Carborane-beta-cyclodextrin interaction as an efficient strategy to create supramolecular bioactive surface

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SUPPORTING INFORMATIONS

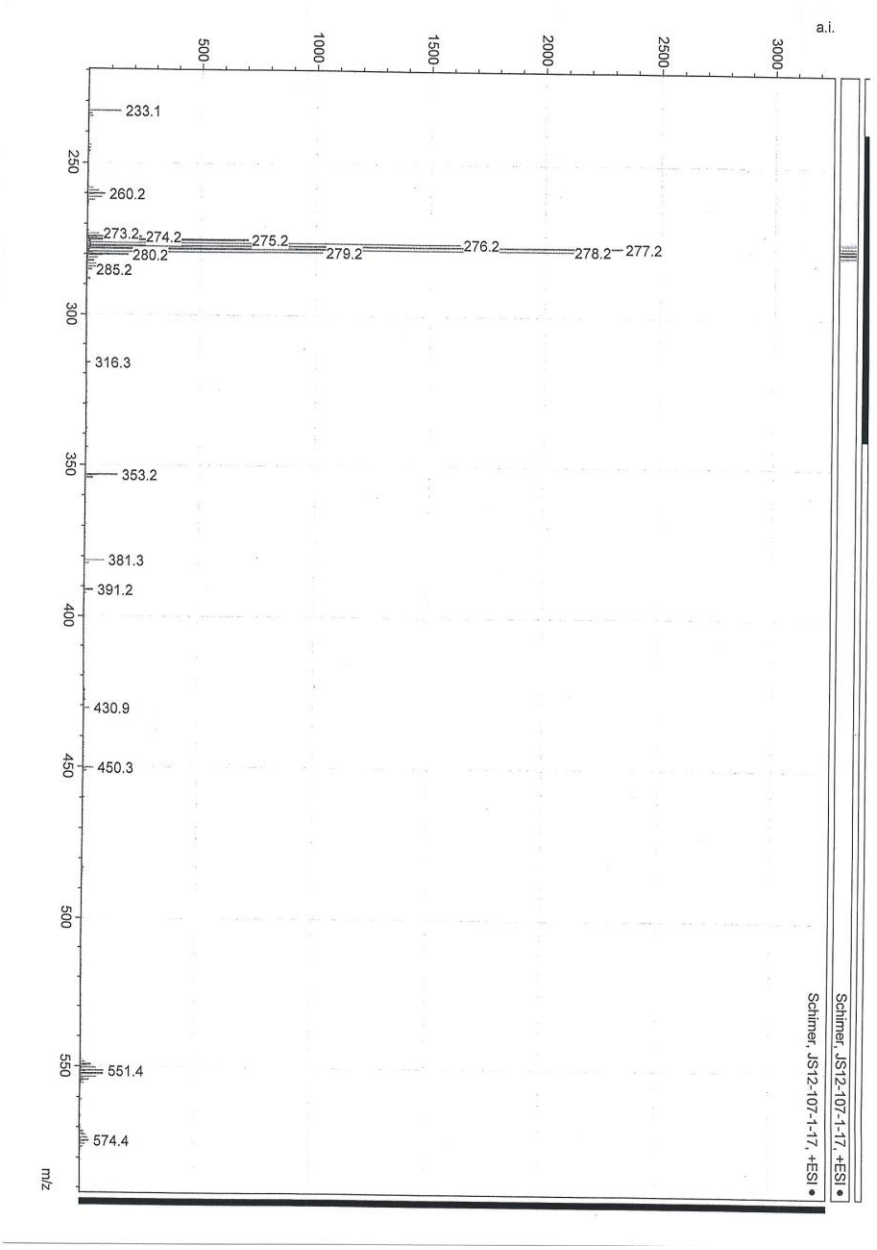


Figure S1. HRMS of **3**.

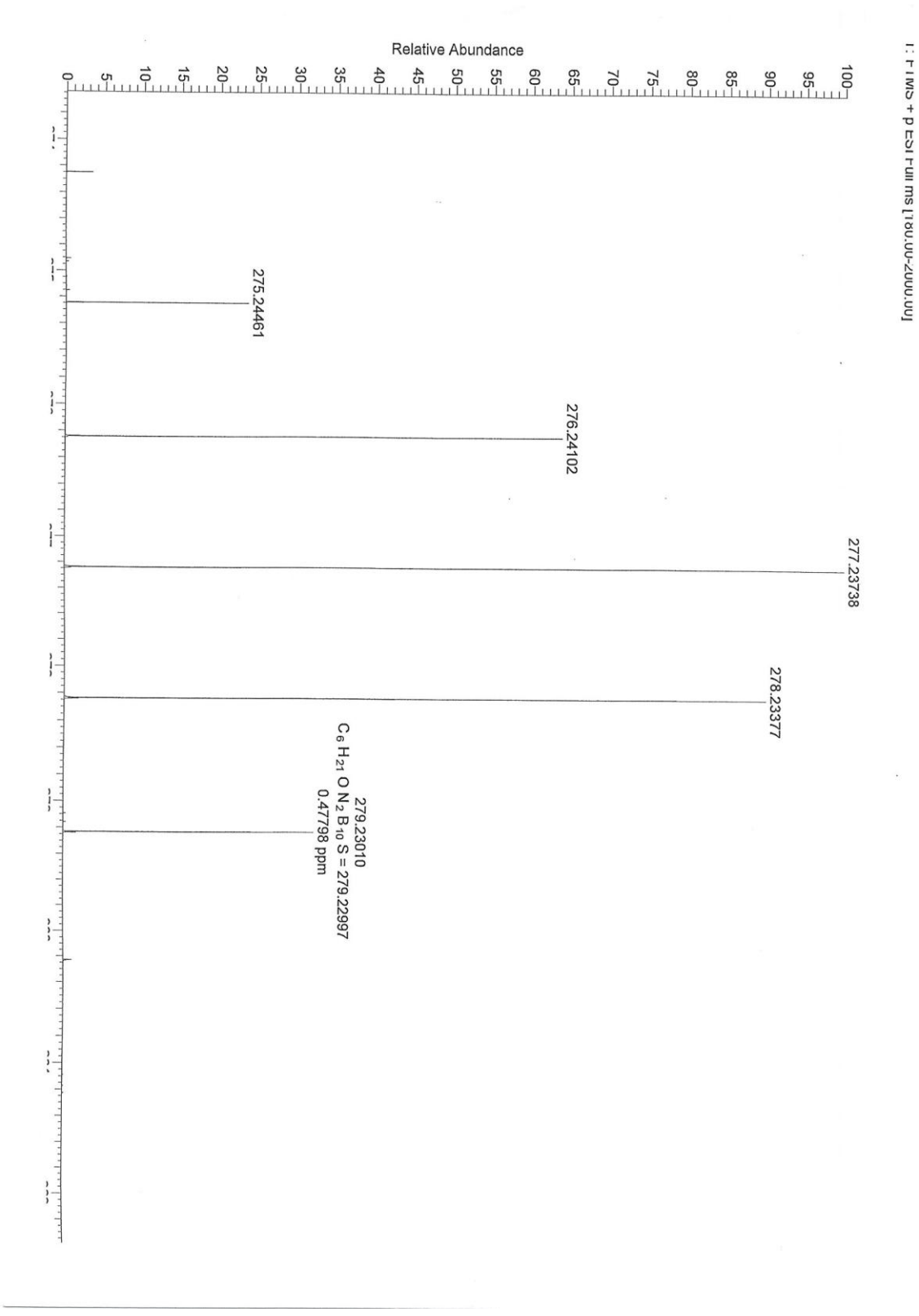


Figure S2. HRMS of **3** (zoom).

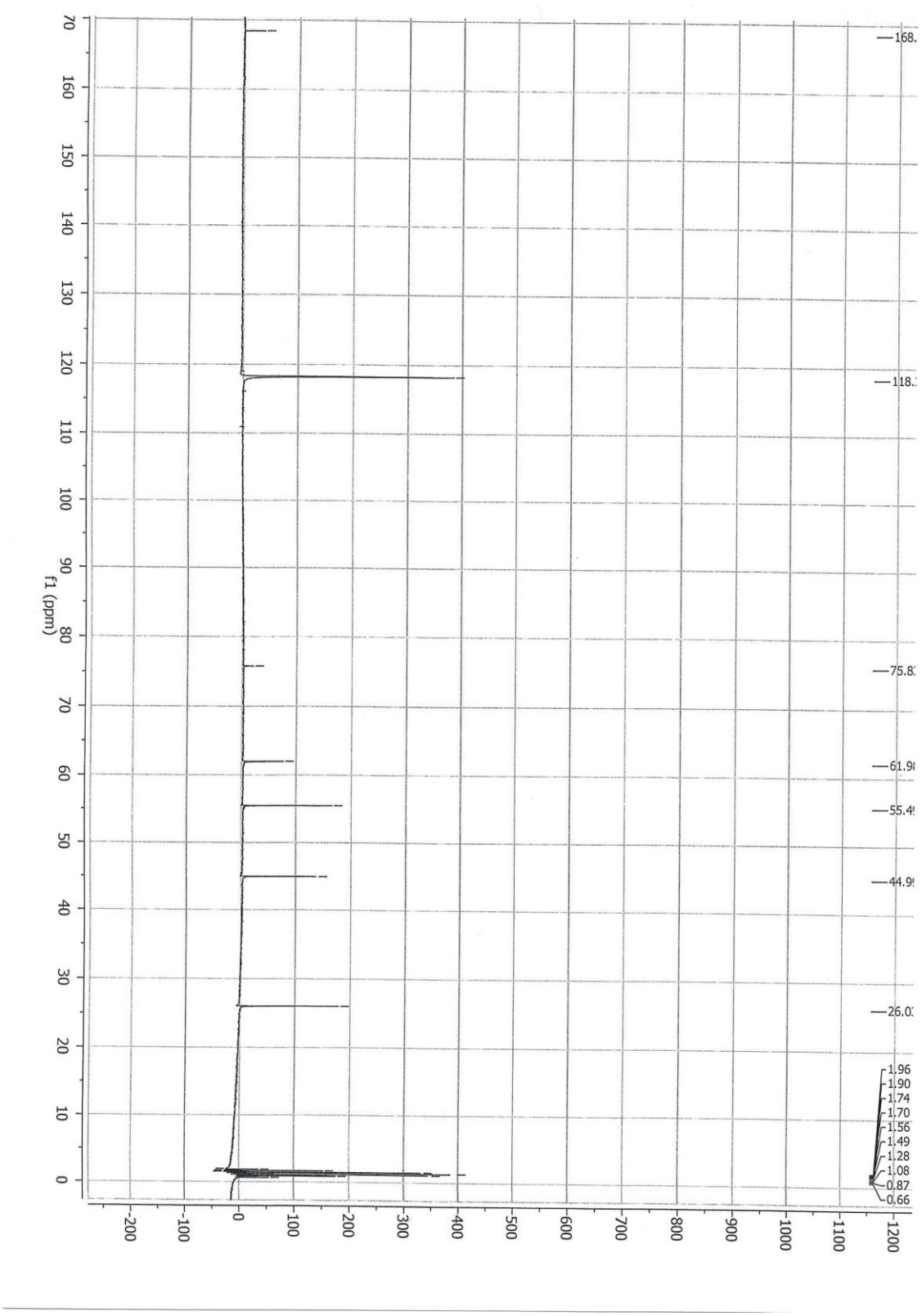


Figure S3. ^{13}C NMR of **3** in CD_3CN.

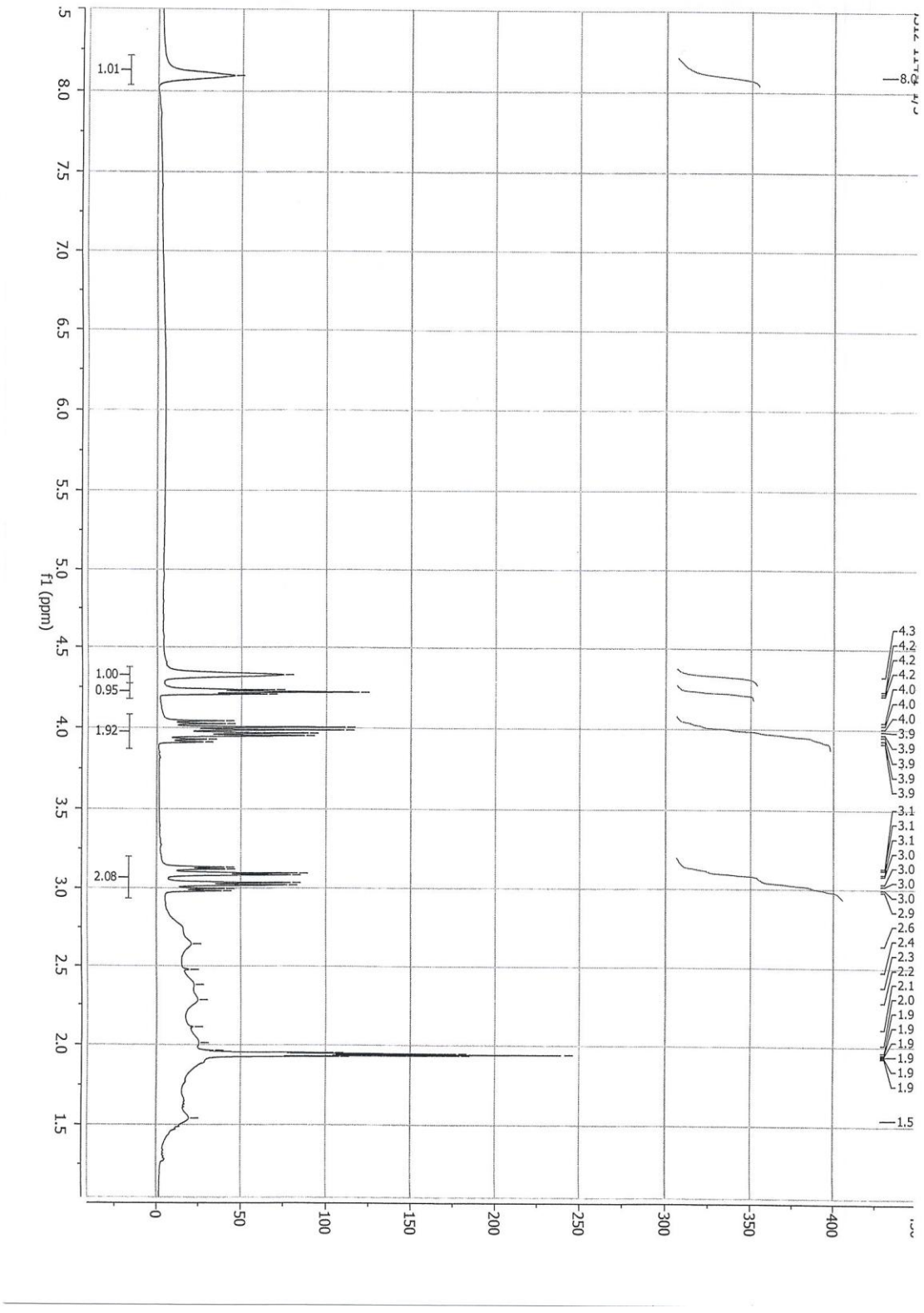


Figure S4. ^{1}H NMR of **3** in CD_3CN.

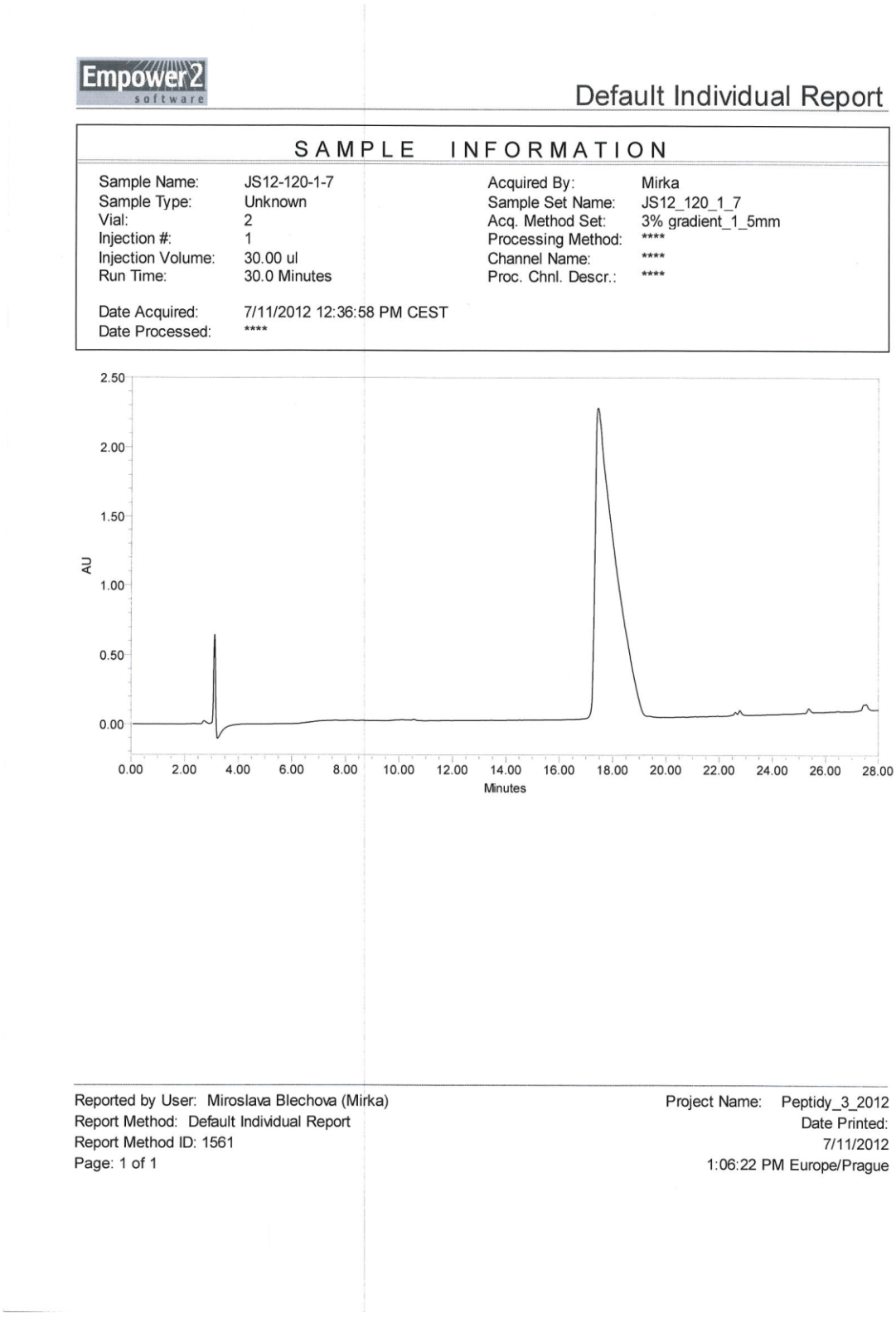
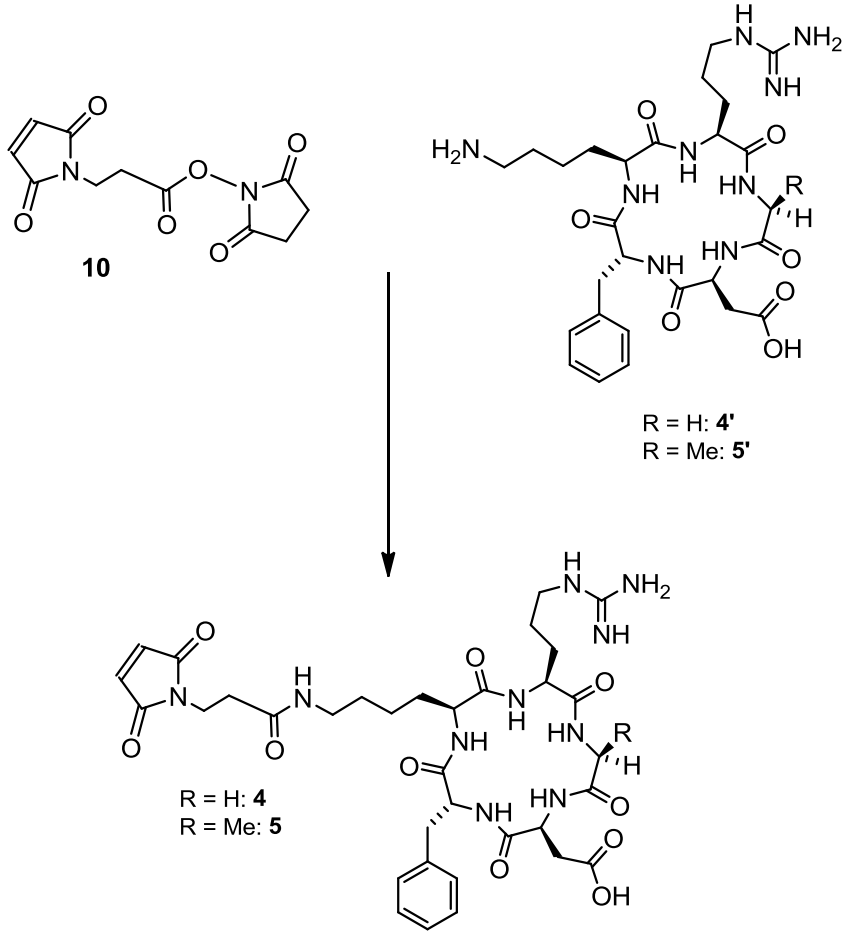


Figure S5. Analytical HPLC of **3**, R_t = 18.5 min.

Synthesis of cRGD-maleimide 4 and cRAD-maleimide 5



Synthesis of NHS-maleimide linker **10** was carried out following previously described protocol, with a final yield of 43 % after purification.[1]

Synthesis of cRGDfK **4'** and cRADfK **5'** was performed following previously described protocol.[2]

1 eq of **10** was dissolved together with 1 eq of DIPEA and 1 eq of **4'** or **5'** in DMF:PBS 1:1, pH was adjusted to 7 and reaction was stirred at room temperature for 1 h. Solvents were evaporated and LCMS confirmed the product formation. Product was purified on reverse-phase HPLC equipped with UV detection with a gradient of 10 to 25 % in 20 min, yielding **4** and **5** in respectively 25 and 28 % yield.

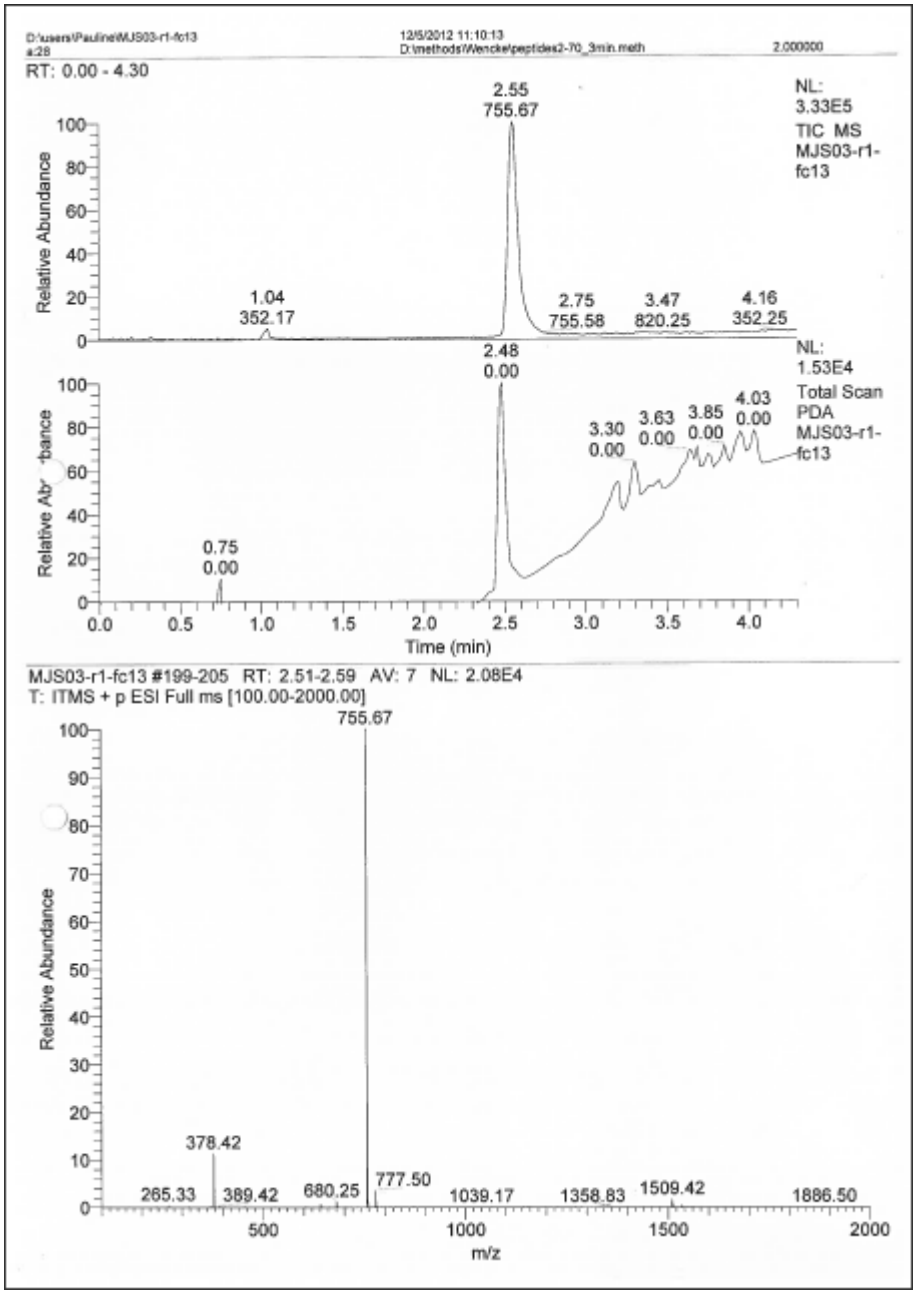


Figure S6. LCMS of cRGD-maleimide **4** after purification.

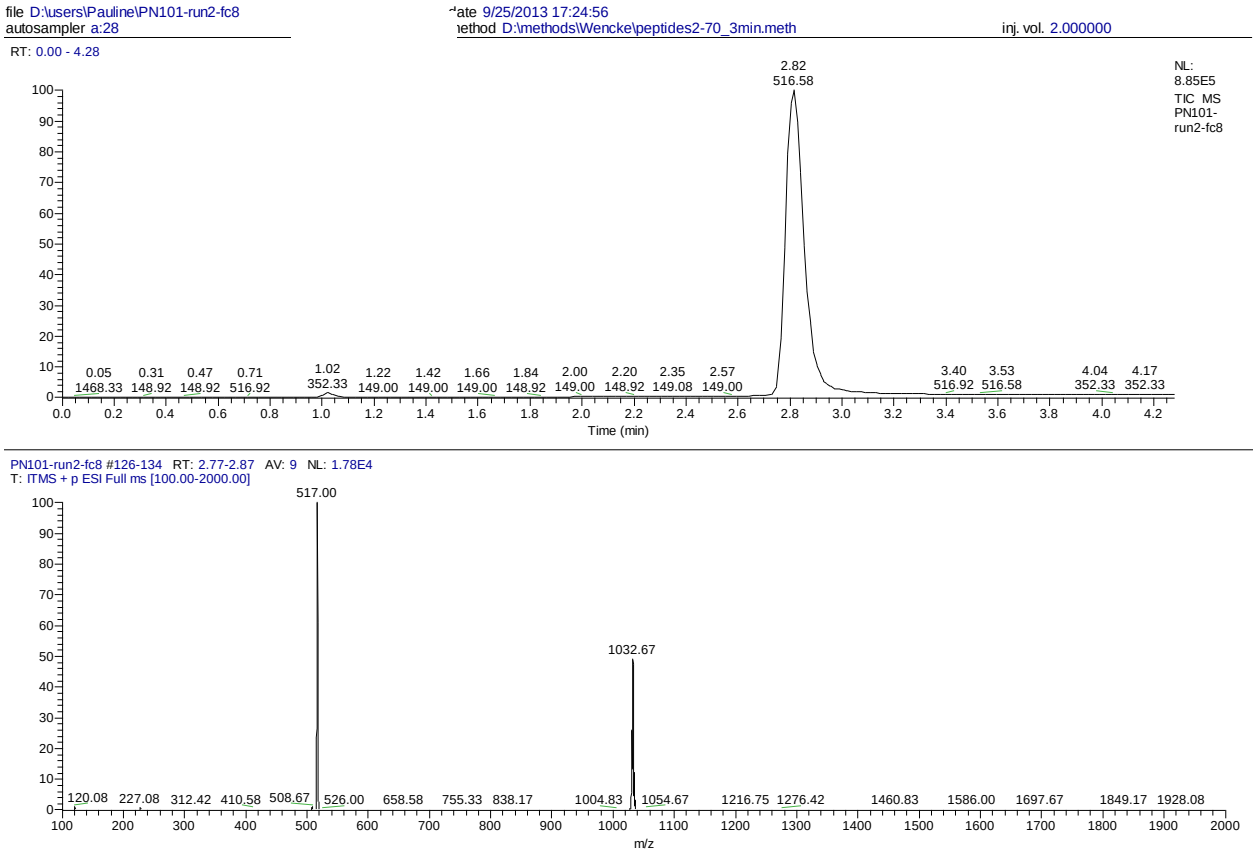


Figure S7. LCMS of carborane-cRGD **6** after purification.

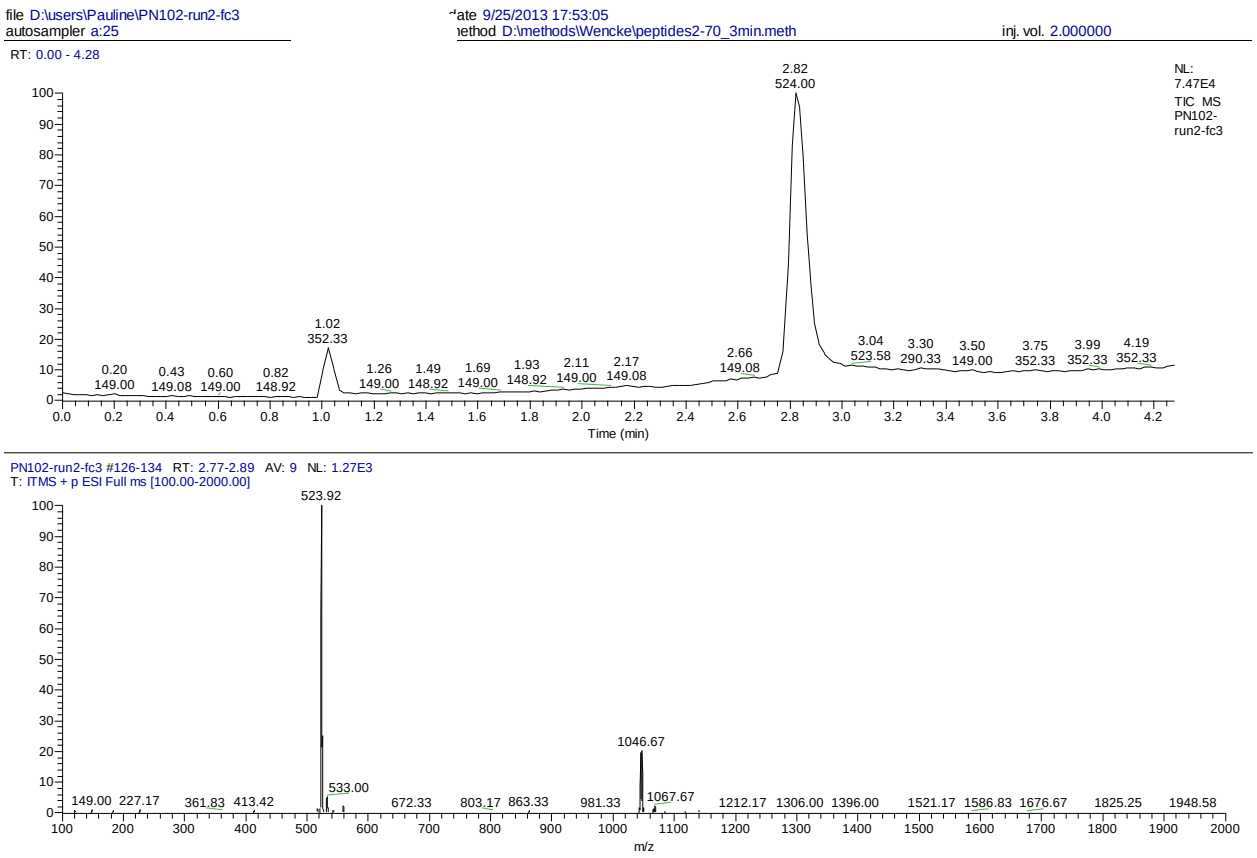


Figure S8. LCMS of carborane-cRAD **7** after purification.