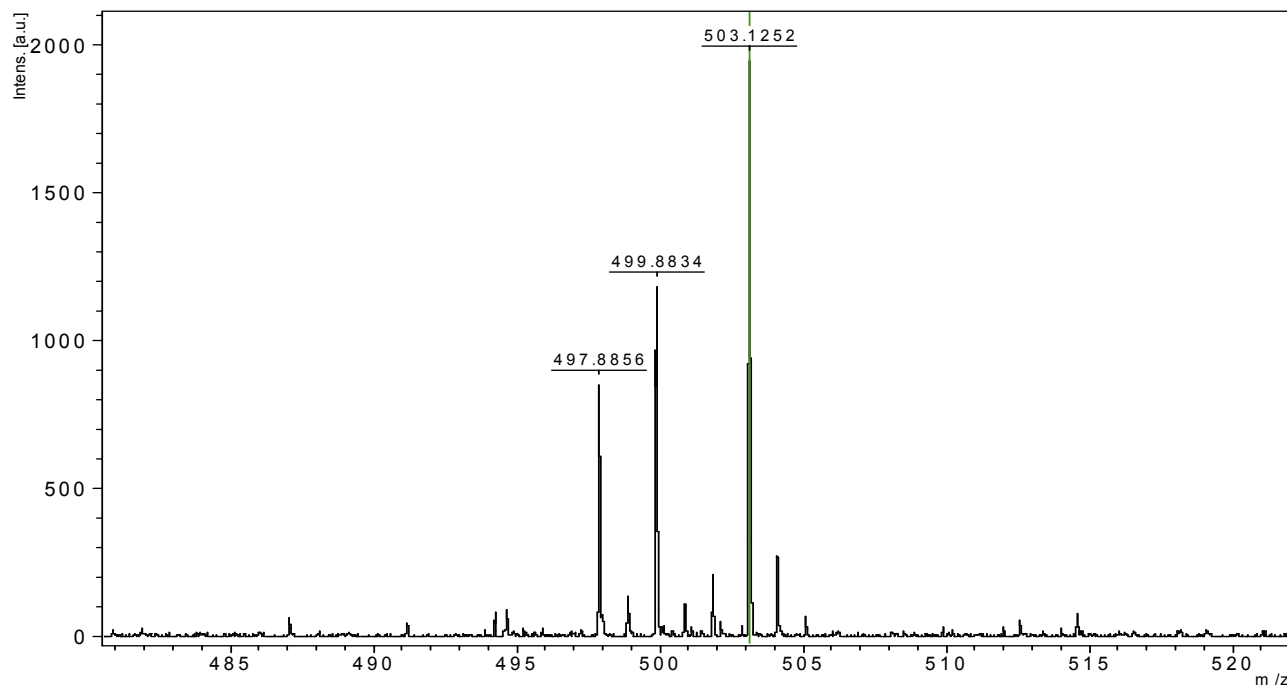


Figure S27. HRMS (MALDI-TOF) of **5c**, m/z : $[M + Cs]^+$ calcd for $C_{16}H_{13}BrClNO_2Cs$ 497.8867, 499.8846; found 497.8856, 499.8834.

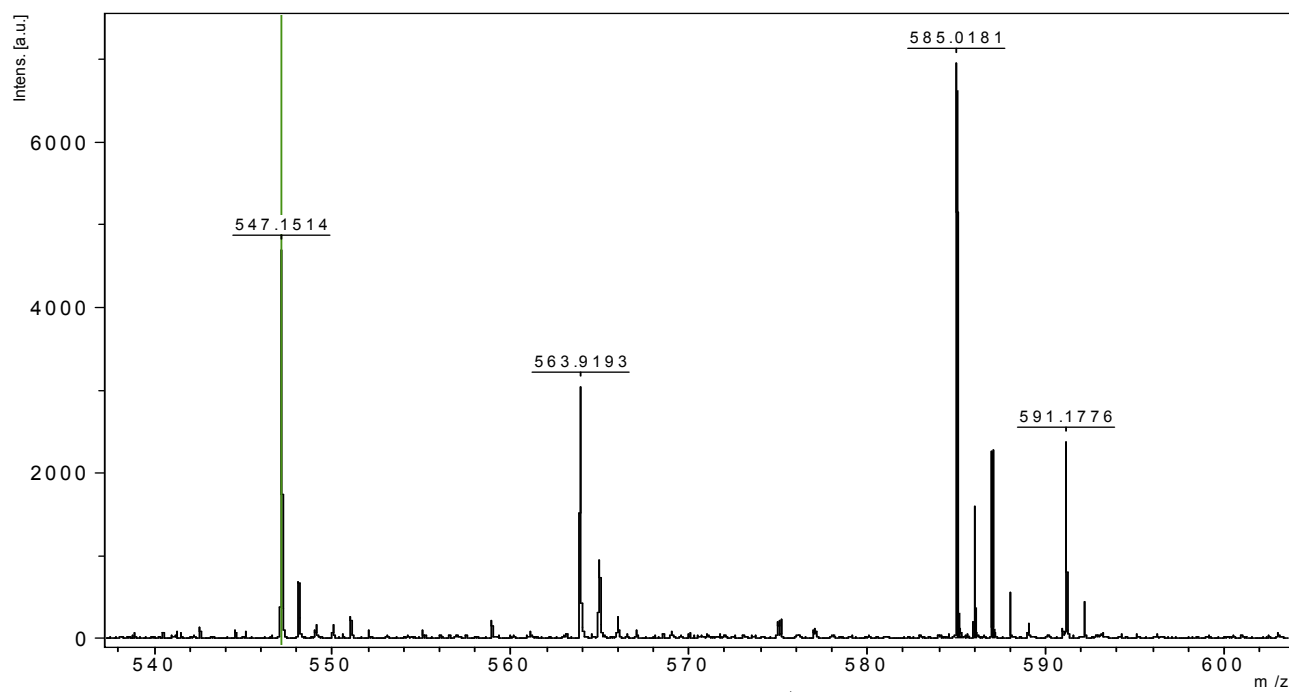


Figure S28. HRMS (MALDI-TOF) of **5m**, m/z : $[M + Cs]^+$ calcd for $C_{24}H_{21}ClN_2O_5Cs$ 585.0188; found 585.0181.

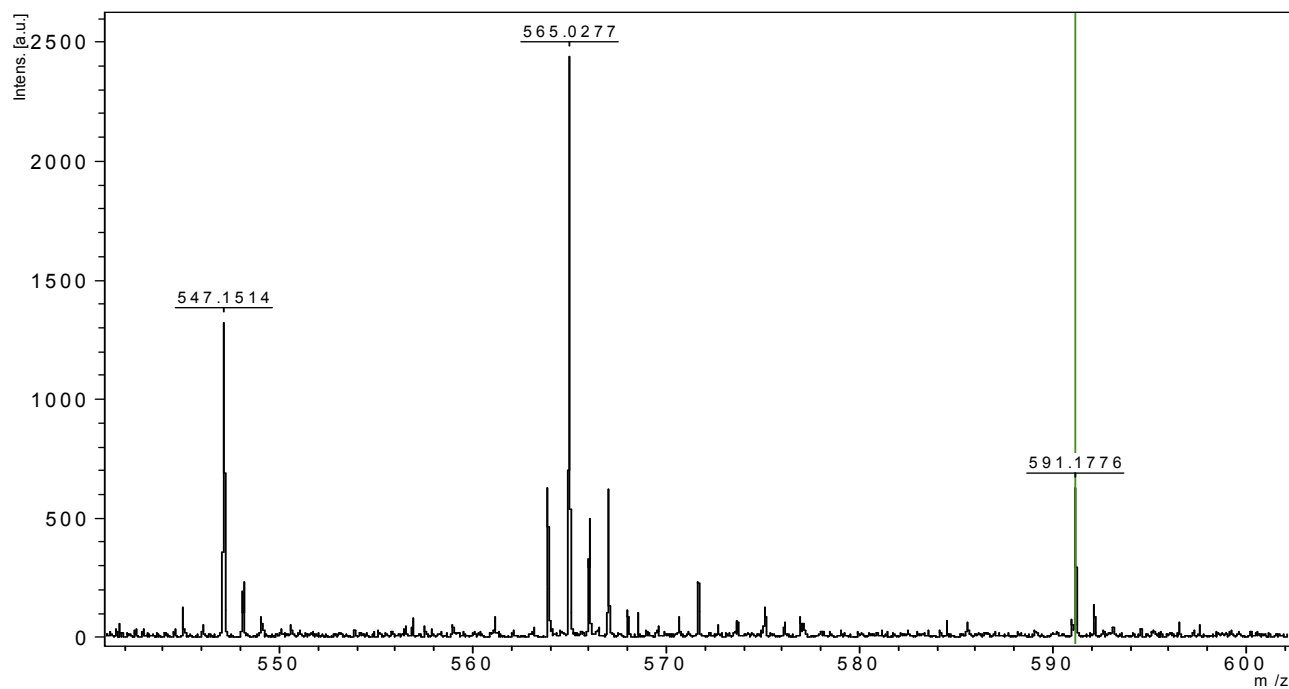


Figure S29. HRMS (MALDI-TOF) of **5n**, m/z : $[M + Cs]^+$ calcd for $C_{25}H_{21}ClN_2O_3Cs$ 565.0290; found 565.0277.

HRMS (MALDI-TOF) of 6-8

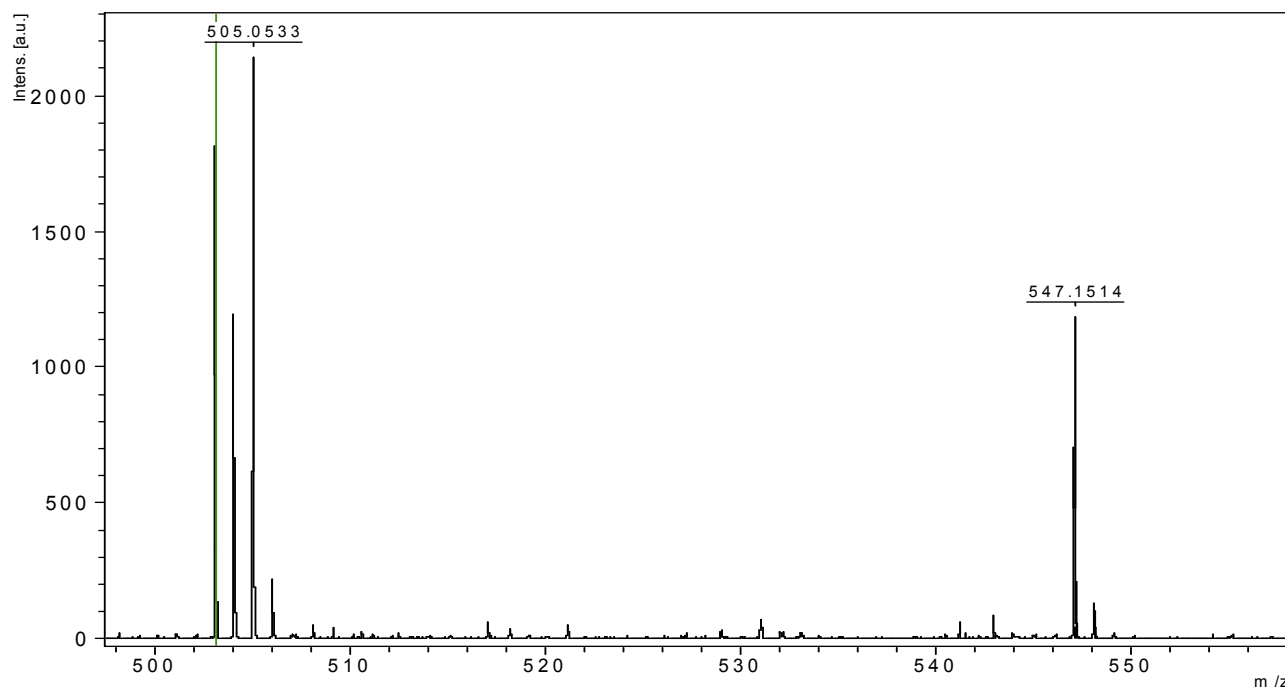


Figure S30. HRMS (MALDI-TOF) of **6a**, m/z : $[M + Cs]^+$ calcd for $C_{23}H_{20}N_2O_3Cs$ 505.0523; found 505.0533.

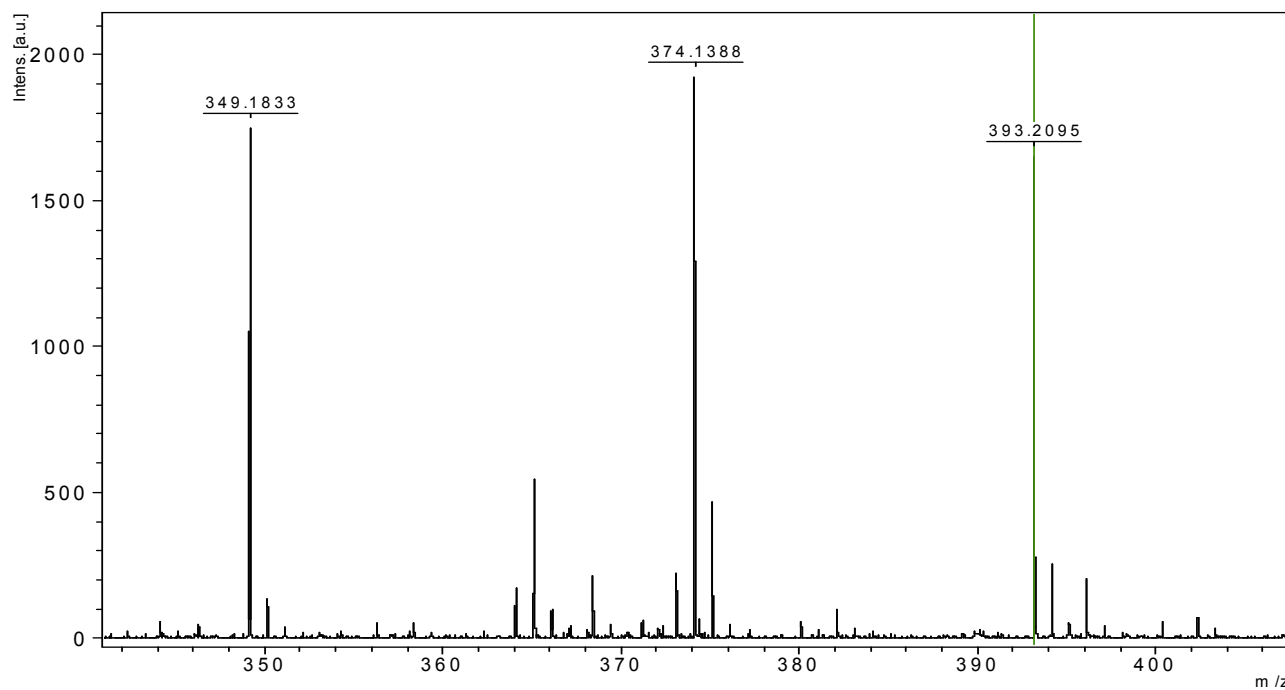


Figure S31. HRMS (MALDI-TOF) of **6b**, m/z : $[M + H]^+$ calcd for $C_{23}H_{20}NO_4$ 374.1387; found 374.1388.

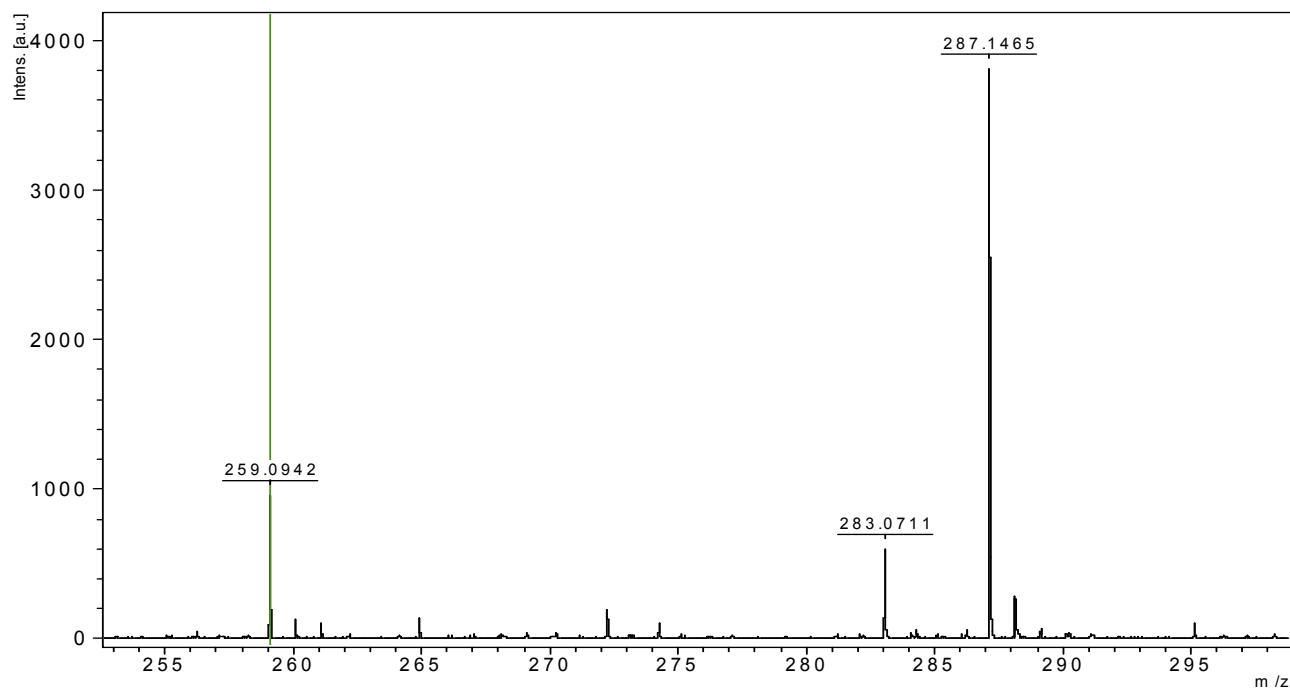


Figure S32. HRMS (MALDI-TOF) of **7a**, m/z : $[M + H]^+$ calcd for $C_{15}H_{11}N_2O_4$ 283.0713; found 283.0711.

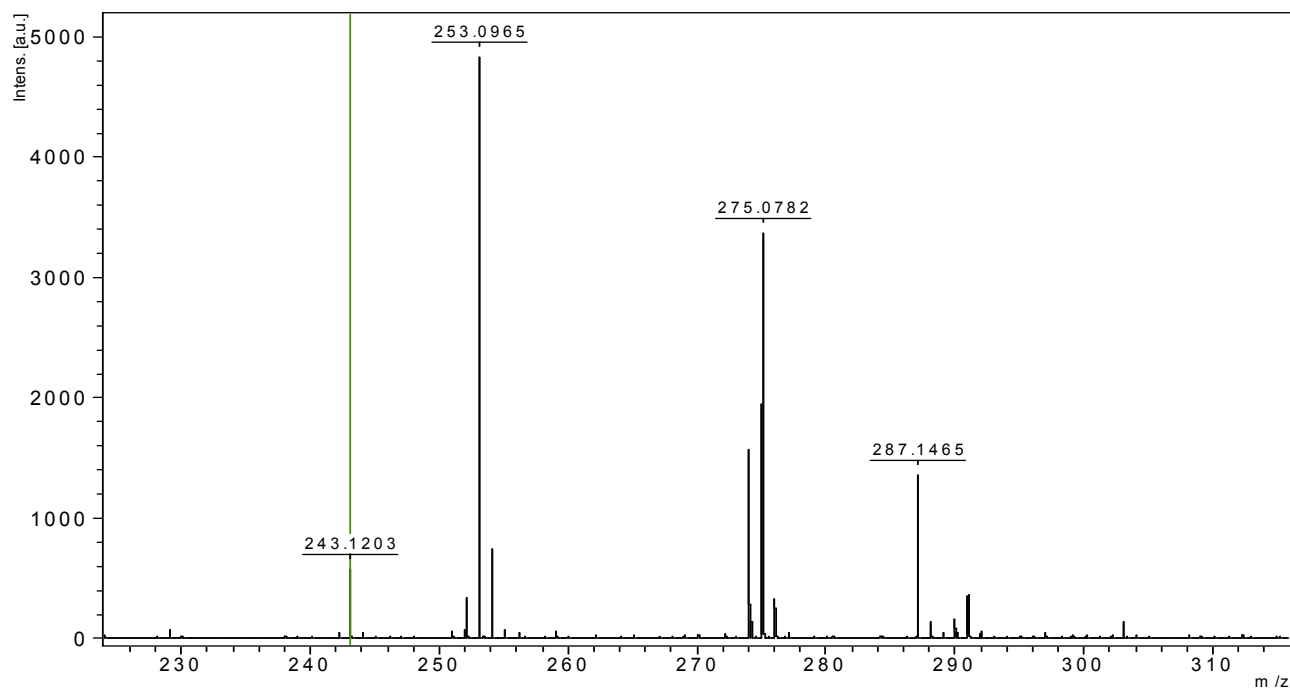


Figure S33. HRMS (MALDI-TOF) of **7b**, m/z : $[M + H]^+$ calcd for $C_{15}H_{13}N_2O_2$ 253.0972; found 253.0965; $[M + Na]^+$ calcd for $C_{15}H_{12}N_2O_2Na$ 275.0791; found 275.0782.

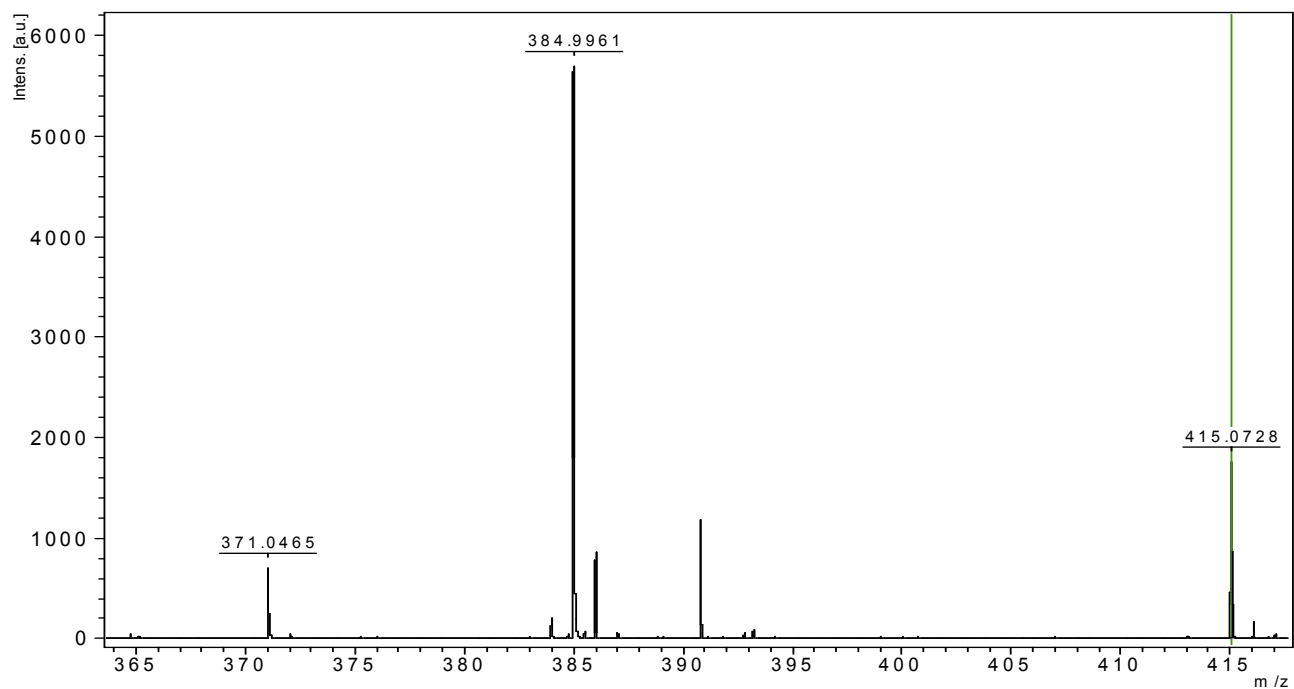


Figure S34. HRMS (MALDI-TOF) of **7b**, m/z : $[M + Cs]^+$ calcd for $C_{15}H_{12}N_2O_2Cs$ 384.9948; found 384.9961.

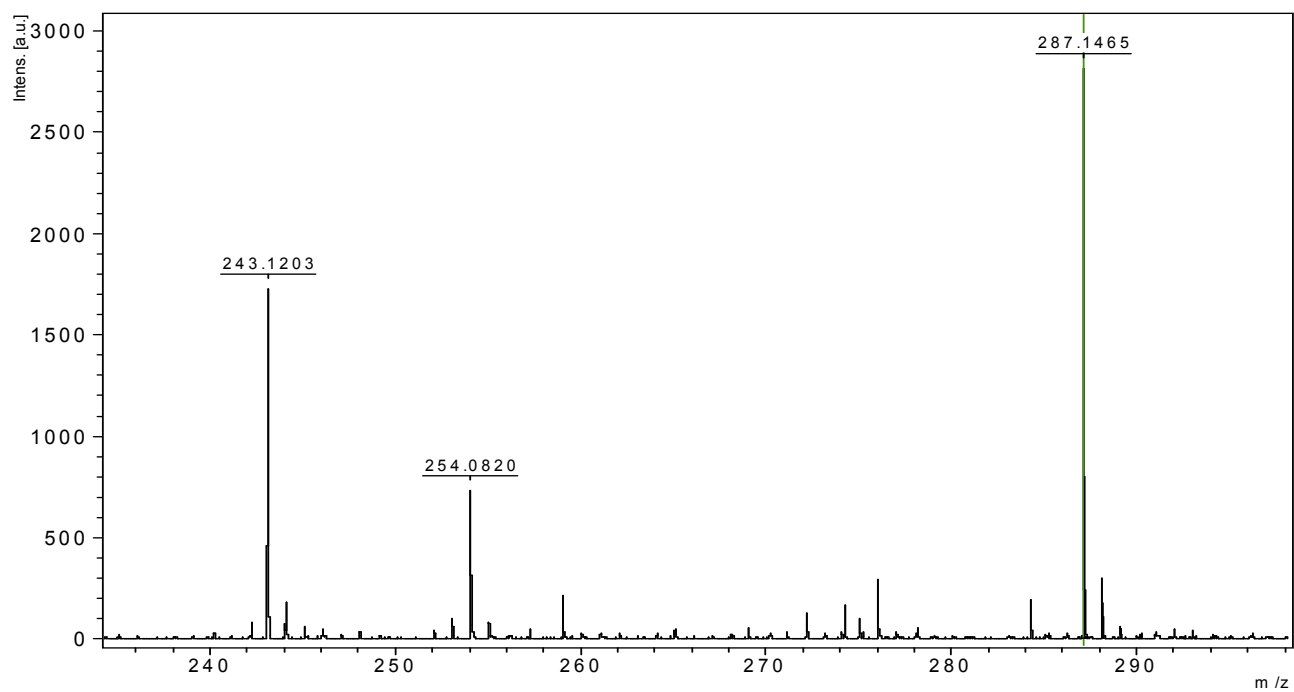


Figure S35. HRMS (MALDI-TOF) of **8**, m/z : $[M + H]^+$ calcd for $C_{15}H_{12}NO_3$ 254.0812; found 254.0820.

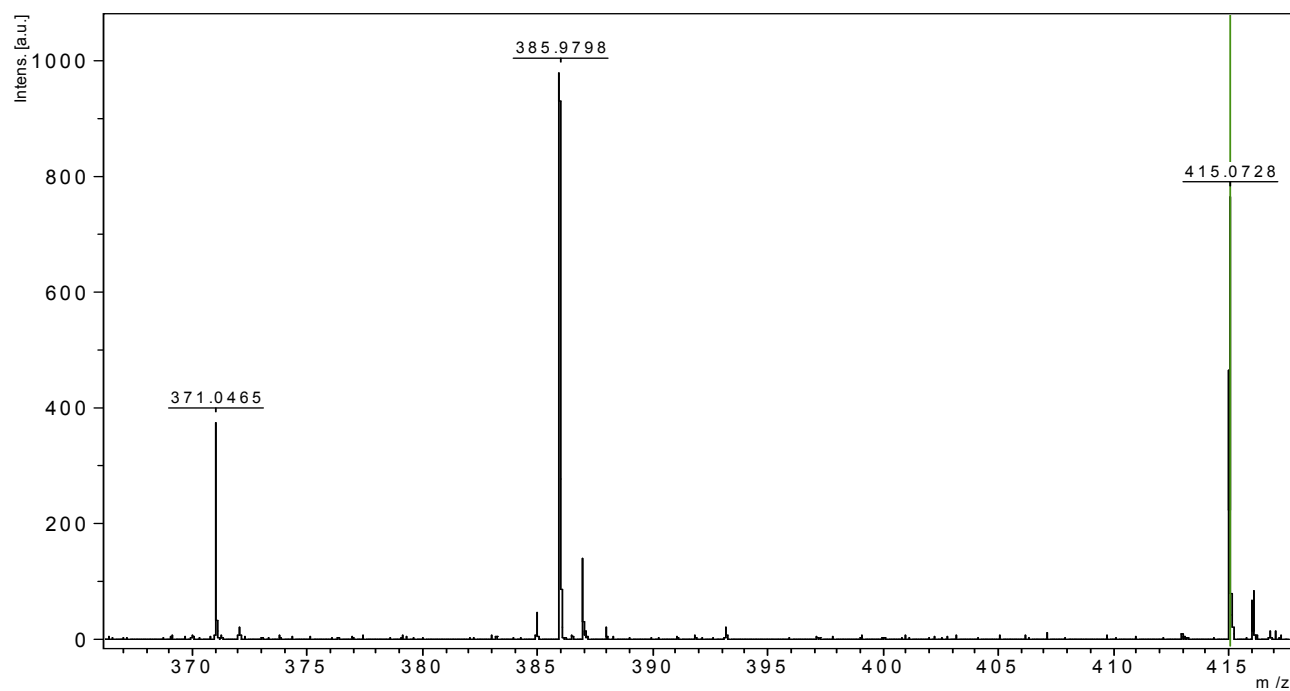


Figure S36. HRMS (MALDI-TOF) of **8**, m/z : $[M + Cs]^+$ calcd for $C_{15}H_{11}NO_3Cs$ 385.9788; found 385.9798.