

## Supplementary Information (SI)

# Investigating of *N*-terminal amino function of Arg<sub>10</sub>-teixobactin

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### Table of content

Figure S1: HPLC of analogue 2	S2
Figure S2: MALDI-TOF spectra of analogue 2	S2
Figure S3: HPLC of analogue 3	S3
Figure S4: MALDI-TOF spectra of analogue 3	S3
Figure S5: HPLC of analogue 4	S4
Figure S6: MALDI-TOF spectra of analogue 4	S4
Figure S7: HPLC of analogue 5	S5
Figure S8: MALDI-TOF spectra of analogue 5	S5
Figure S9: HPLC of analogue 6	S6
Figure S10: MALDI-TOF spectra of analogue 6	S6
Figure S11: HPLC of analogue 8	S7
Figure S12: MALDI-TOF spectra of analogue 8	S7
Figure S13: HPLC of analogue 9	S8
Figure S14: MALDI-TOF spectra of analogue 9	S8
Figure S15: HPLC of analogue 10	S9
Figure S16: MALDI-TOF spectra of analogue 10	S9

Figure S1: HPLC of analogue2 (method 10-60% B in 15 min)

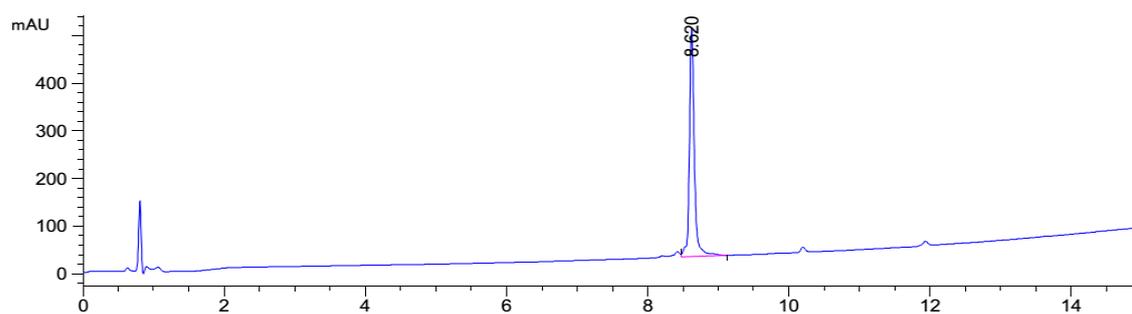


Figure S2: MALDI-TOF spectra of analogue 2 (Expected mass = 1230.4770, observed mass for  $M+H^+$ ,  $M+Na^+$ , and  $M+K^+$ )

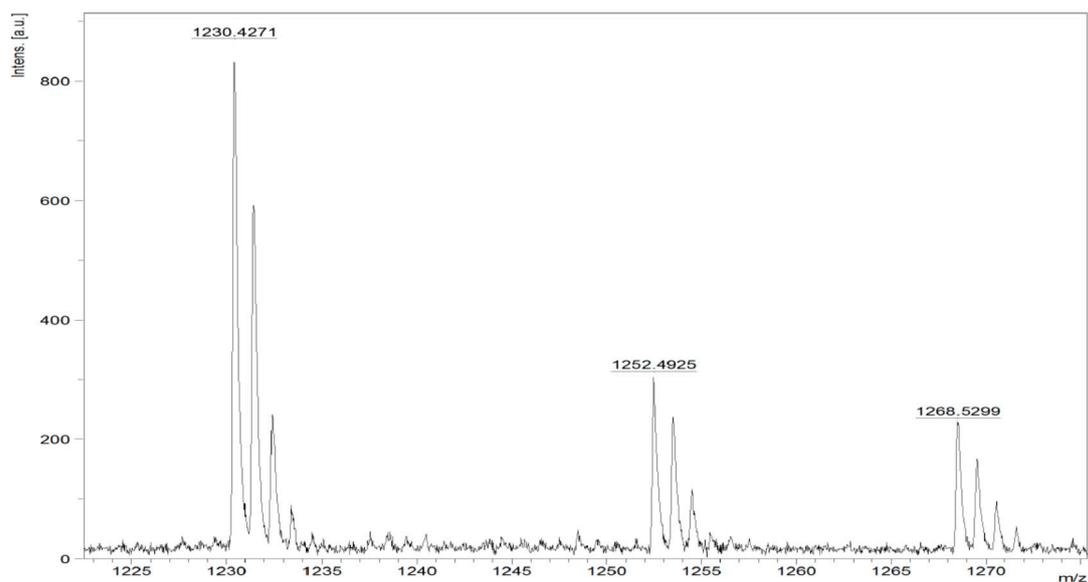
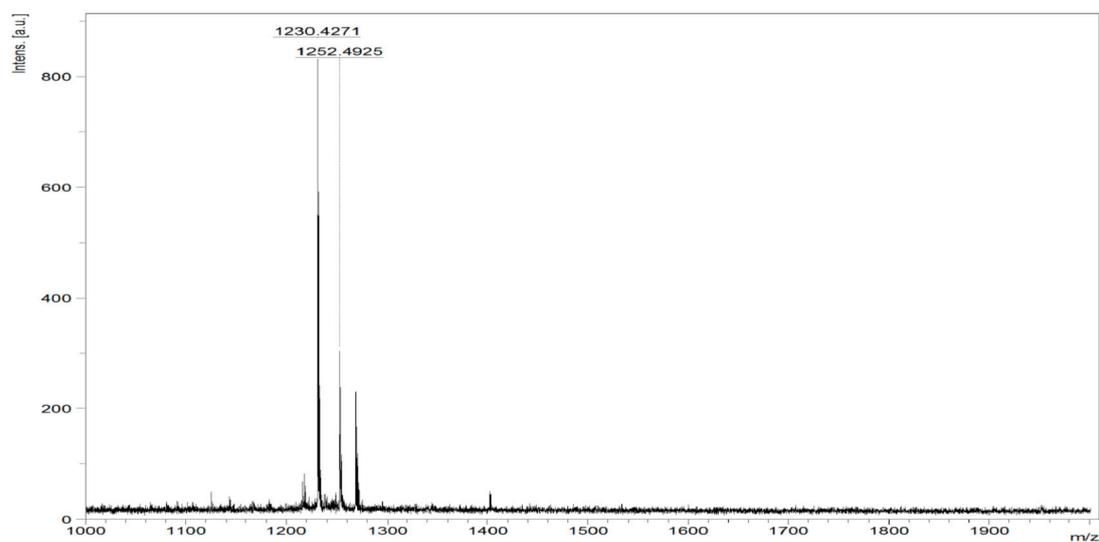


Figure S3: HPLC of analogue3 (method 25-50% B in 15 min)

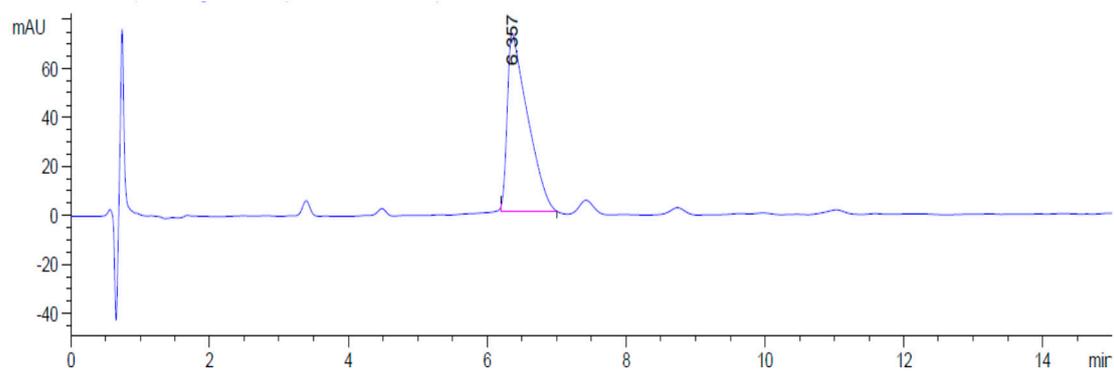


Figure S4: MALDI-TOF spectra of analogue 3 (Expected mass = 1258.5310, observed mass for  $M+H^+$ , and  $M+Na^+$ )

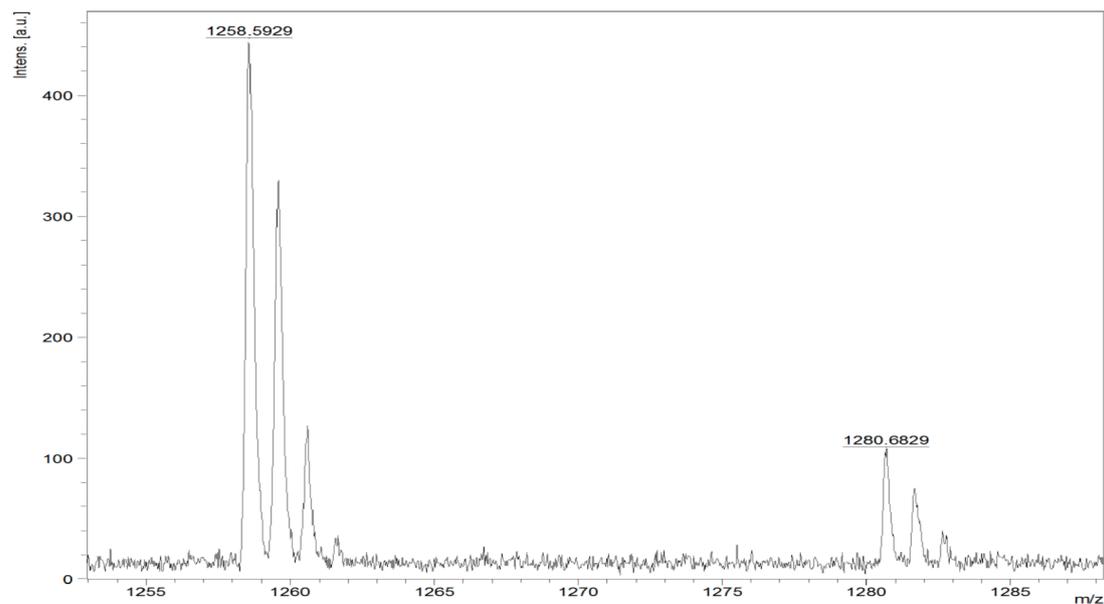
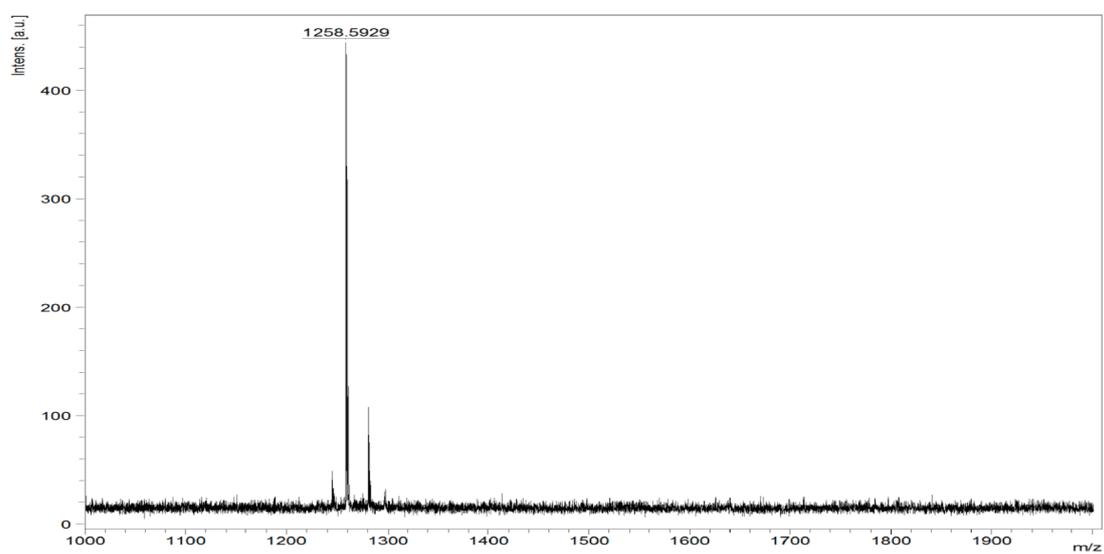


Figure S5: HPLC of analogue 4 (method 25-40% B in 15 min)

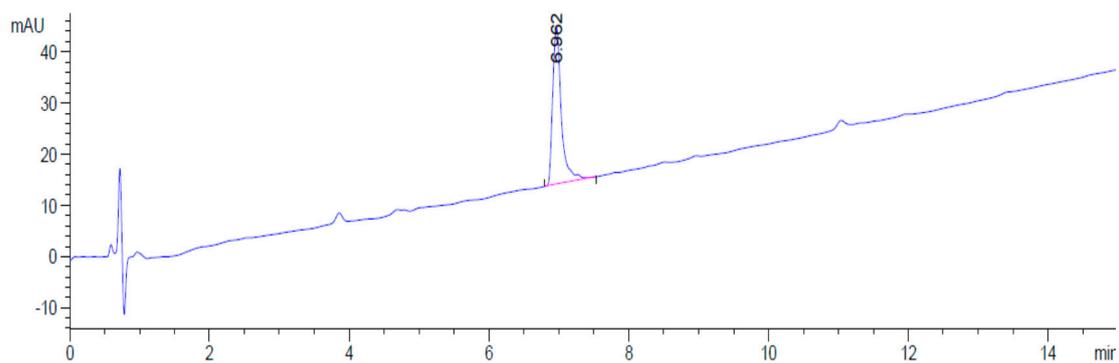


Figure S6: MALDI-TOF spectra of analogue 4 (Expected mass = 1320.6020, observed mass for  $M+H^+$ ,  $M+Na^+$ , and  $M+K^+$ )

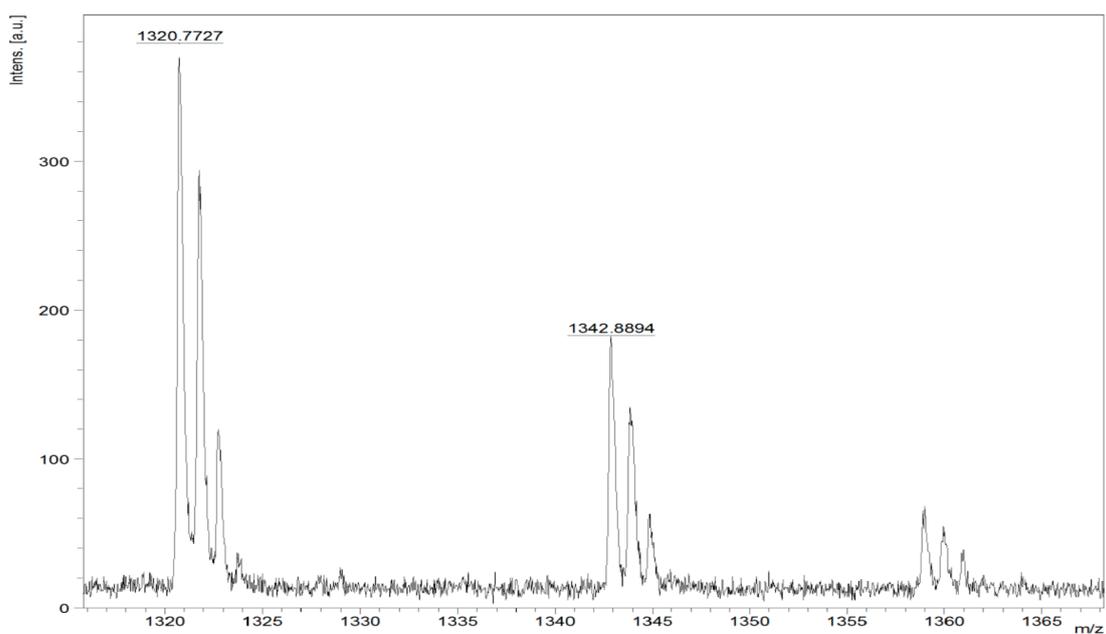
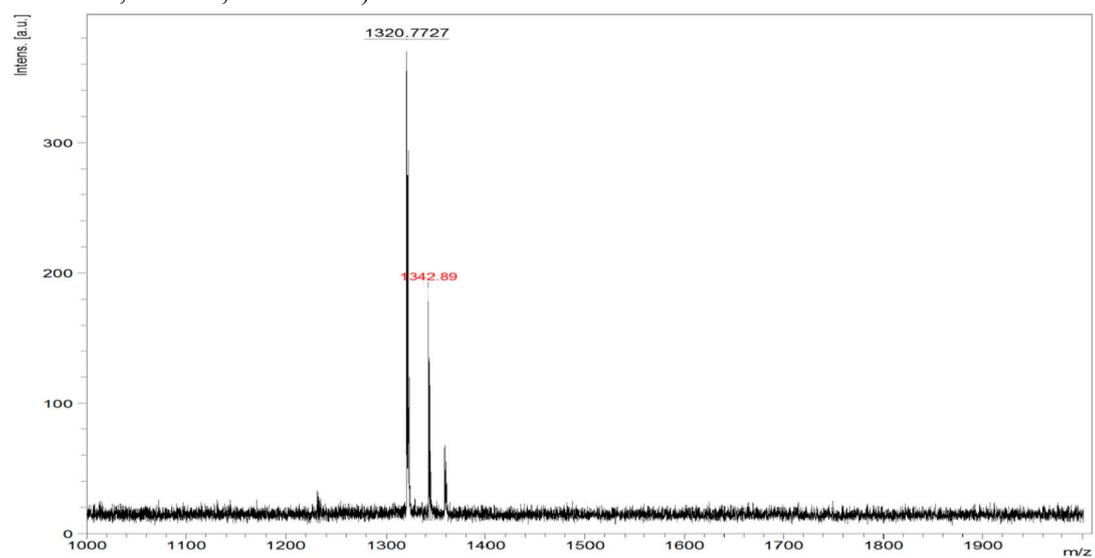


Figure S7: HPLC of analogue **5** (method 10-65% B in 15 min)

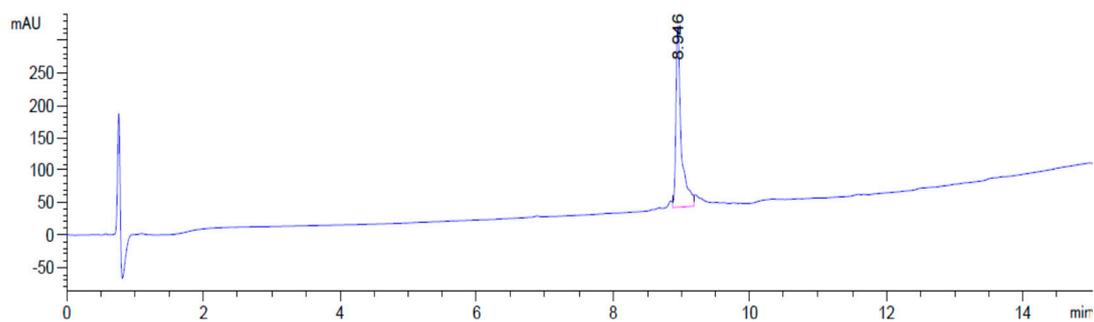


Figure S8: MALDI-TOF spectra of analogue **5** (Expected mass = 1370.7470, observed mass for  $M+H^+$ ,  $M+Na^+$ , and  $M+K^+$ )

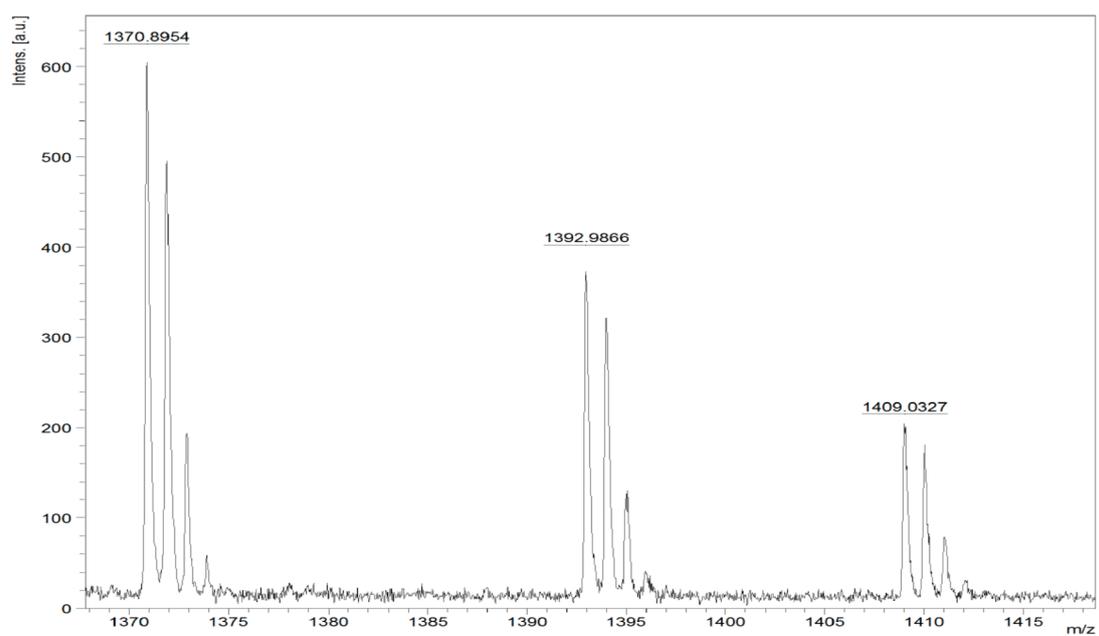
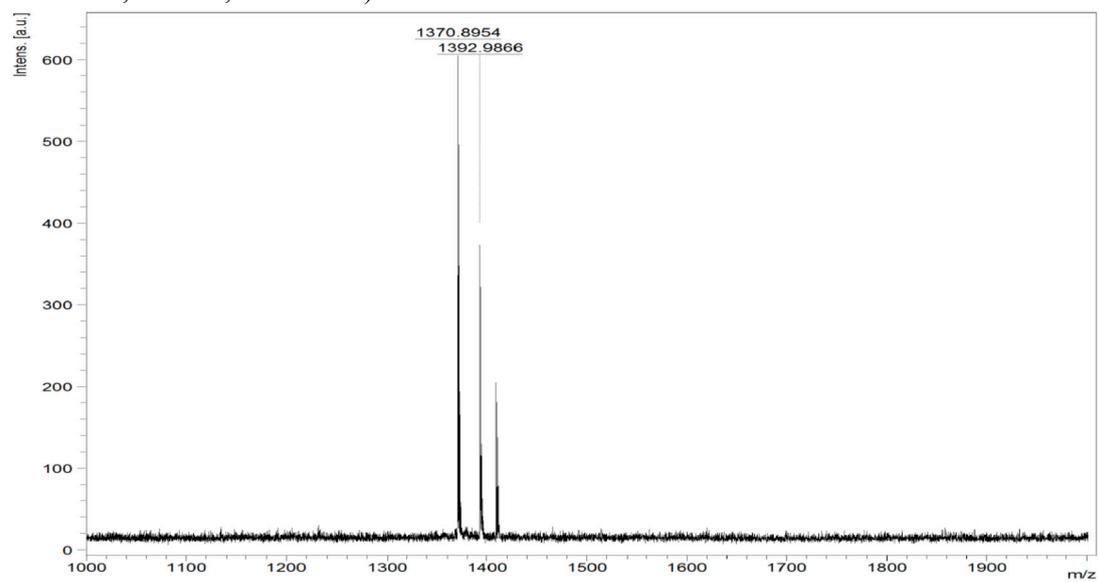


Figure S9: HPLC of analogue 6 (method 10-65% B in 15 min)

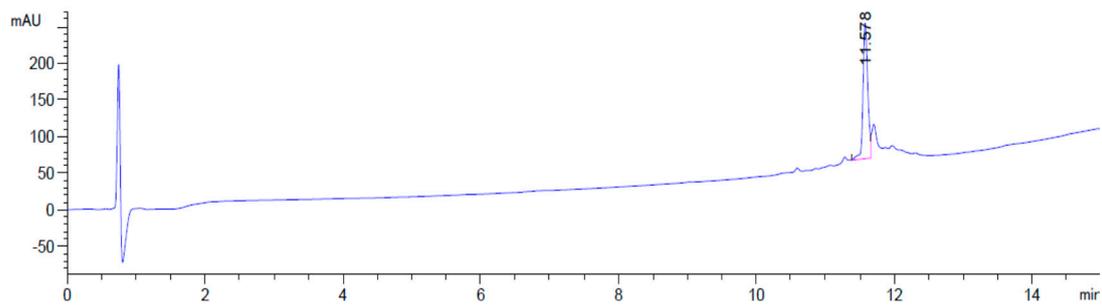


Figure S10: MALDI-TOF spectra of analogue 6 (Expected mass = 1511.0170, observed mass for  $M+H^+$ ,  $M+Na^+$ , and  $M+K^+$ )

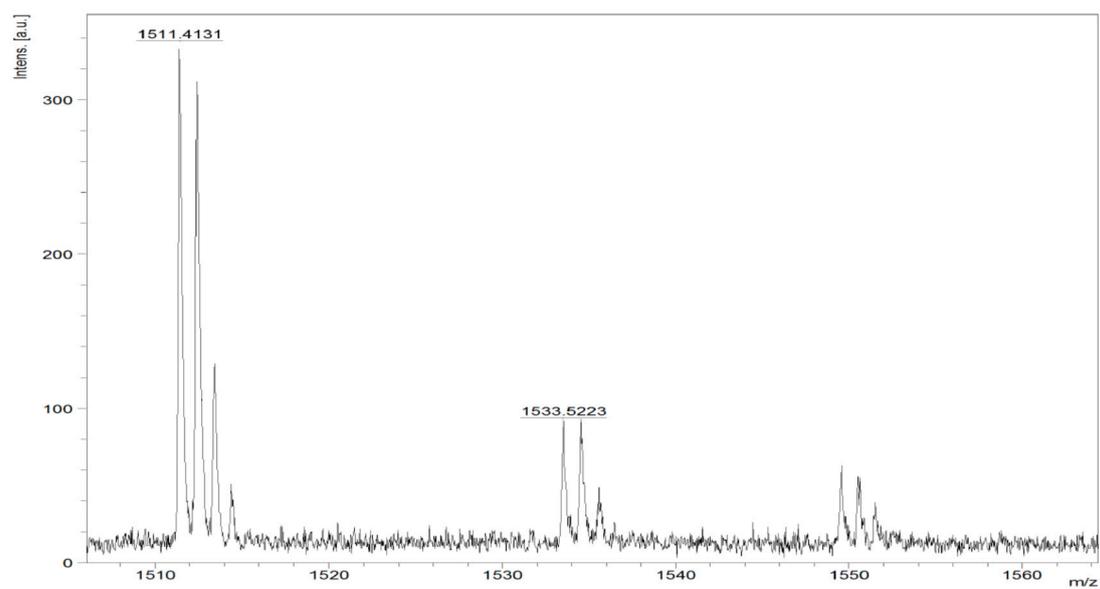
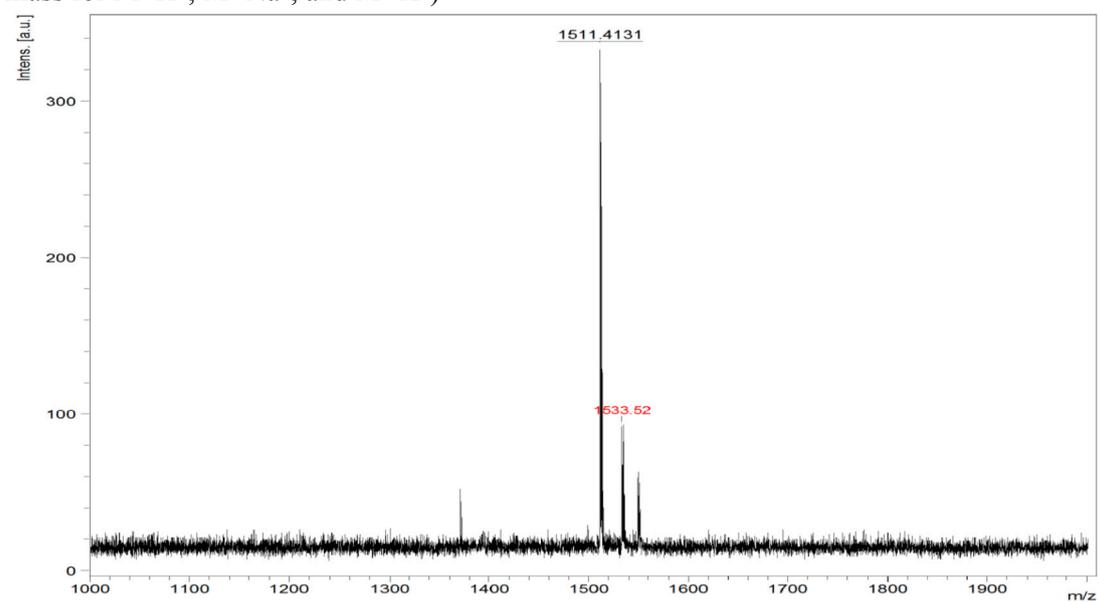


Figure S11: HPLC of analogue **8** (method 45-85% B in 15 min)

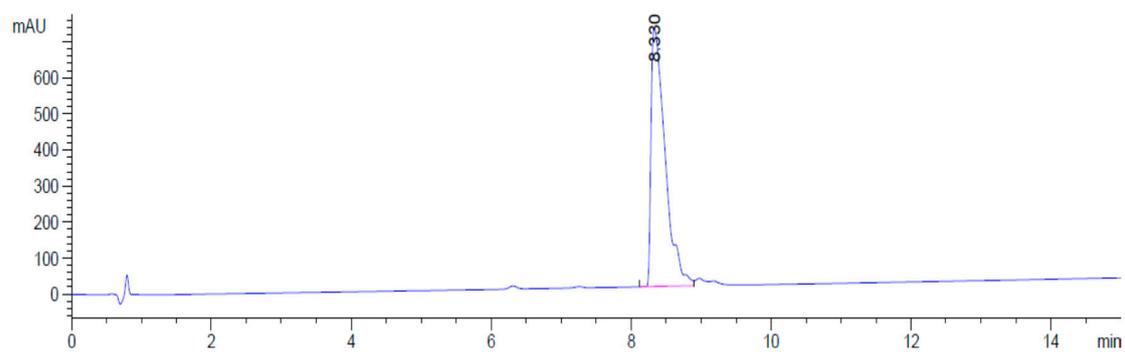


Figure S12: MALDI-TOF spectra of analogue **8** (Expected mass = 1384.7300, observed mass for  $M+H^+$ )

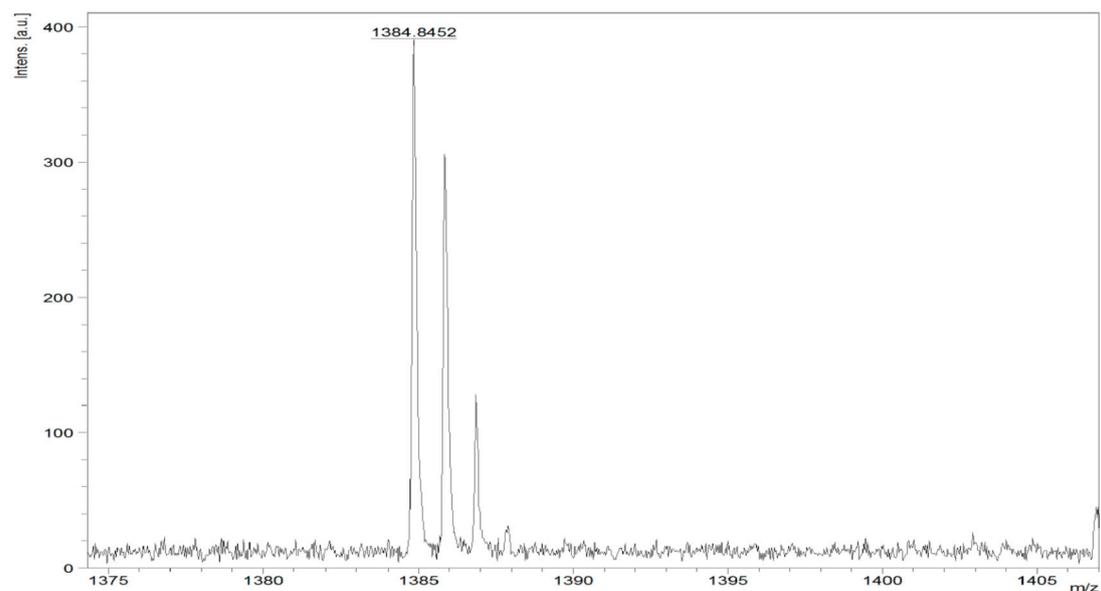
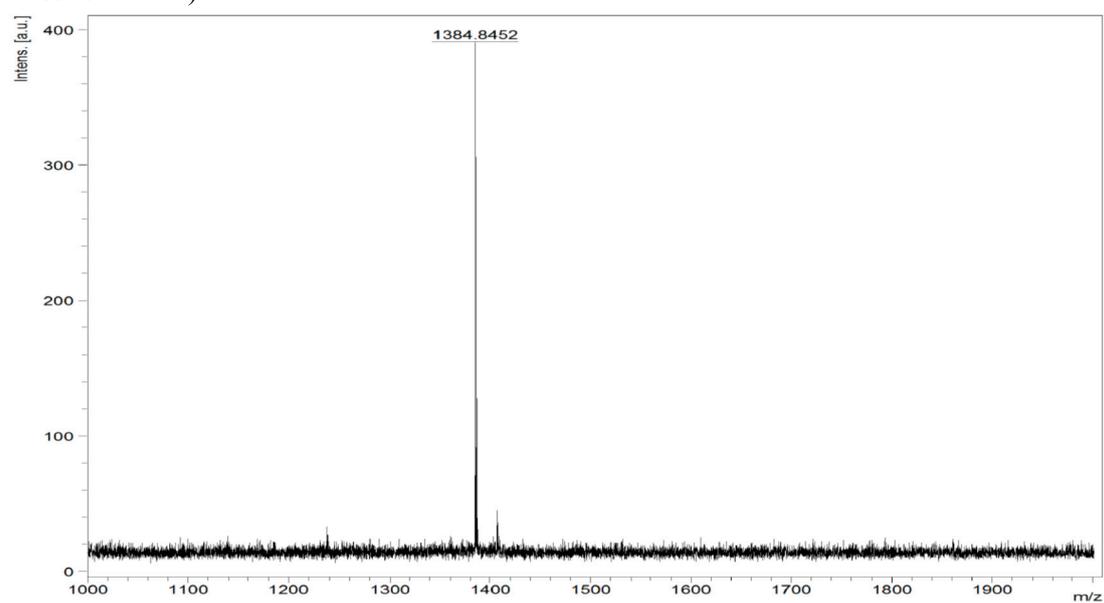


Figure S13: HPLC of analogue **9** (method 30-50% B in 15 min)

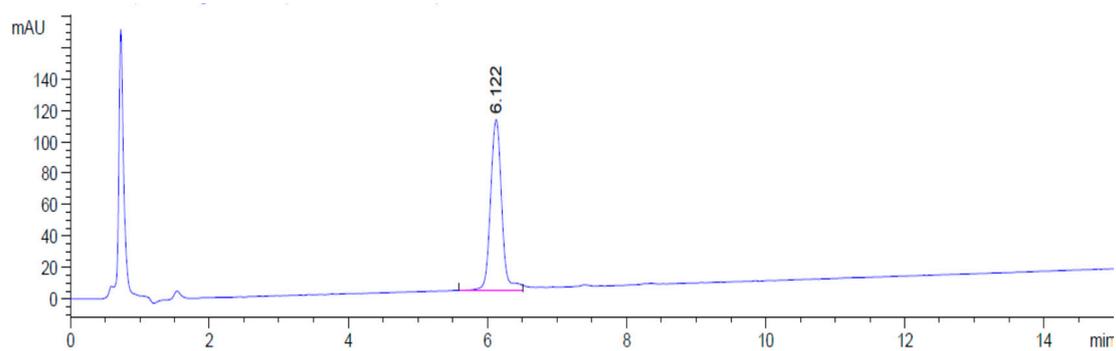


Figure S14: MALDI-TOF spectra of analogue **9** (Expected mass = 1272.5140, observed mass for  $M+H^+$ )

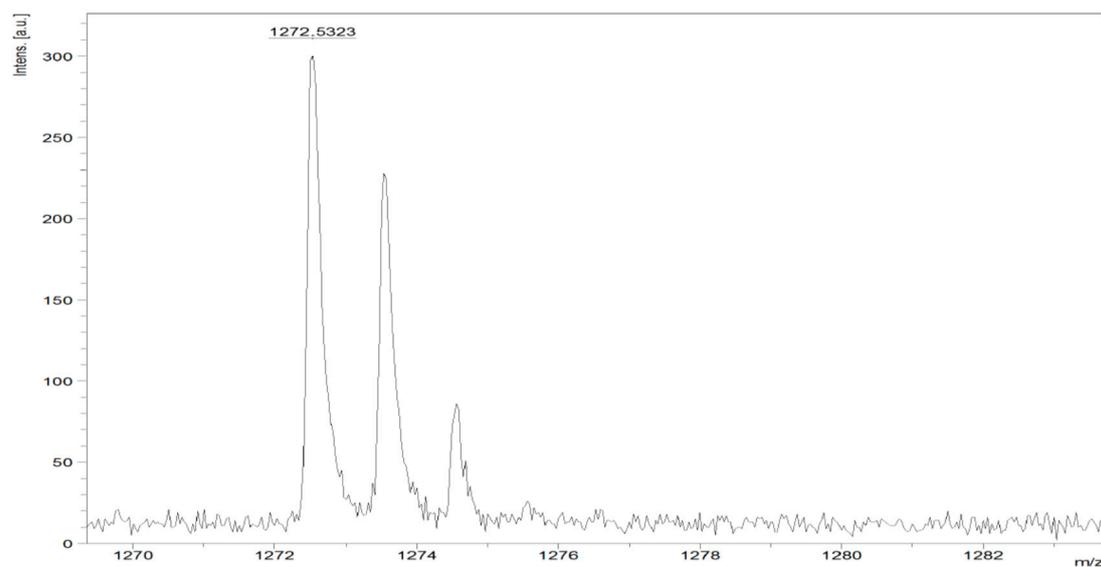
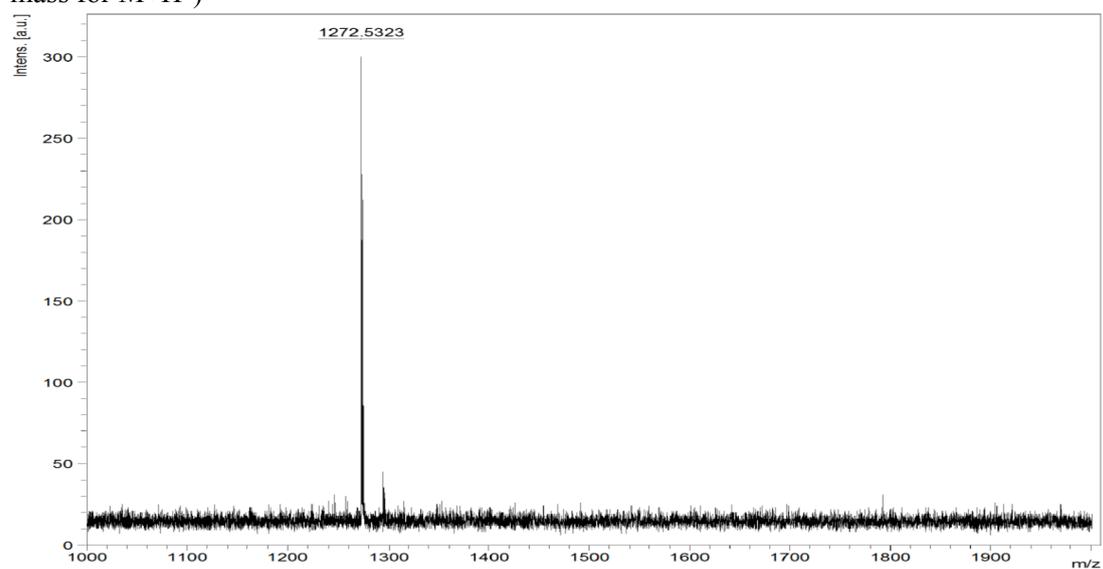


Figure S15: HPLC of analogue **10** (method 30-50% B in 15 min)

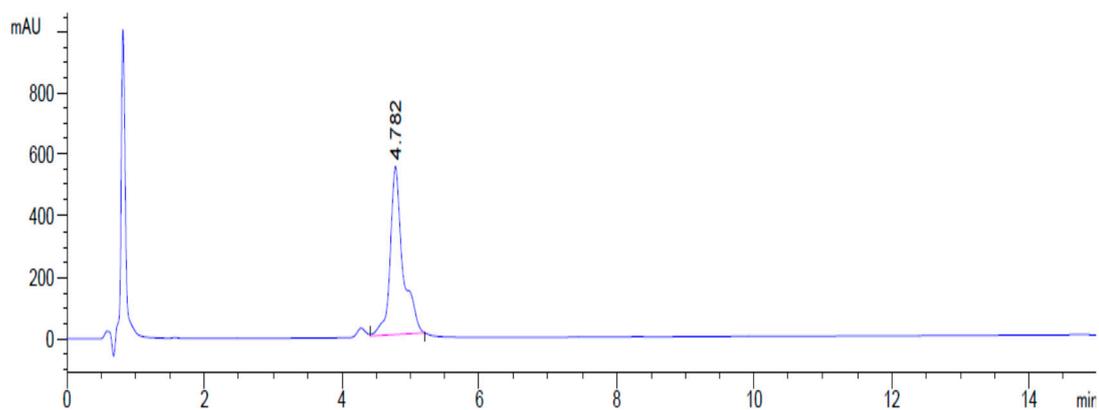


Figure S16: MALDI-TOF spectra of analogue **10** (Expected mass = 1328.6260, observed mass for  $M+H^+$ ,  $M+Na^+$ , and  $M+K^+$ )

