Supporting information

Fabrication of Hollow Self-Assembled Peptide Microvesicles and Transition from Sphere-to-Rod Structure

Sibaprasad Maity, Poulami Jana, Suman K Maity and Debasish Haldar*

Department of Chemical Sciences, Indian Iinstitute of Science Education and Research-Kolkata, Mohanpur, West Bengal-741246, India.

Fax: +913473279131 ; Tel: +913473279130;
E-mail: deba_h76@yahoo.com

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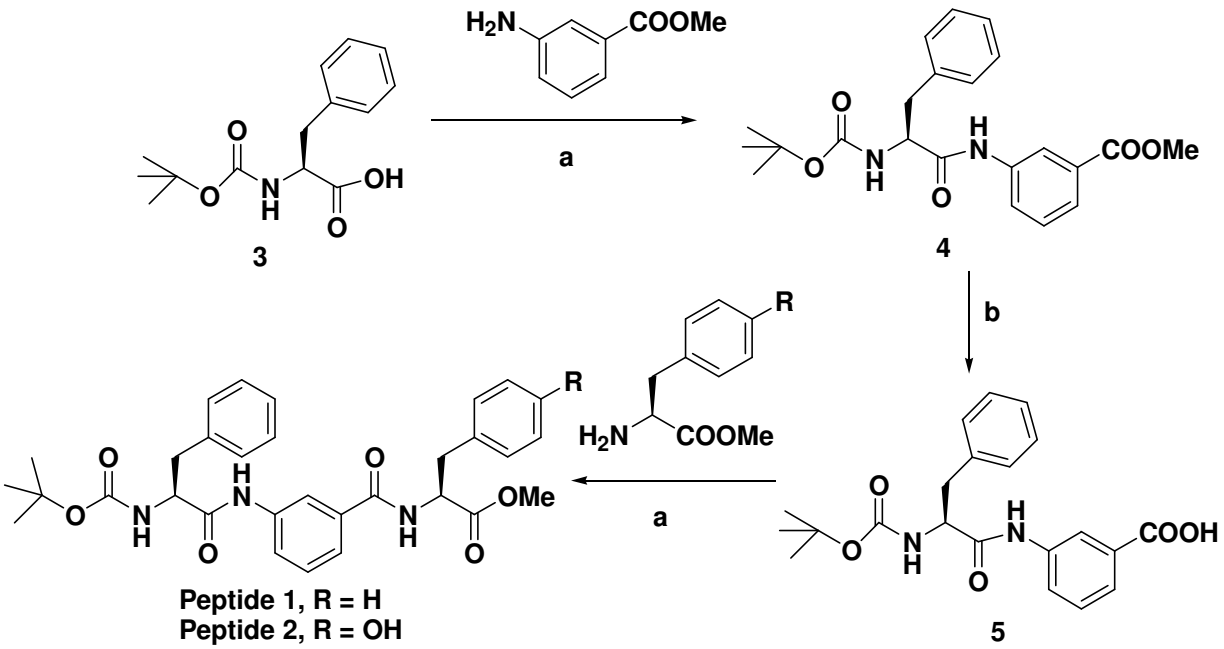


Figure S1: Synthesis of peptides **1** and **2**. Reactions and conditions: (a) Dry DCM, DCC, HOBT, 0˚C. (b) MeOH, 2(N) NaOH.

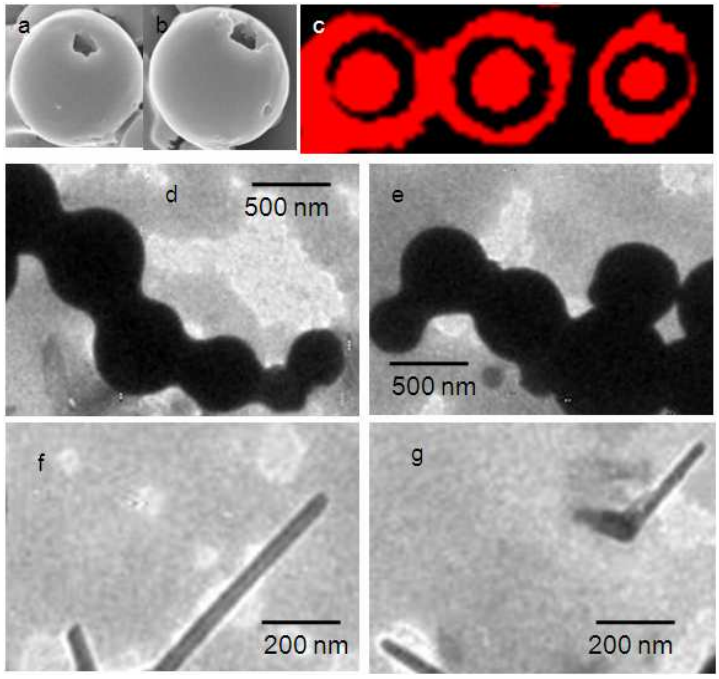


Figure S2: (a) and (b) Hollow microspheres of peptide **2** by FE-SEM; (c) Confocal microscopic images of Rhodamine 6G encapsulated peptide **1** hollow microspheres; (d) and (e) TEM images showing the fusion of microvesicles of peptide **1**; (f) and (g) TEM images of nanorod obtained from peptide **1**.

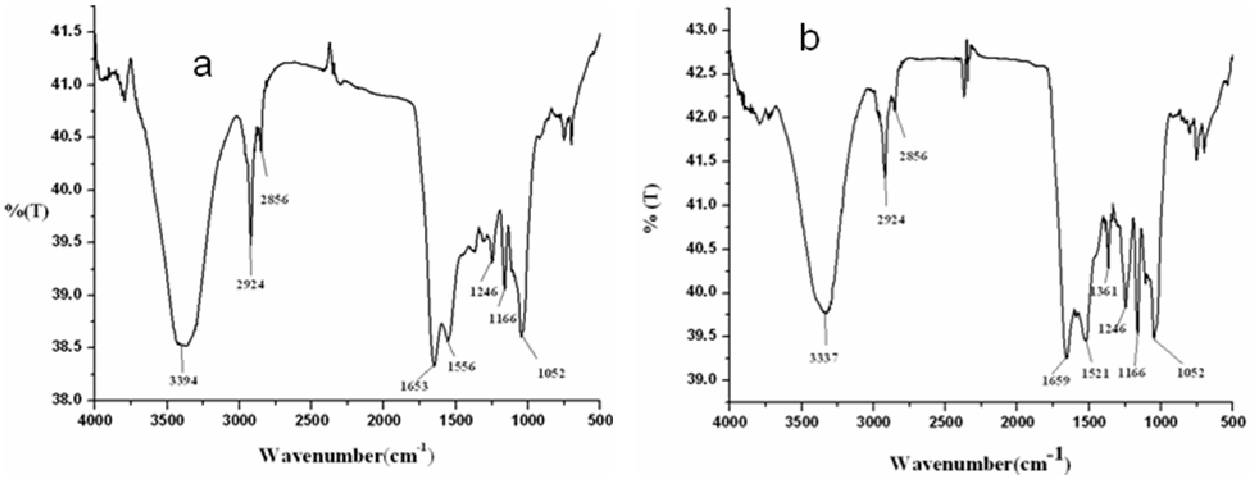


Figure S3. FT-IR spectra of peptide **1** and **2** vesicles.

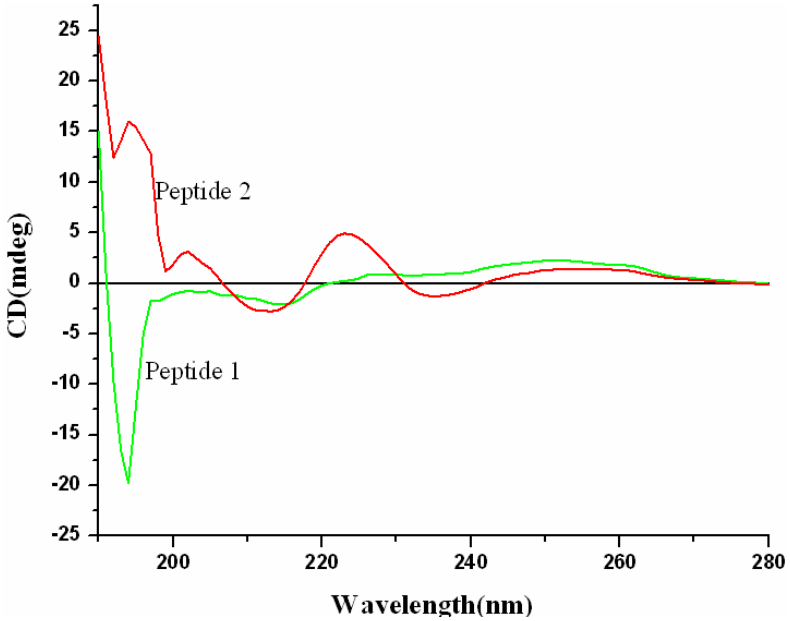


Figure S4. CD spectra of peptide **1** and **2** at 0.4 mM concentration.

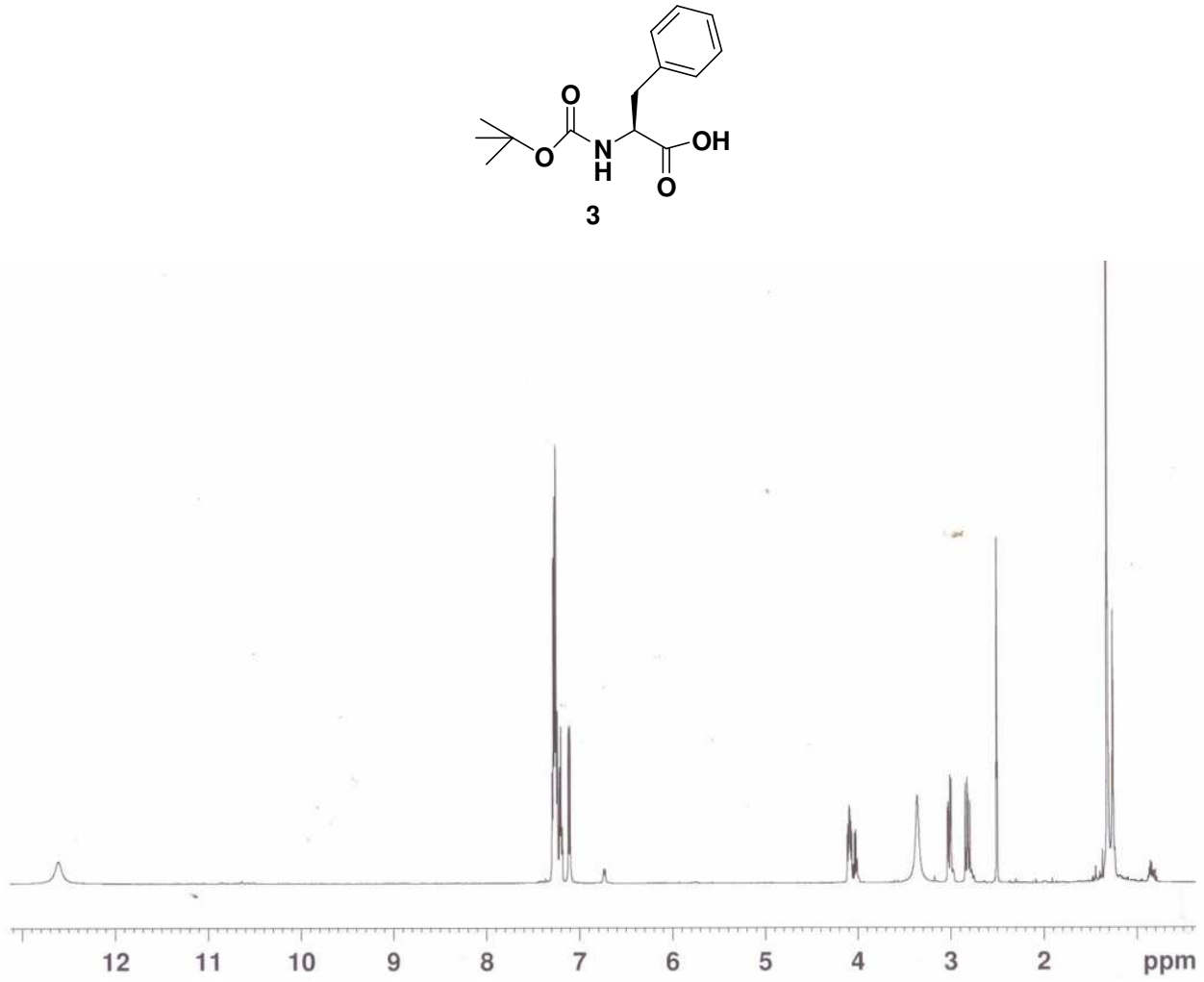


Figure S 5: ^{1}H NMR (DMSO-d6, 500MHz, δ_{ppm}) spectra of Boc-Phe-OH 3.

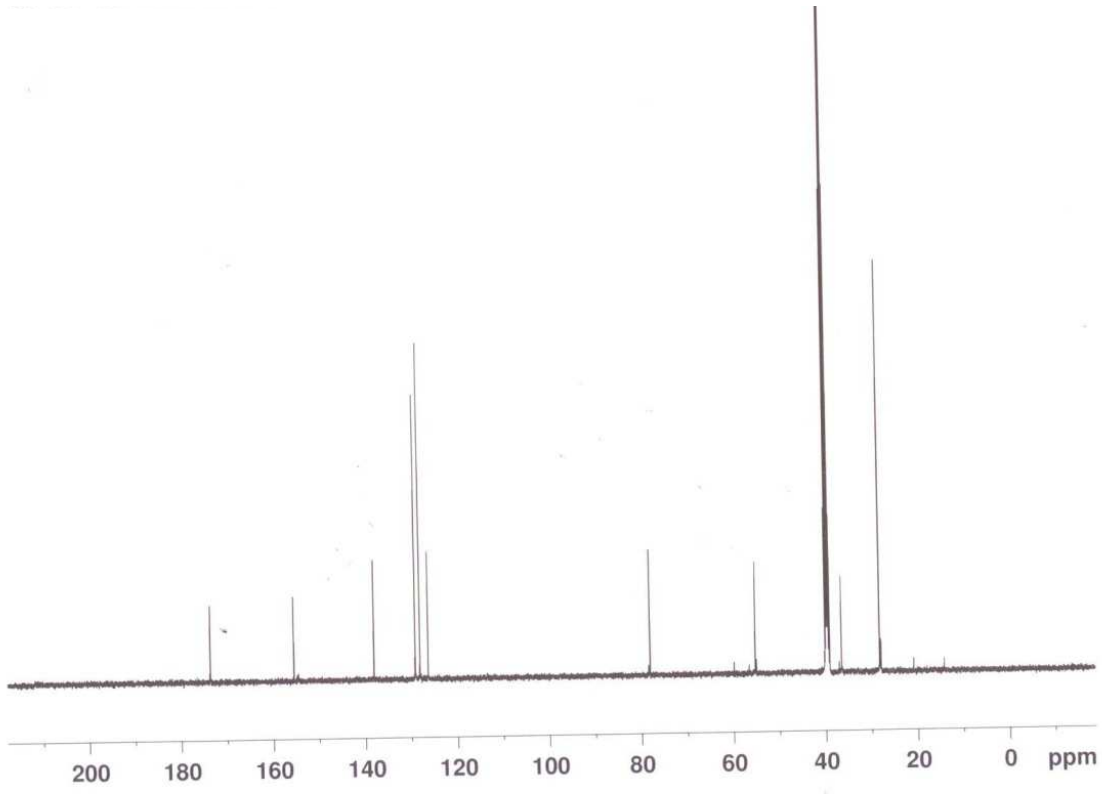
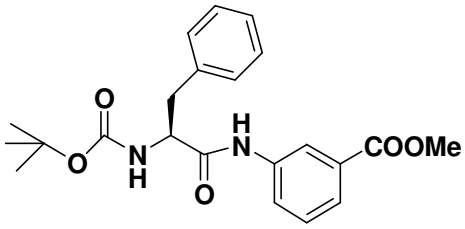


Figure S 6: ^{13}C NMR (DMSO-d6, 125MHz, δ_{ppm}) spectra of Boc-Phe-OH 3



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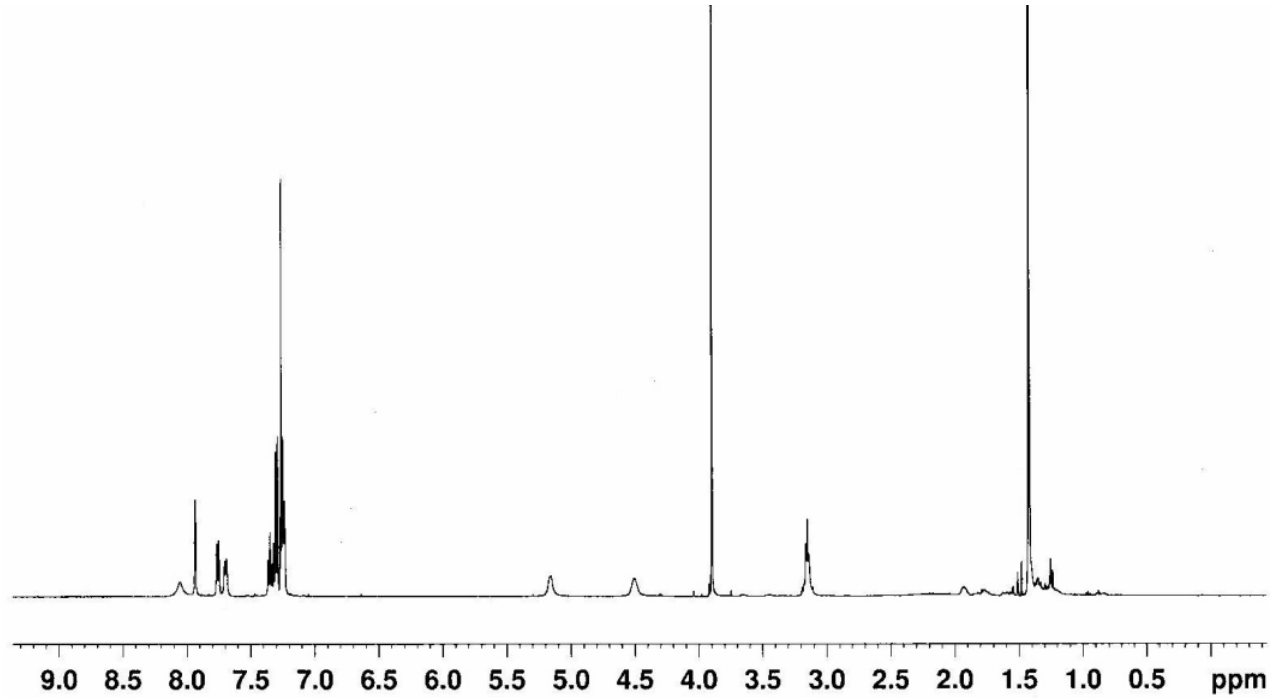


Figure S 7: ^{1}H NMR ($CDCl_3$, 500MHz, δ_{ppm}) spectra of Boc-Phe-Maba-OMe 4

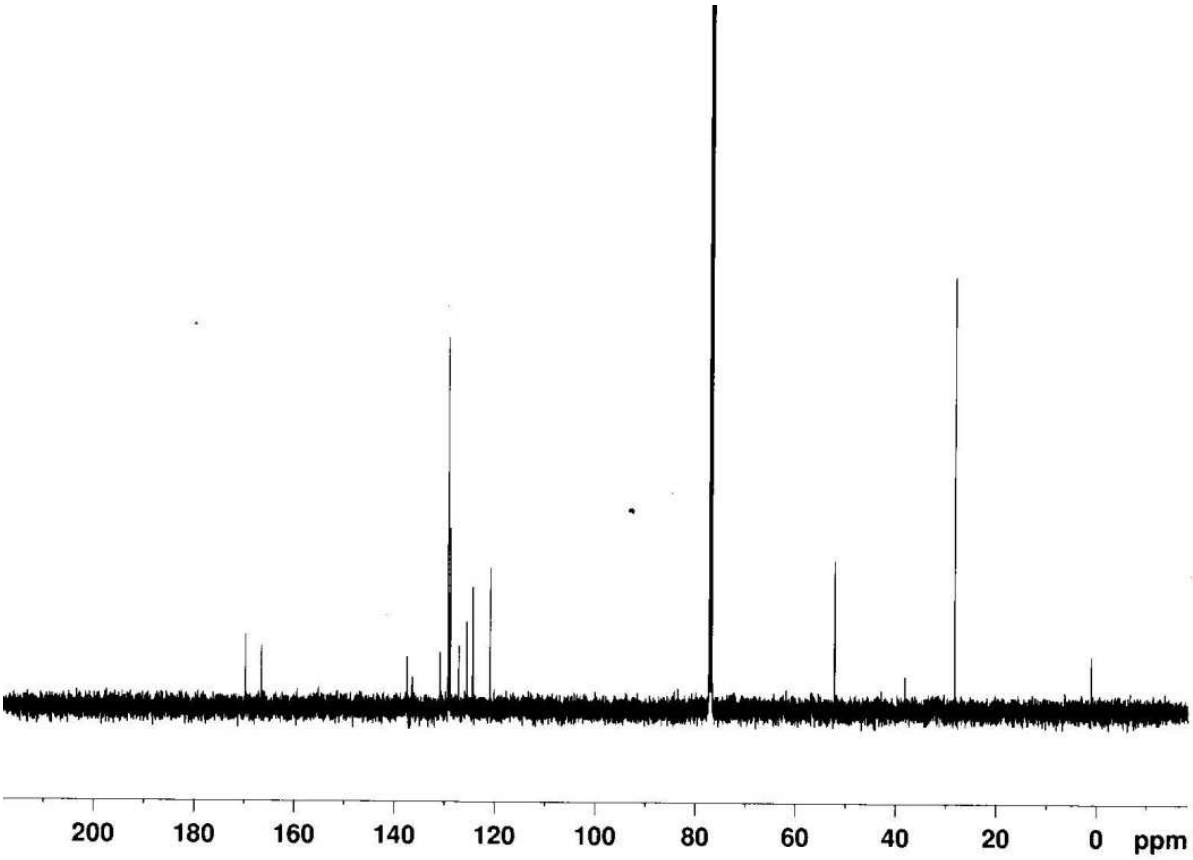


Figure S 8: ^{13}C NMR ($CDCl_3$, 125MHz, δ_{ppm}) spectra of Boc-Phe-Maba-OMe 4

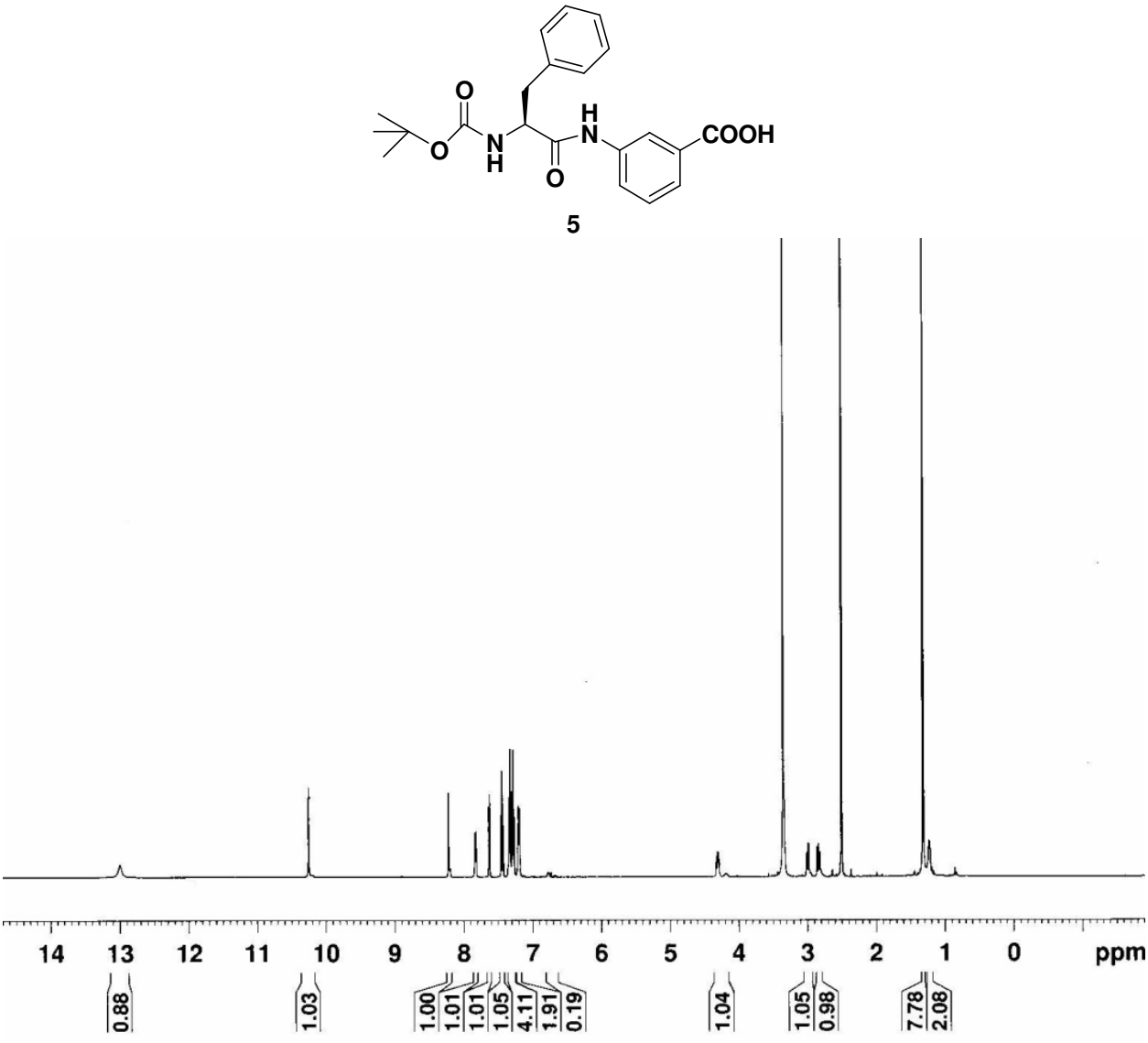


Figure S 9: ^{1}H NMR (DMSO-d_6, 500MHz, δ_{ppm}) spectra of Boc-Phe-Maba-OH 5

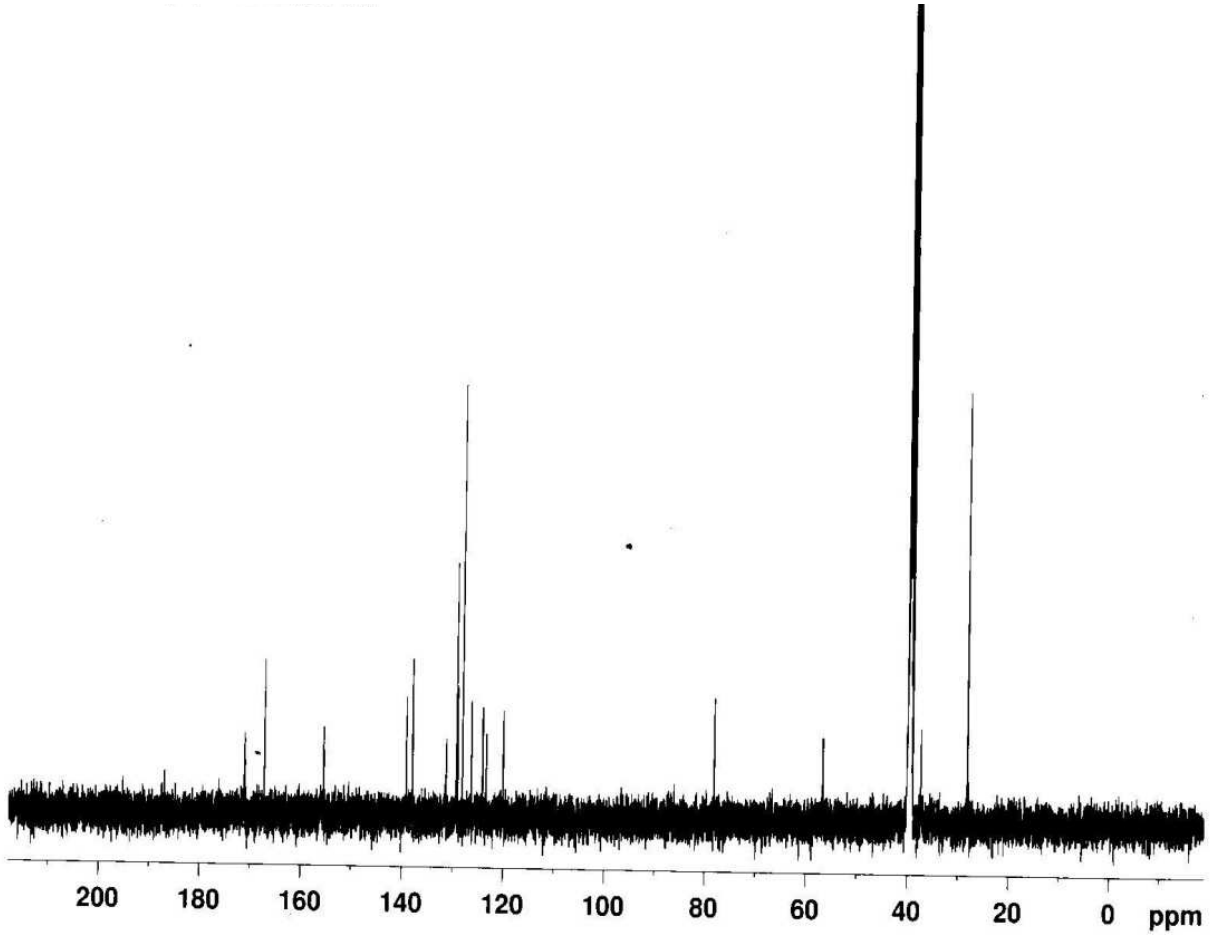
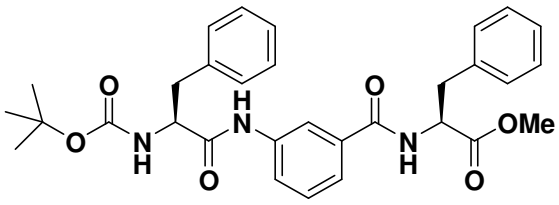


Figure S 10: ^{13}C NMR (DMSO-d6, 125MHz, δ_{ppm}) spectra of Boc-Phe-Maba-OH 5.



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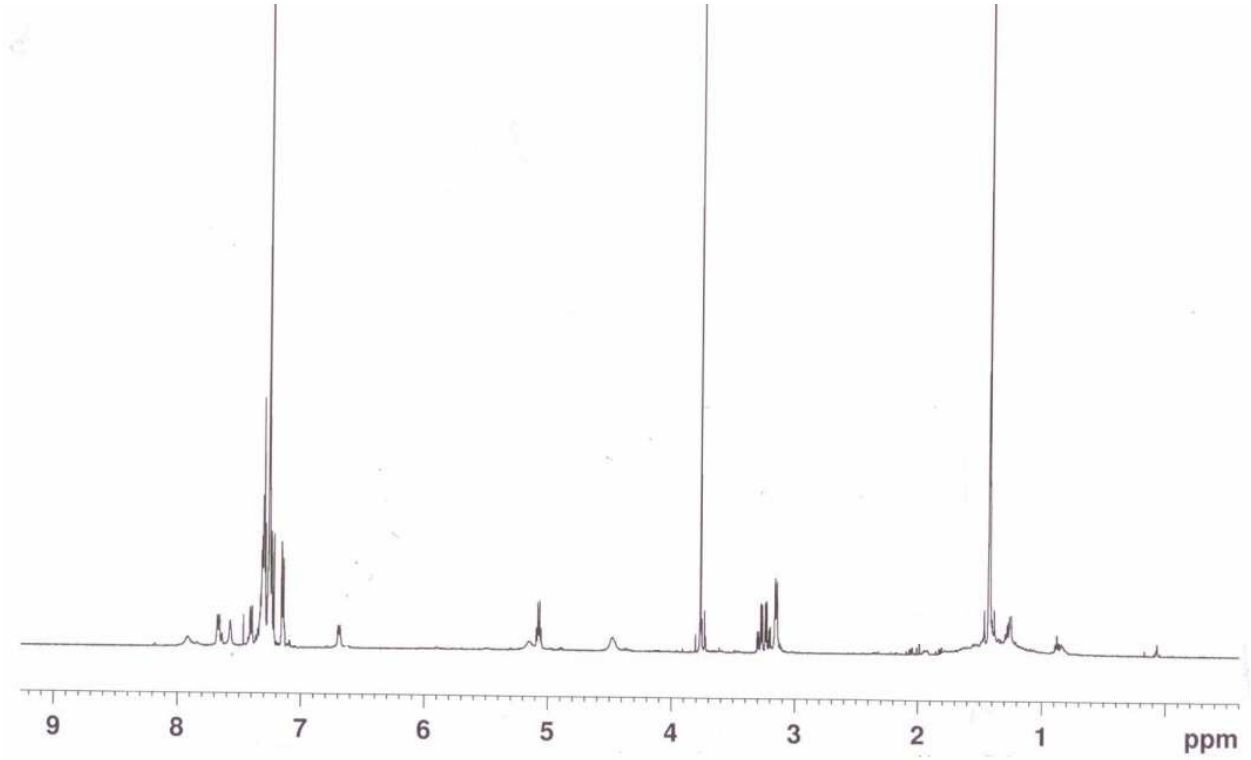


Figure S 11: ^{1}H NMR ($CDCl_3$, 500MHz, δ_{ppm}) Spectra of Boc-Phe-Maba-Phe-OMe 1.

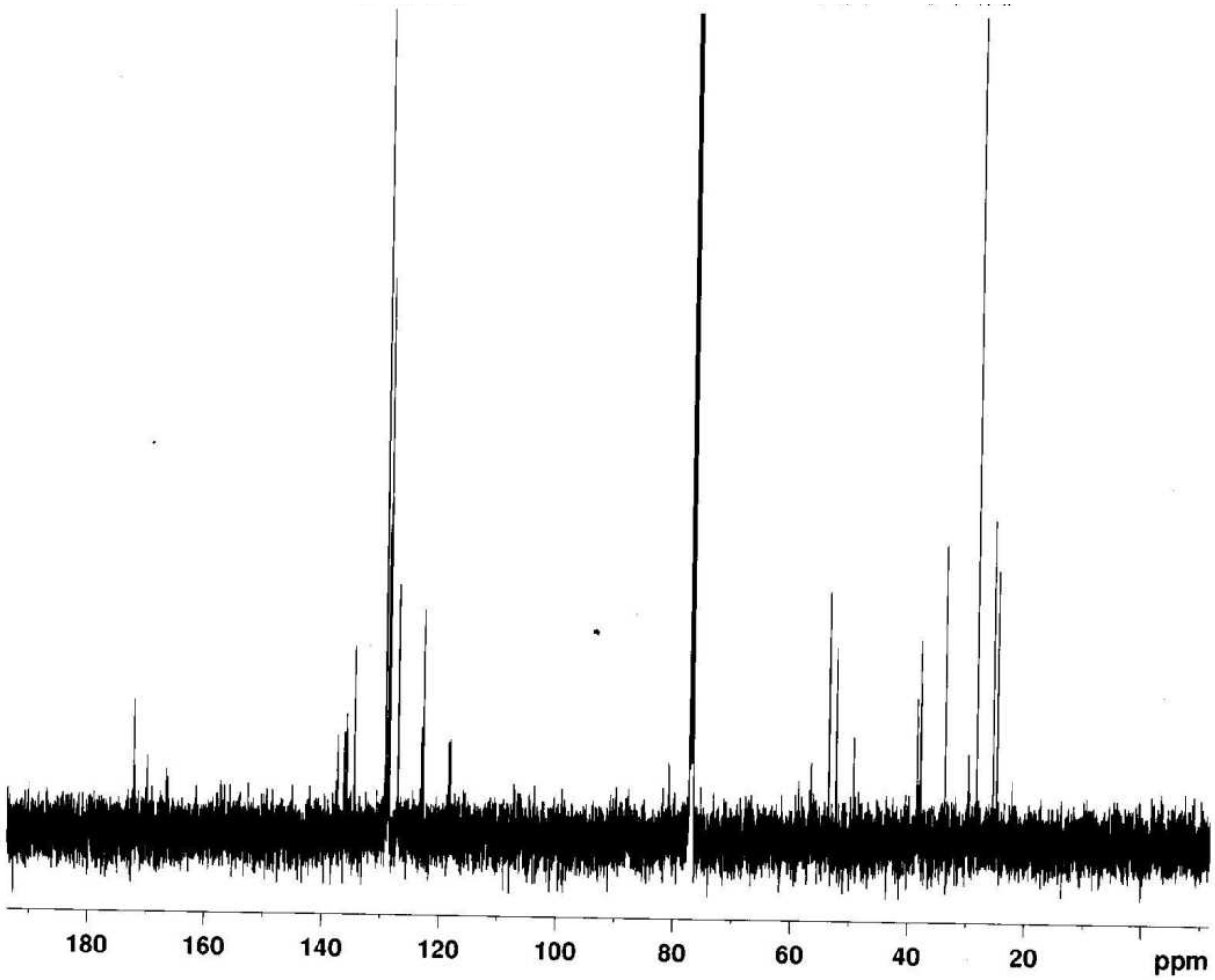


Figure S 12: ^{13}C NMR ($CDCl_3$, 125MHz, δ_{ppm}) Spectra of Boc-Phe-Maba-Phe-OMe 1.

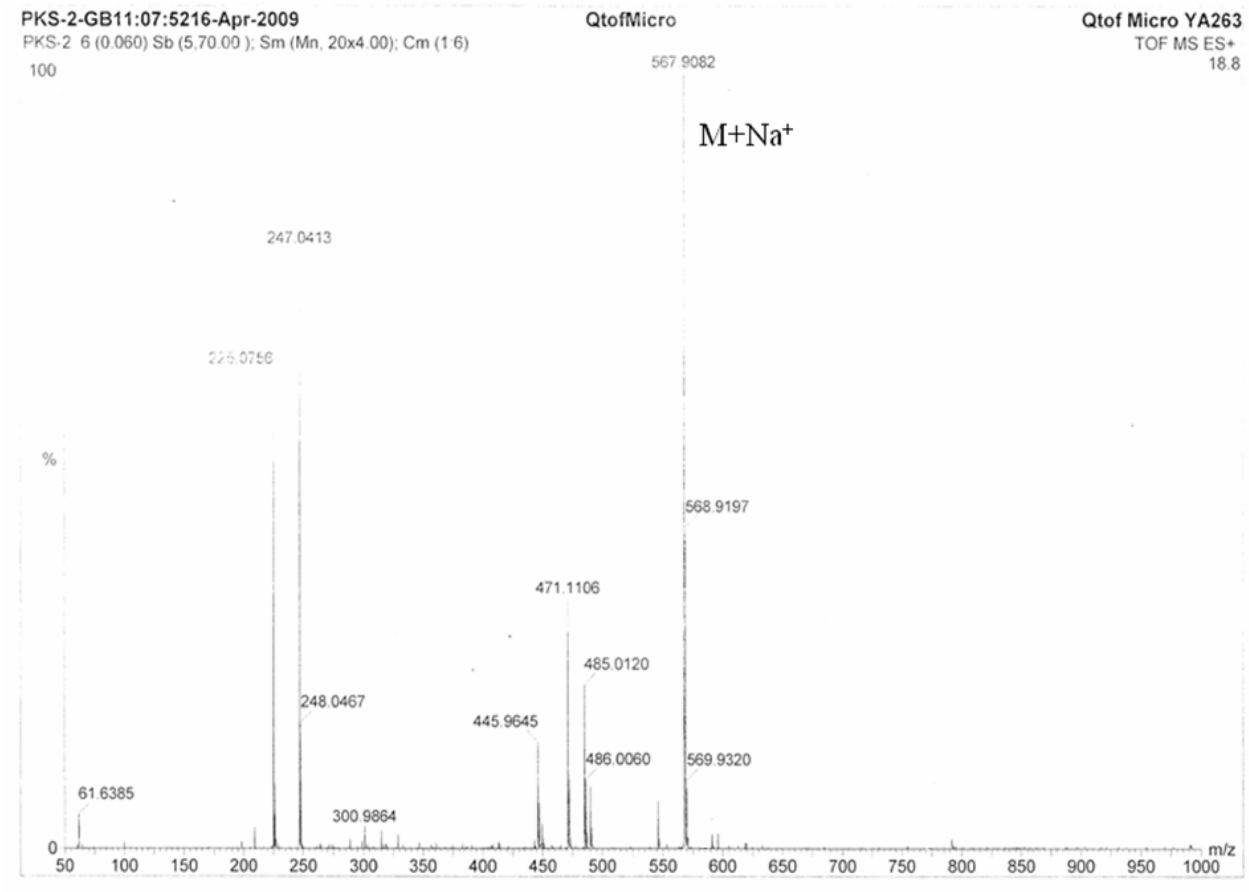
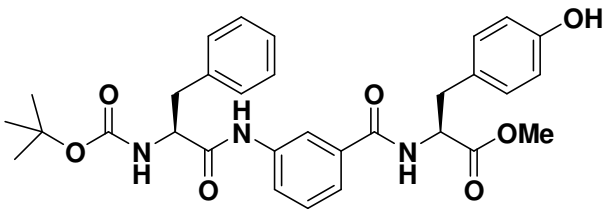


Figure S 13: Mass Spectra of Boc-Phe-Maba-Phe-OMe **1.**



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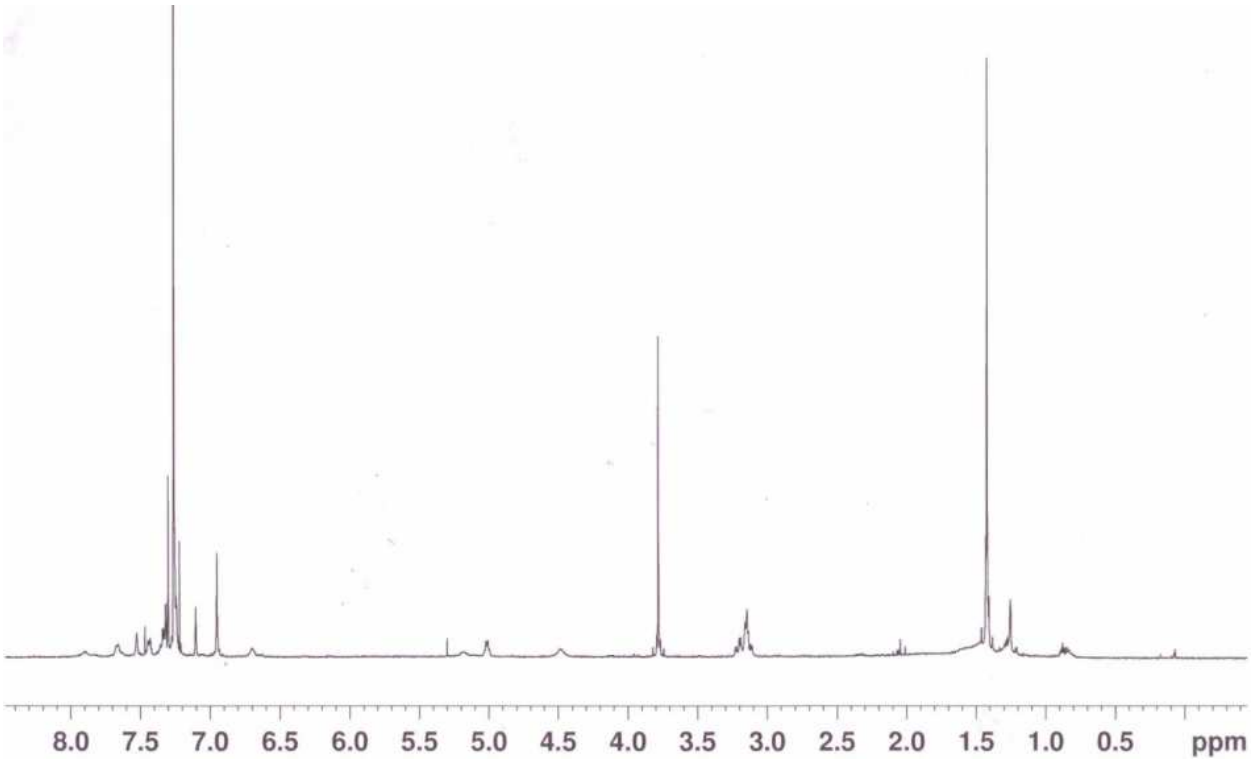

Figure S 14: ^{1}H NMR ($CDCl_3$, 500MHz, δ_{ppm}) Spectra of Boc-Phe-Maba-Tyr-OMe **2**.

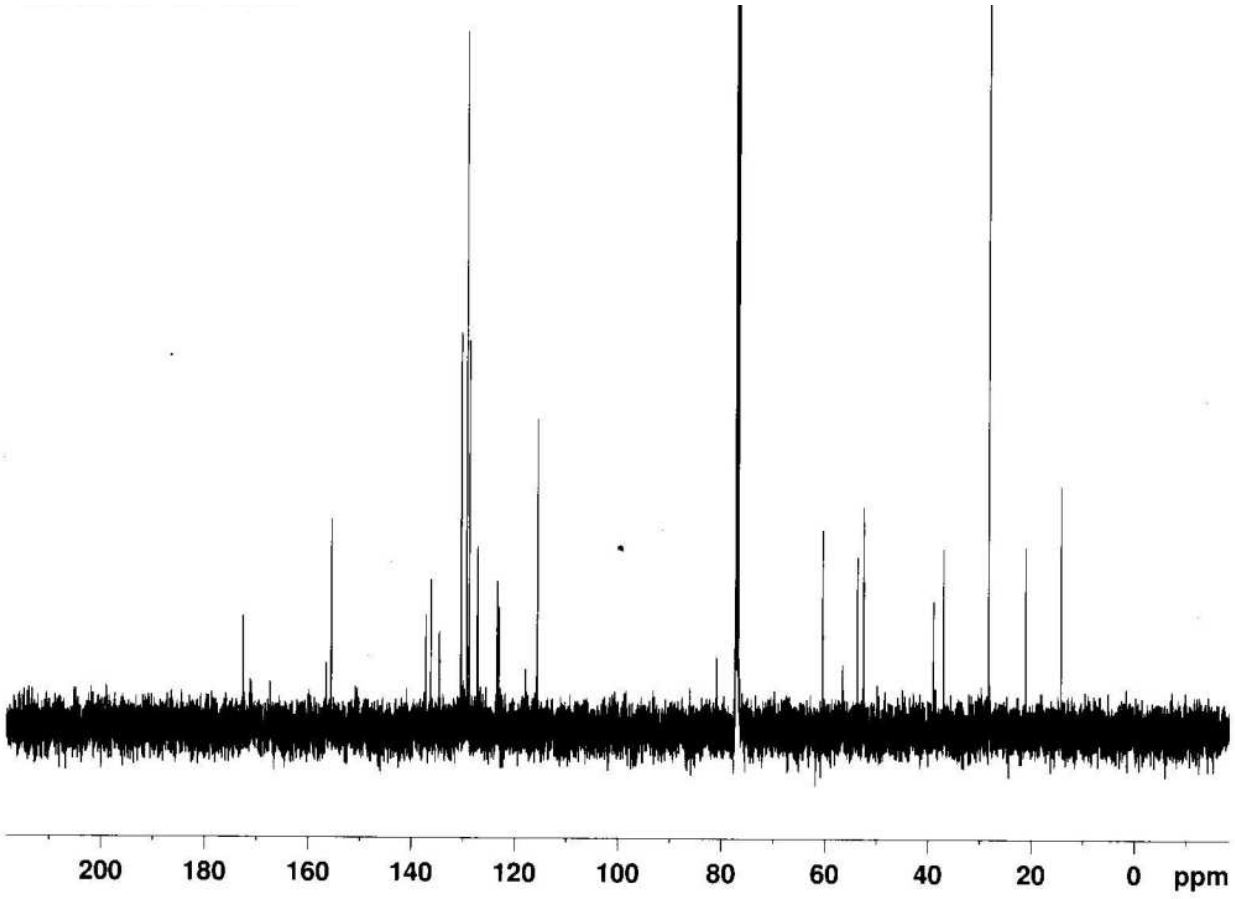

Figure S 15: ^{13}C NMR ($CDCl_3$, 125MHz, δ_{ppm}) Spectra of Boc-Phe-Maba-Tyr-OMe **2**.

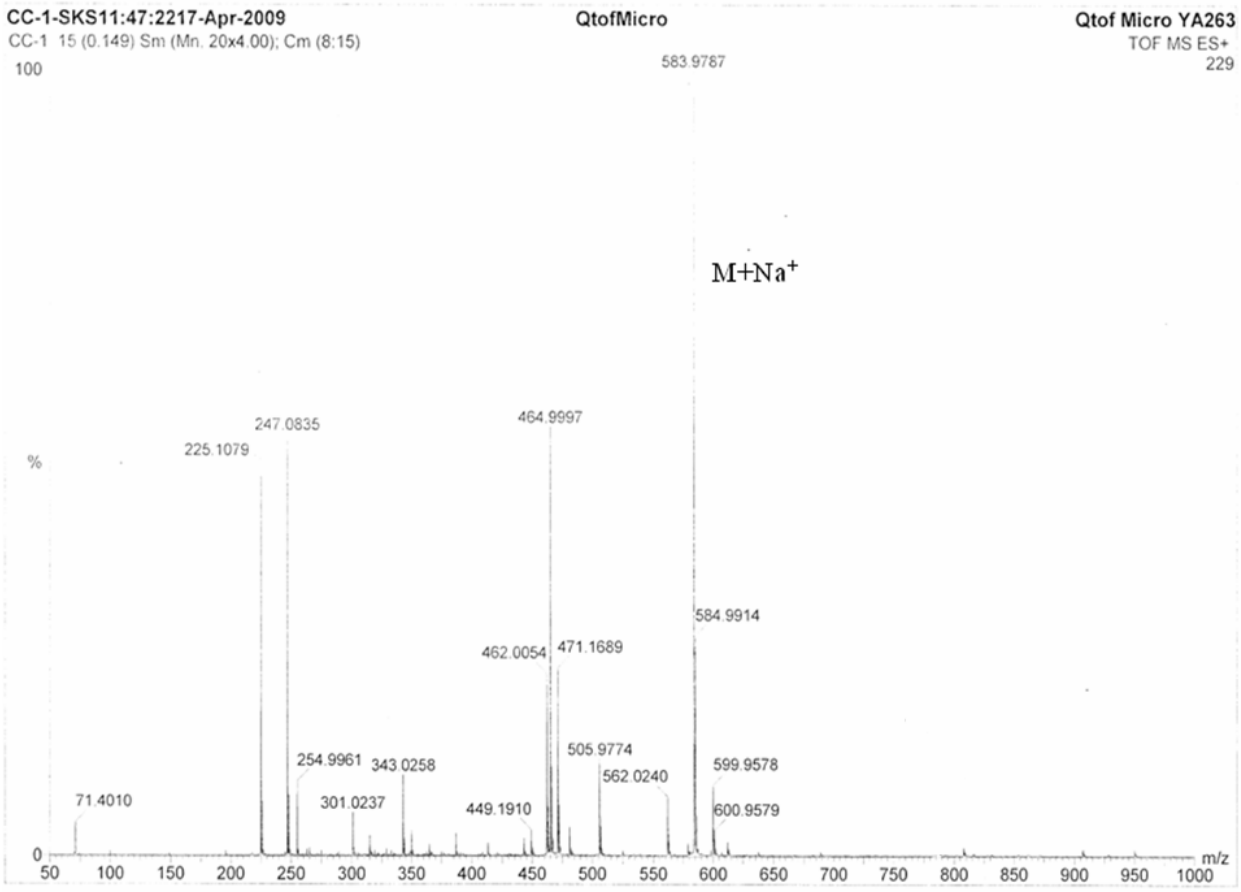

Fig S 16: Mass Spectra of Boc-Phe-Maba-Tyr-OMe **2**