

Supporting Information

Cationic phthalocyanine dendrimers as potential antimicrobial photosensitisers

Rubén Ruiz-González,^a Francesca Setaro,^b Òscar Gulás,^a Montserrat Agut,^a Uwe Hahn,^{*bc} Tomás Torres,^{*bde} and Santi Nonell^{*a}

^a Grup d'Enginyeria Molecular, Institut Químic de Sarriá, Universitat Ramon Llull, Barcelona, Spain. Fax: +34 932 056 266; Tel: +34 932 672 000; E-mail: santi.nonell@iqs.url.edu.

^b Departamento de Química Orgánica, Universidad Autónoma de Madrid, Cantoblanco, 28049 Madrid, Spain. Fax: +34 91497 3966; Tel: +34 91497 4151.

^c Laboratoire de Chimie des Matériaux Moléculaires, Université de Strasbourg et CNRS (UMR 7509), Ecole Européenne de Chimie, Polymères et Matériaux (ECPM), 25 rue Becquerel, 67087 Strasbourg Cedex 2, France. Fax: +33 368 85 27 64; Tel: +33 368 85 27 64.

^d IMDEA-Nanociencia, c/ Faraday, 9, Cantoblanco, 28049 Madrid, Spain.

^e Institute for Advanced Research in Chemical Sciences (IAdChem), Universidad Autónoma de Madrid, 28049 Madrid, Spain.

* Corresponding authors

santi.nonell@iqs.url.edu (Santi Nonell)

tomas.torres@uam.es (Tomás Torres)

u.hahn@unistra.fr (Uwe Hahn)

Part 1. Structural characterisation data.

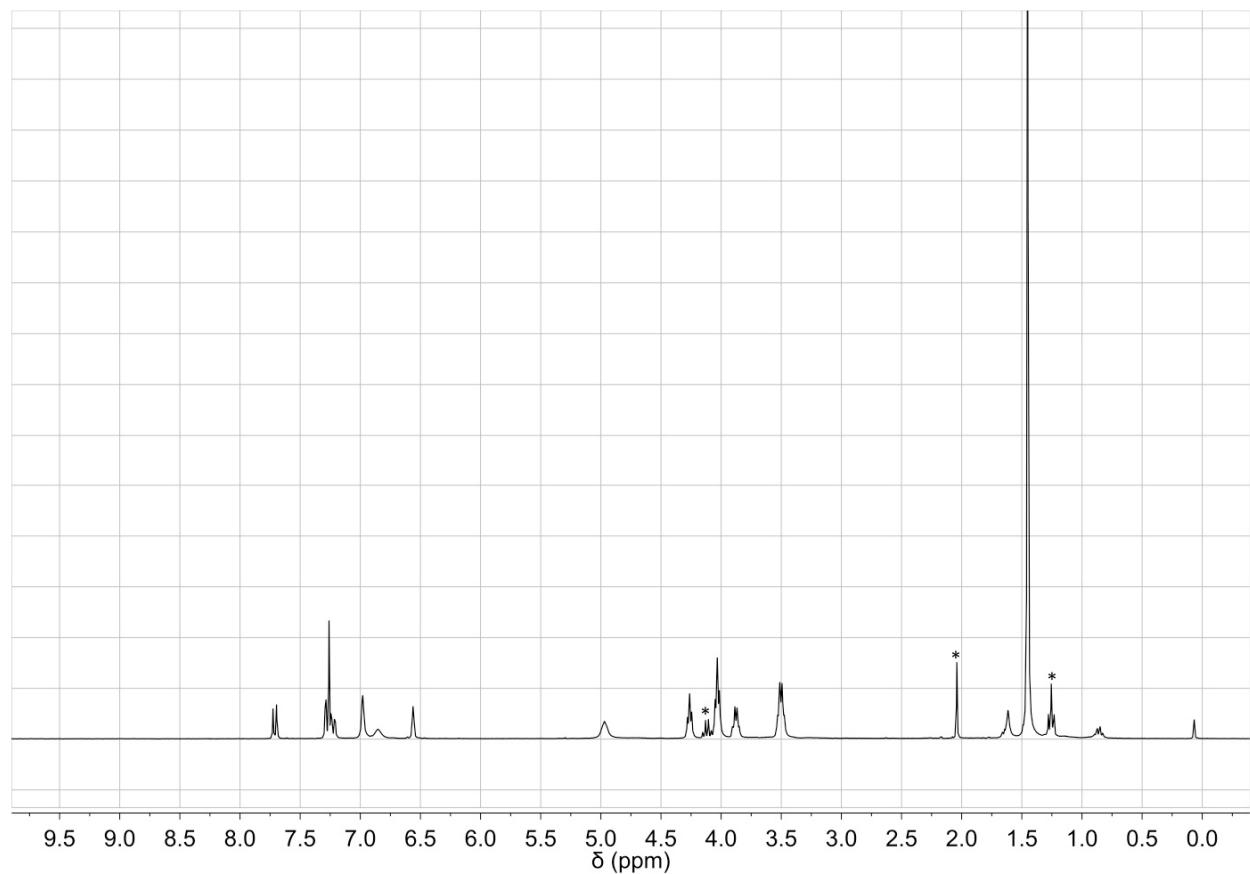


Fig. S1a. ¹H NMR spectrum of **6** (CDCl_3 , 300 MHz); *: solvent impurities.

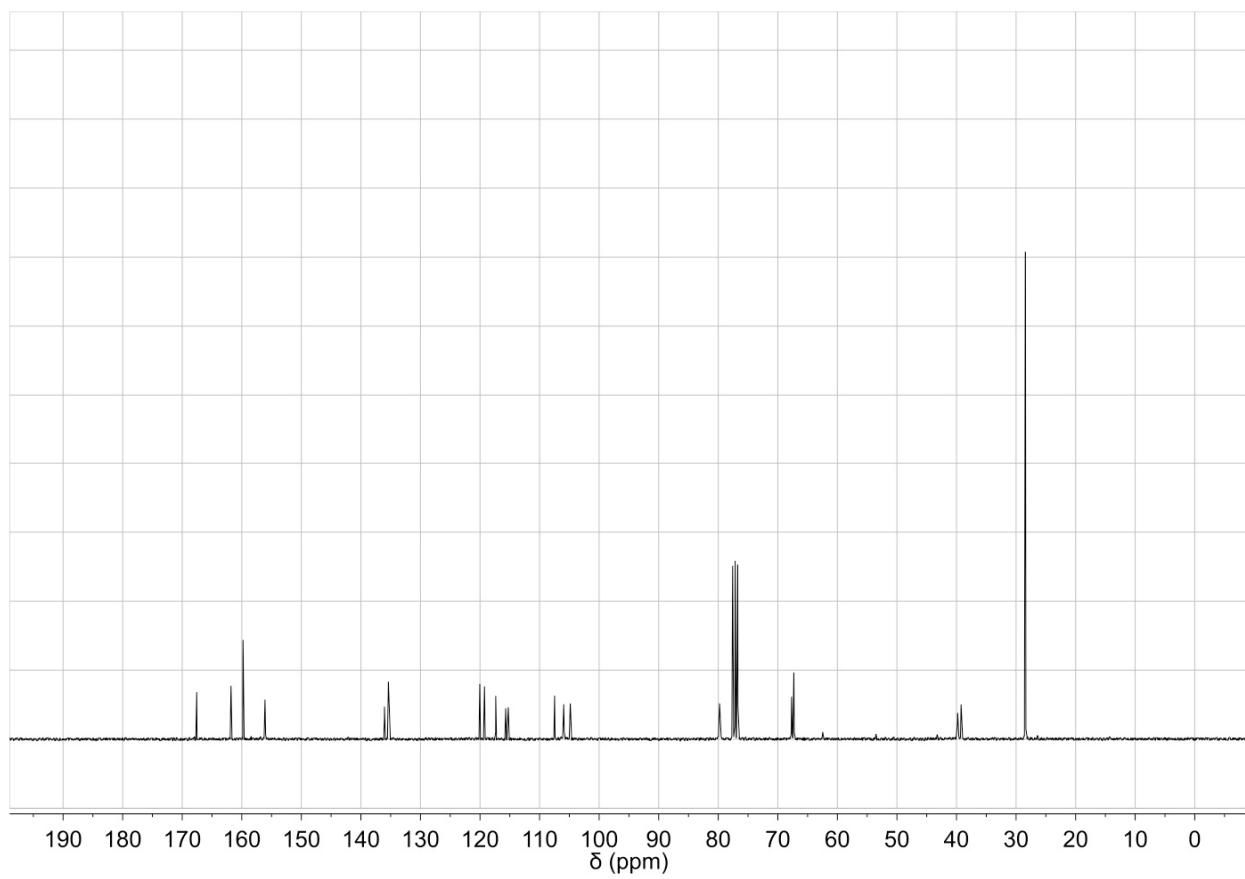


Fig. S1b. ^{13}C NMR spectrum of **6** (CDCl_3 , 75 MHz).

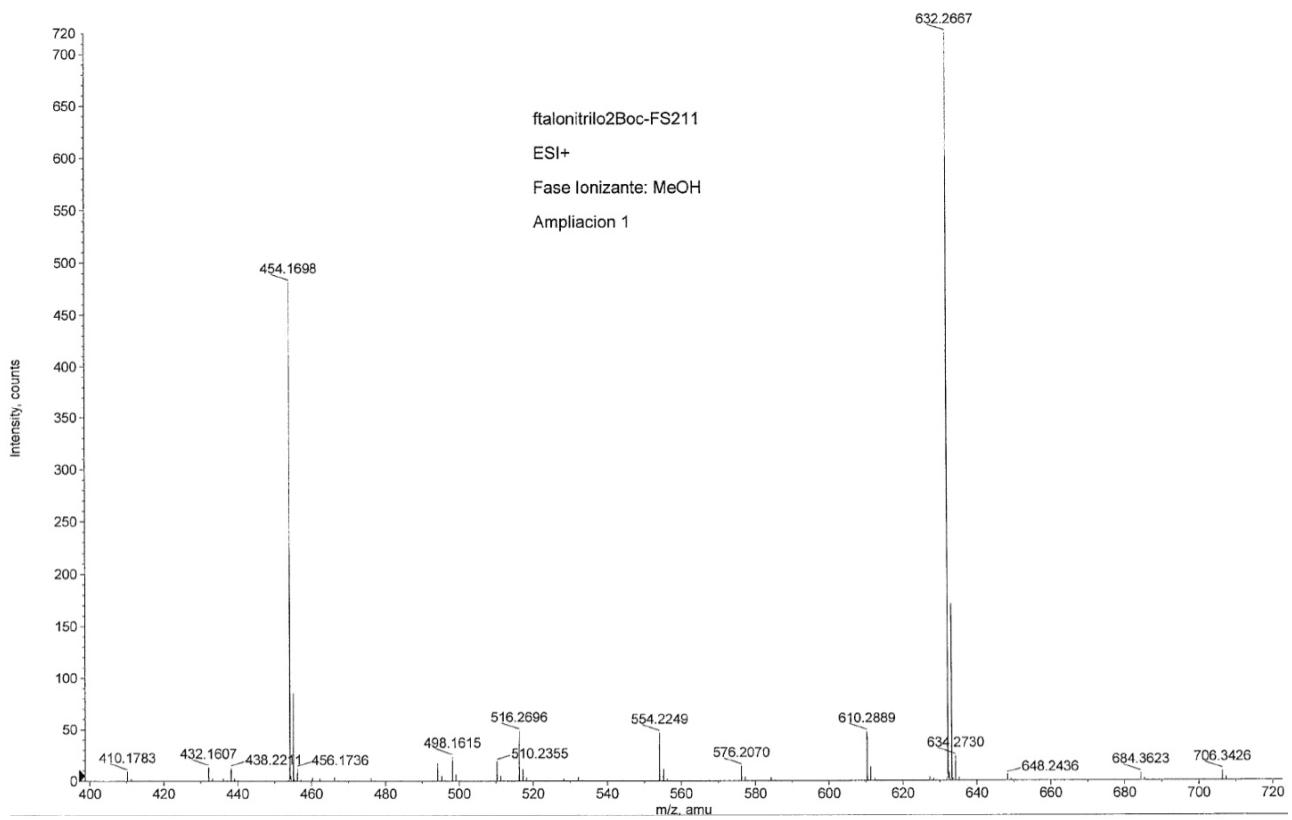


Fig. S1c. ESI-TOF MS spectrum of **6**.

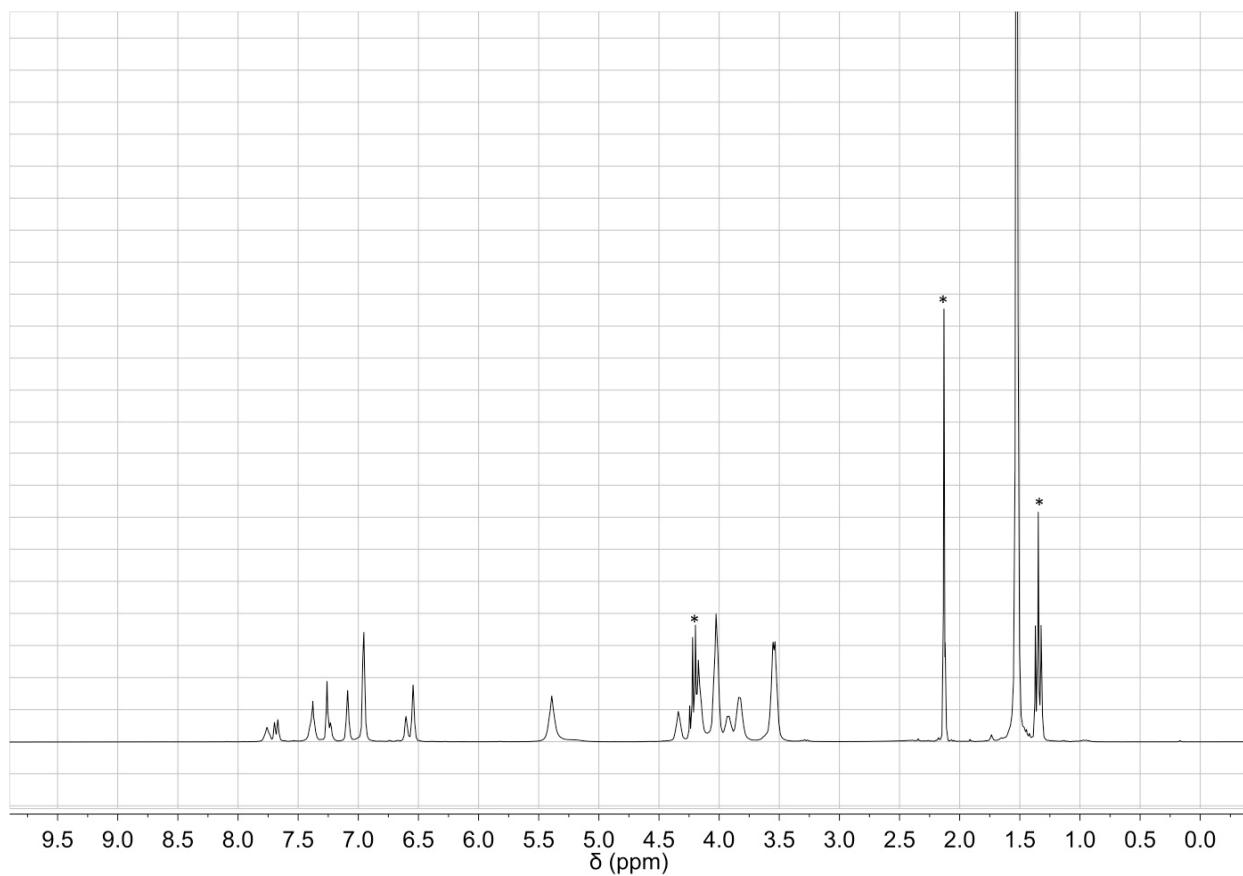


Fig. S2a. ${}^1\text{H}$ NMR spectrum of 7 (CDCl_3 , 300 MHz); *: solvent impurities.

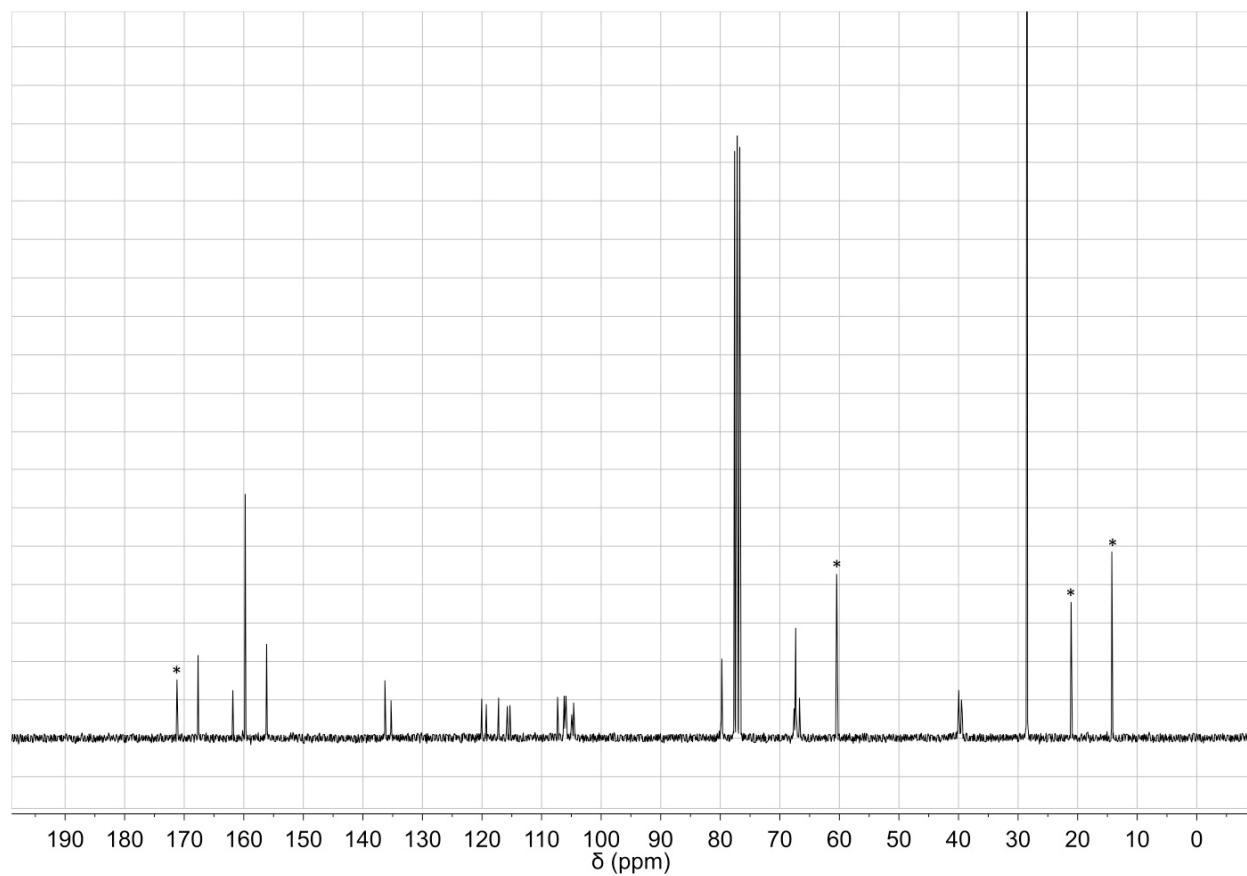


Fig. S2b. ^{13}C NMR spectrum of 7 (CDCl_3 , 75 MHz).

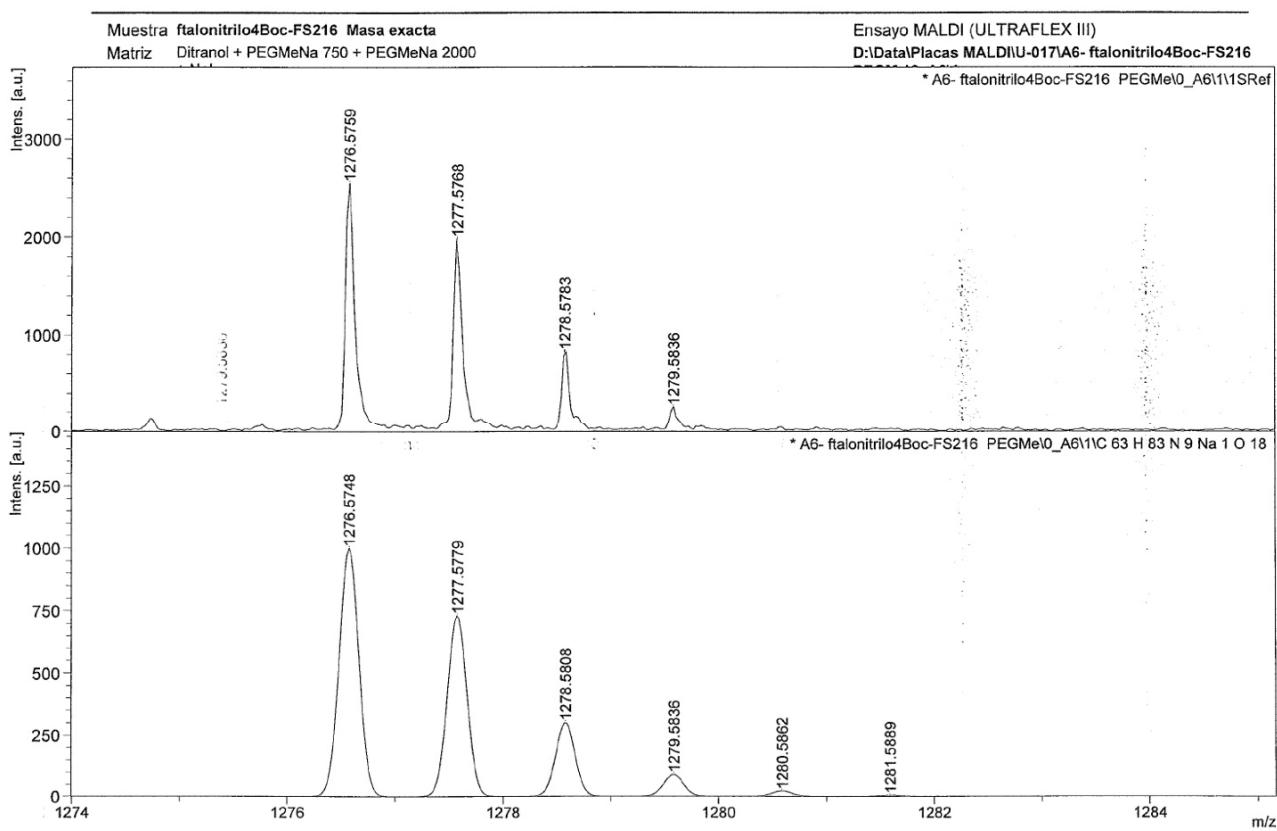


Fig. S2c. MALDI-TOF MS spectrum of 7 (Top: experimental spectrum, bottom: simulated spectrum).

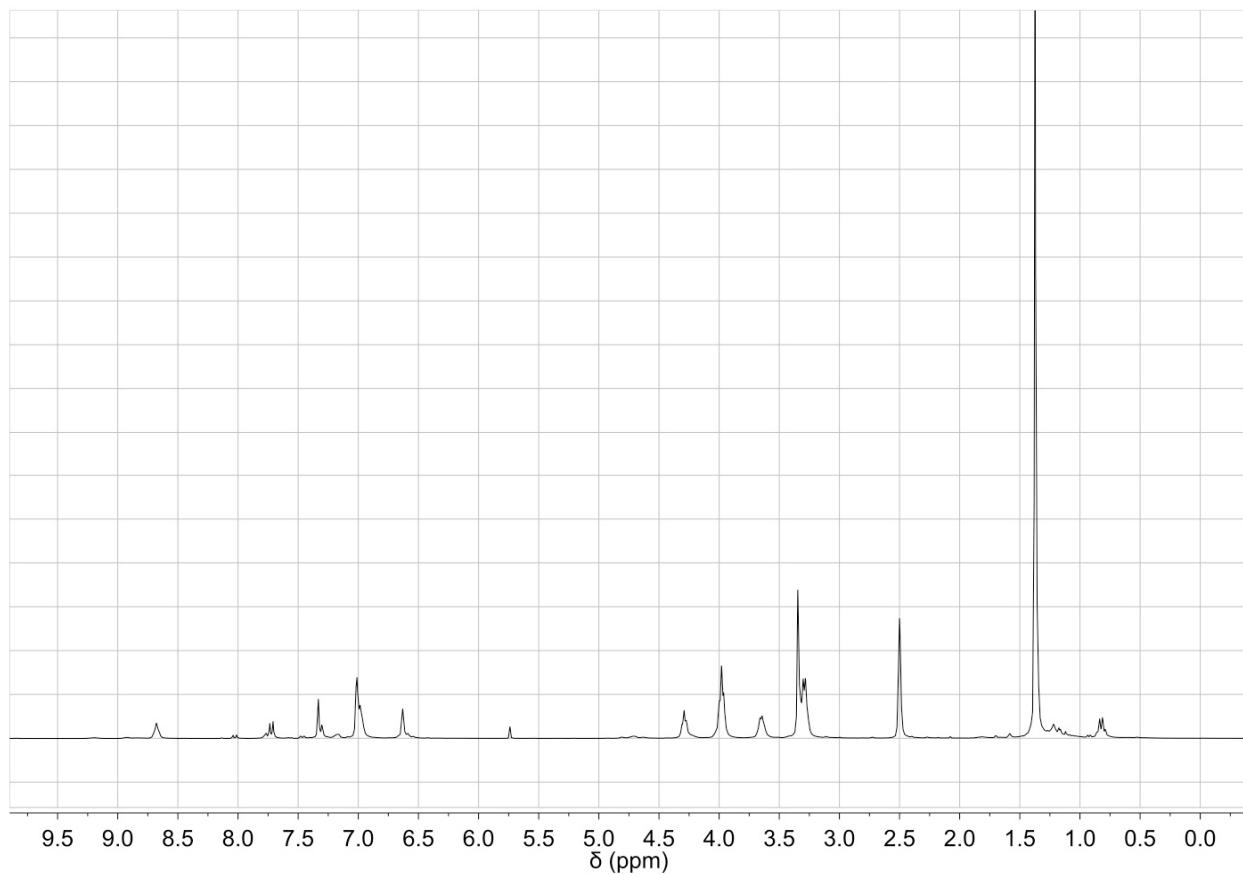


Fig. S3a. ¹H NMR spectrum of **9** (DMSO-d₆, 300 MHz).

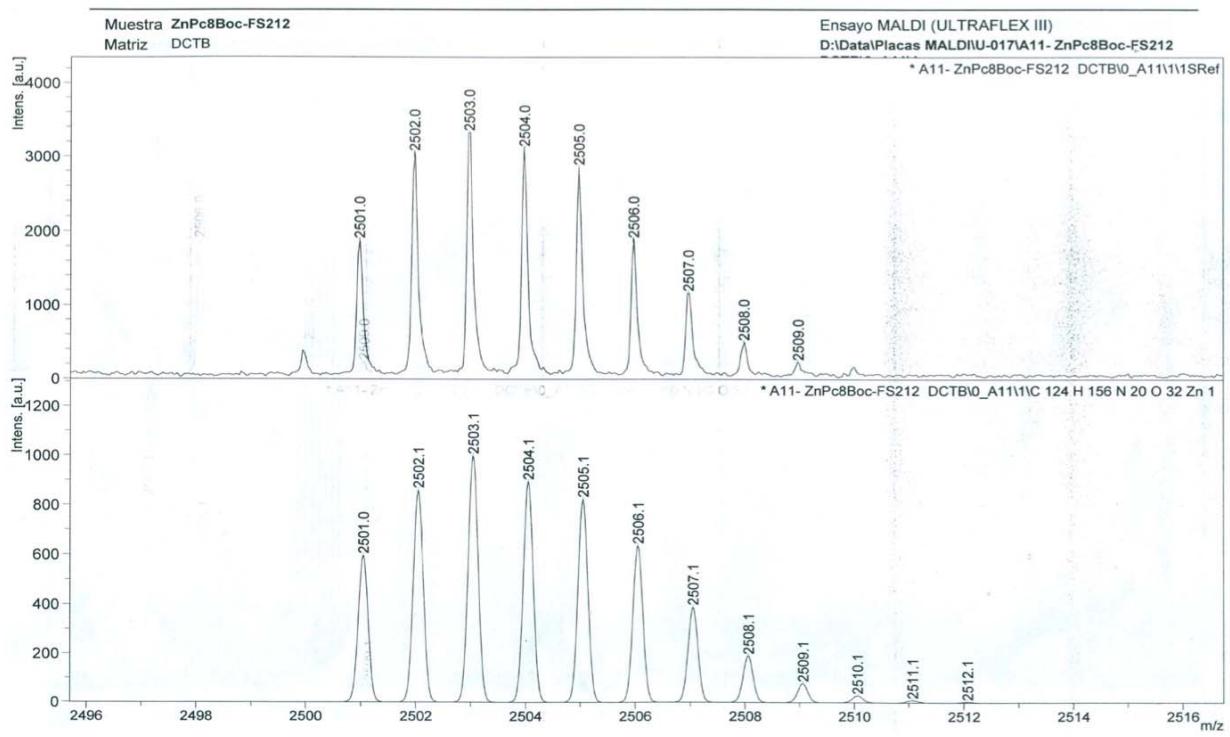


Fig. S3b. MALDI-TOF MS spectrum of **9** (Top: experimental spectrum, bottom: simulated spectrum).

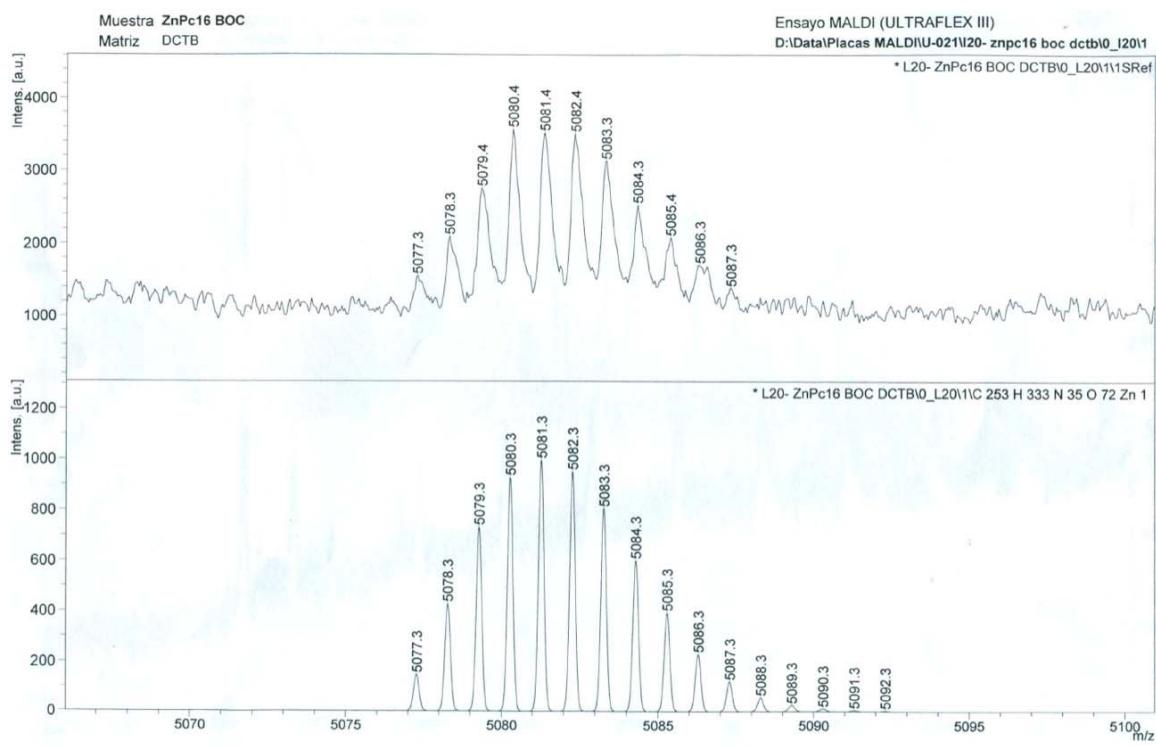


Fig. S4. MALDI-TOF MS spectrum of **10** (Top: experimental spectrum, bottom: simulated spectrum).

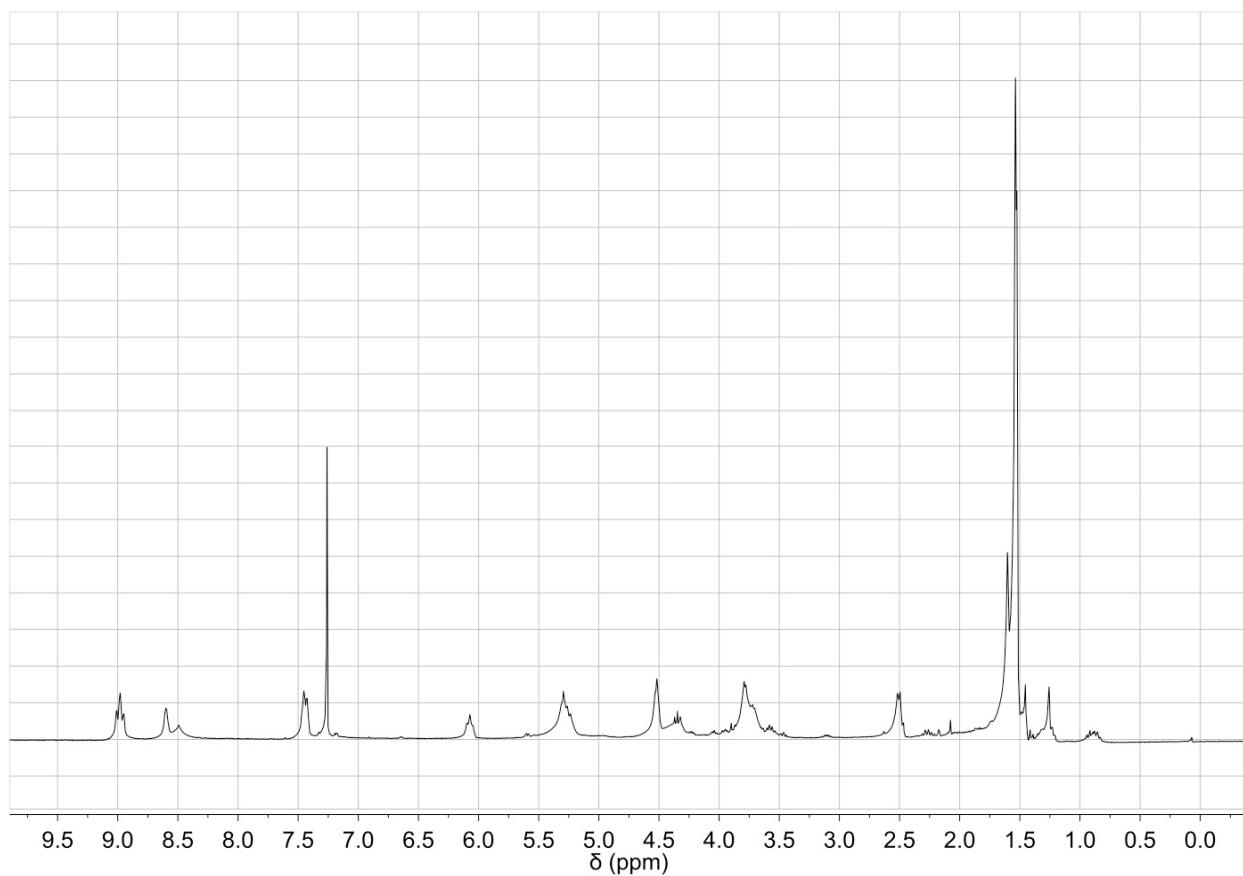


Fig. S5a. ¹H NMR spectrum of 11 (CDCl₃, 300 MHz).

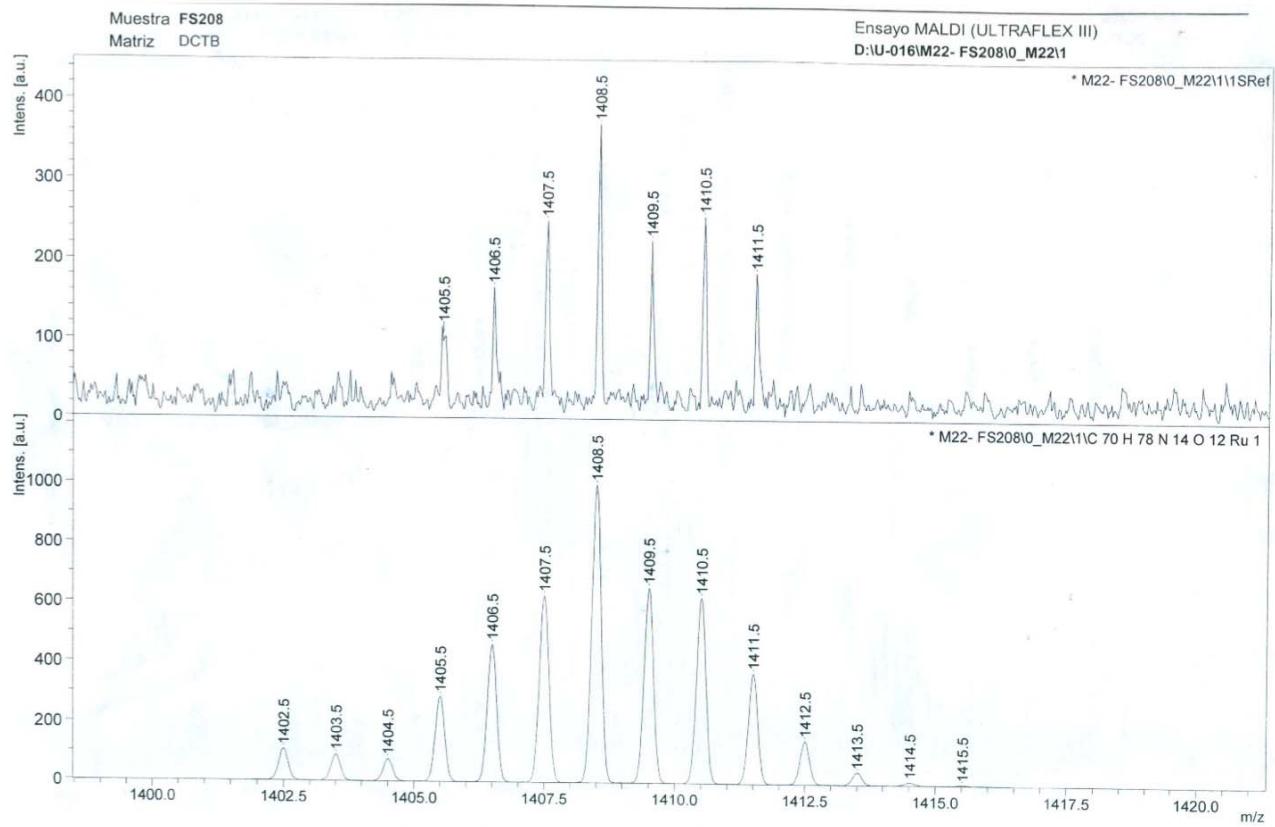


Fig. S5b. MALDI-TOF MS spectrum of **11** (Top: experimental spectrum, bottom: simulated spectrum).

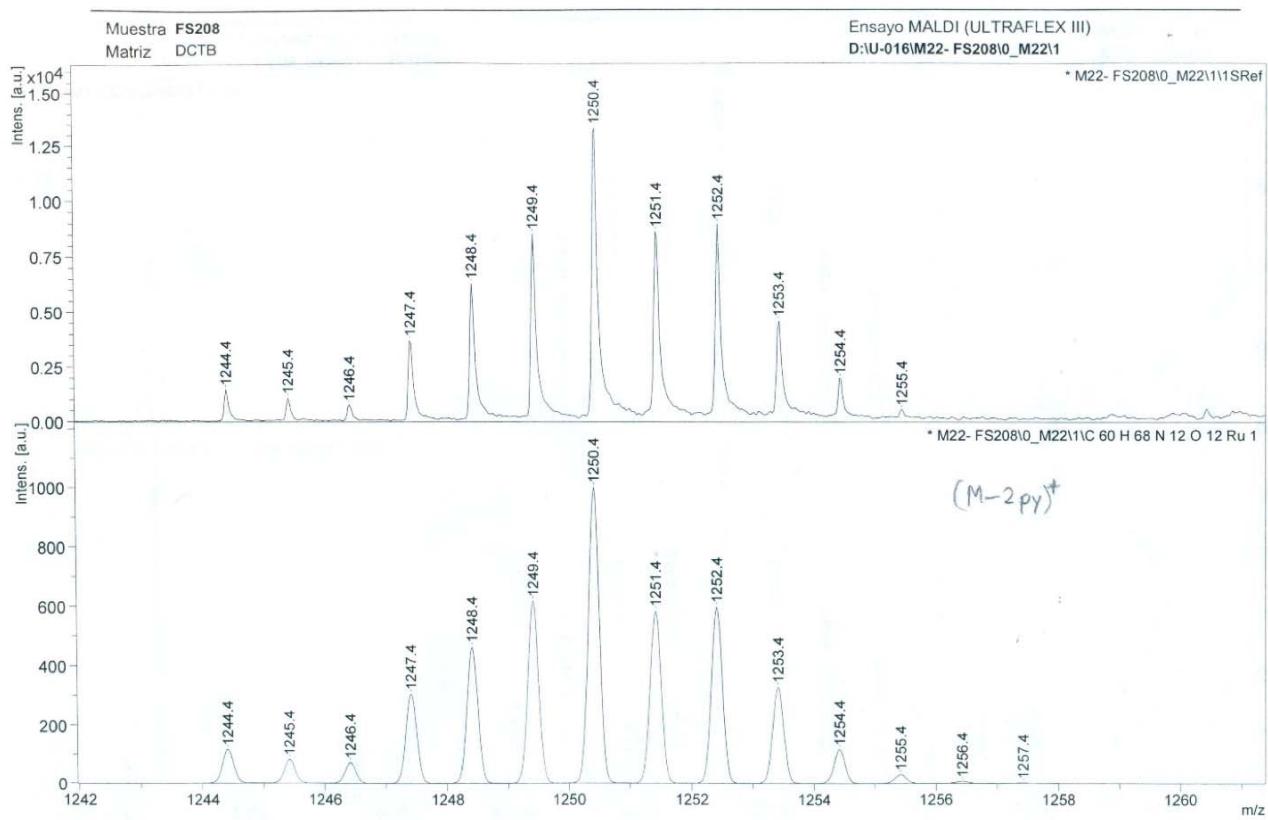


Fig. S5c. MALDI-TOF MS spectrum of **11** (Top: experimental spectrum, bottom: simulated spectrum).

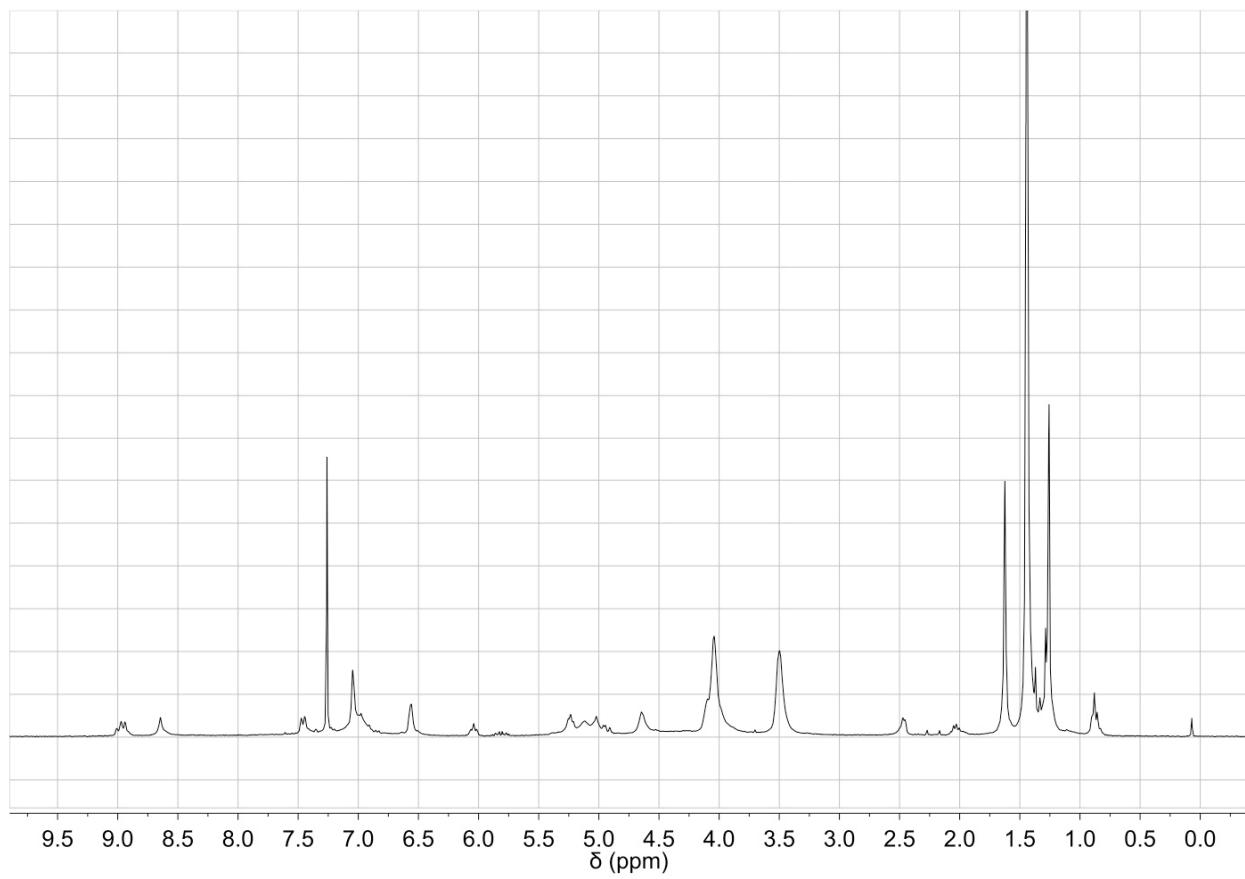


Fig. S6a. ^1H NMR spectrum of **12** (CDCl_3 , 300 MHz).

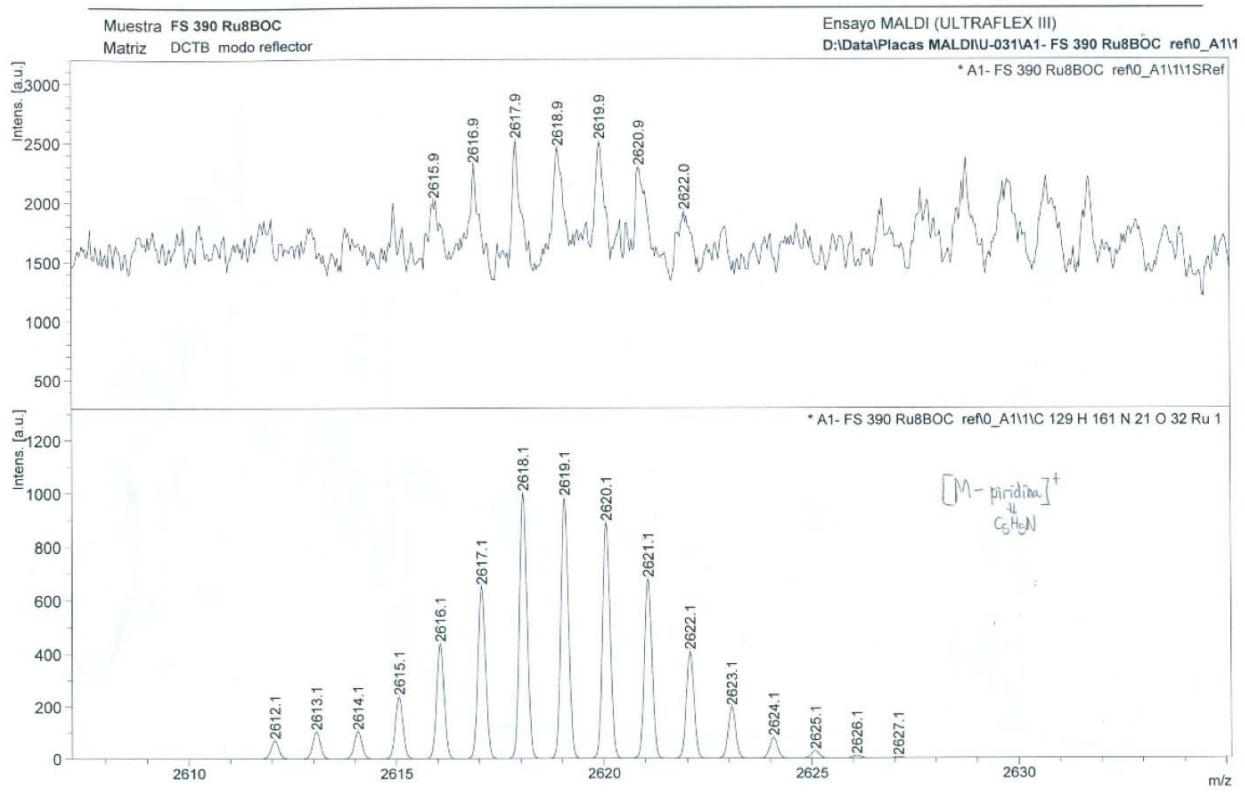


Fig. S6b. MALDI-TOF MS spectrum of **12** (Top: experimental spectrum, bottom: simulated spectrum).

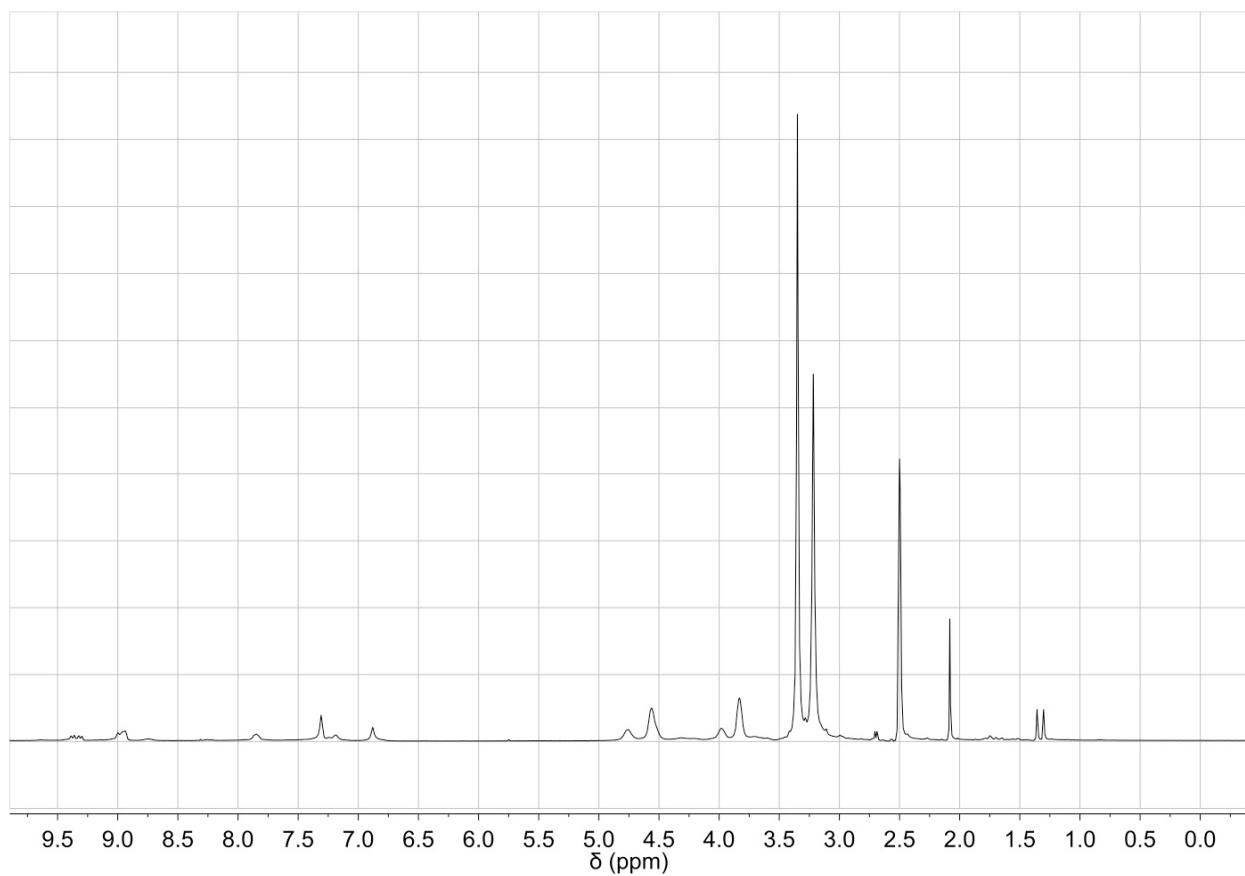


Fig. S7a. ¹H NMR spectrum of **ZnPc1** (DMSO-d₆, 300 MHz).

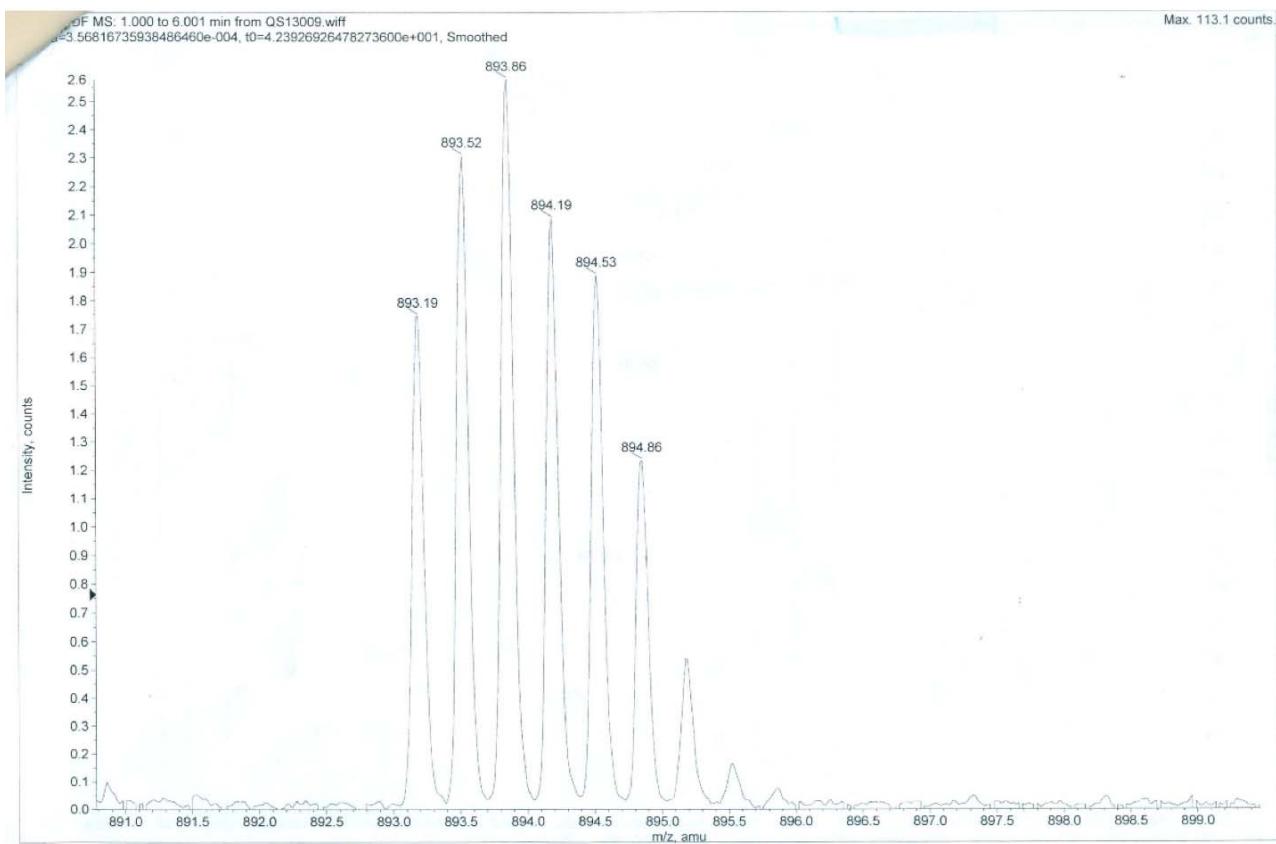


Fig. S7b. ESI-TOF MS spectrum of **ZnPc1**.

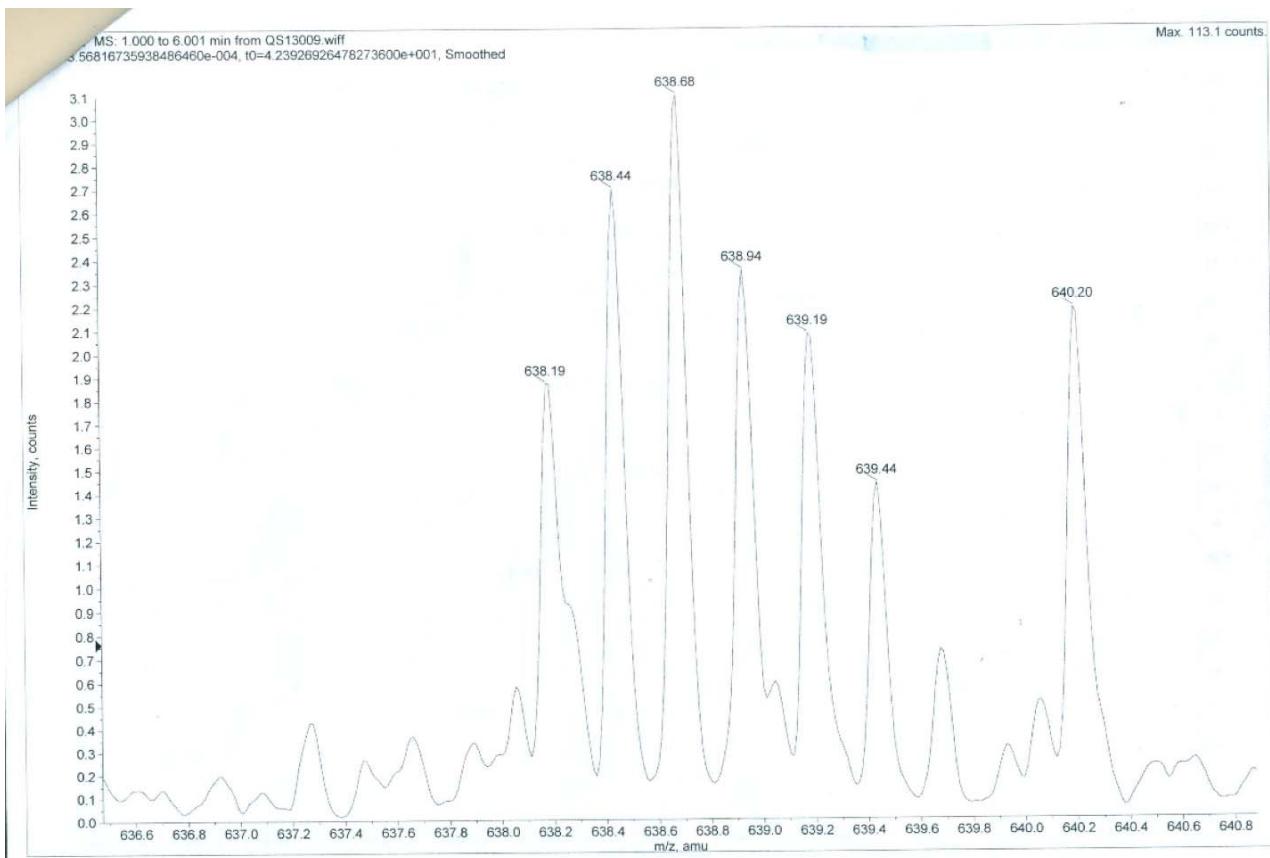


Fig. S7c. ESI -TOF MS spectrum of **ZnPc1**.

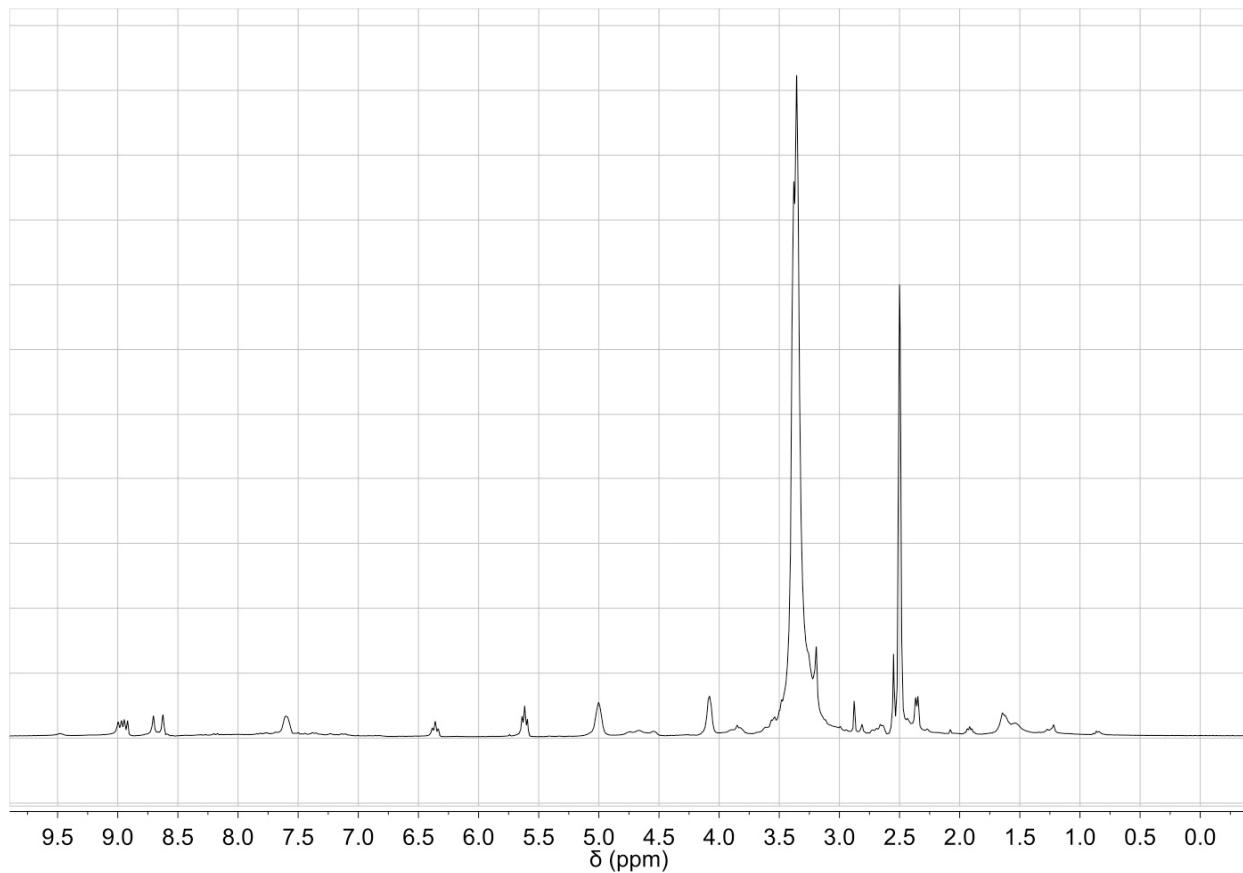


Fig. S8a. ¹H NMR spectrum of RuPc (DMSO-d₆, 300 MHz).

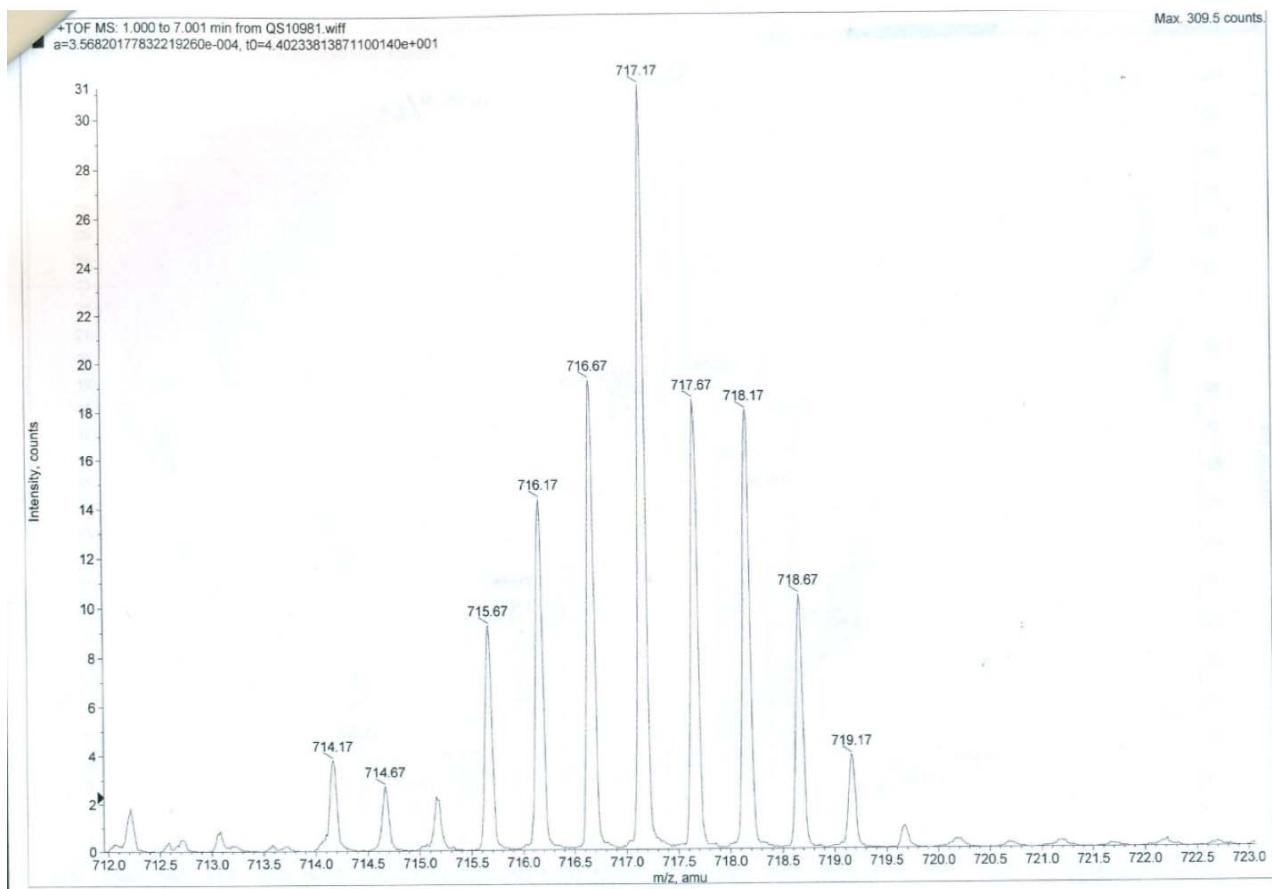


Fig. S8b. ESI -TOF MS spectrum of RuPc.

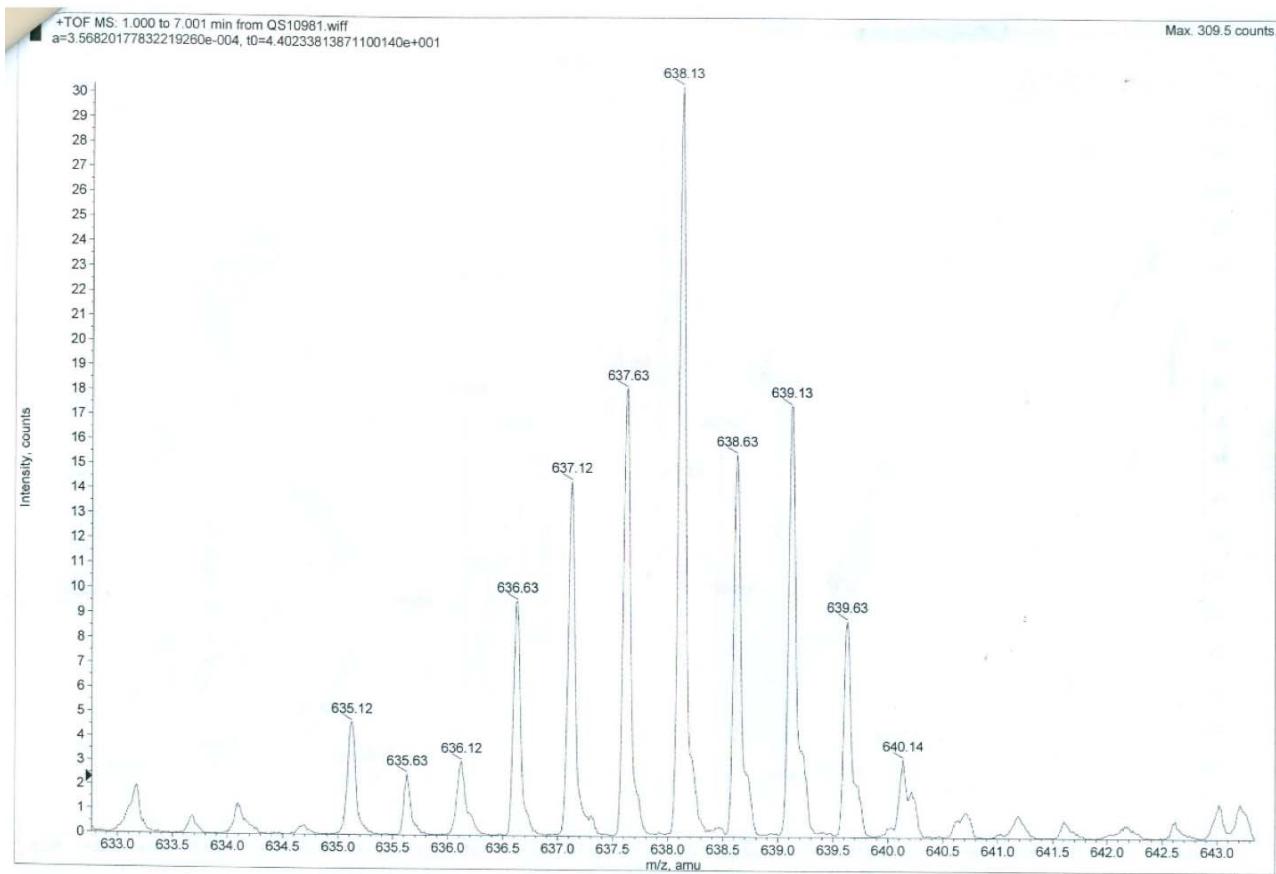


Fig. S8c. ESI -TOF MS spectrum of RuPc.

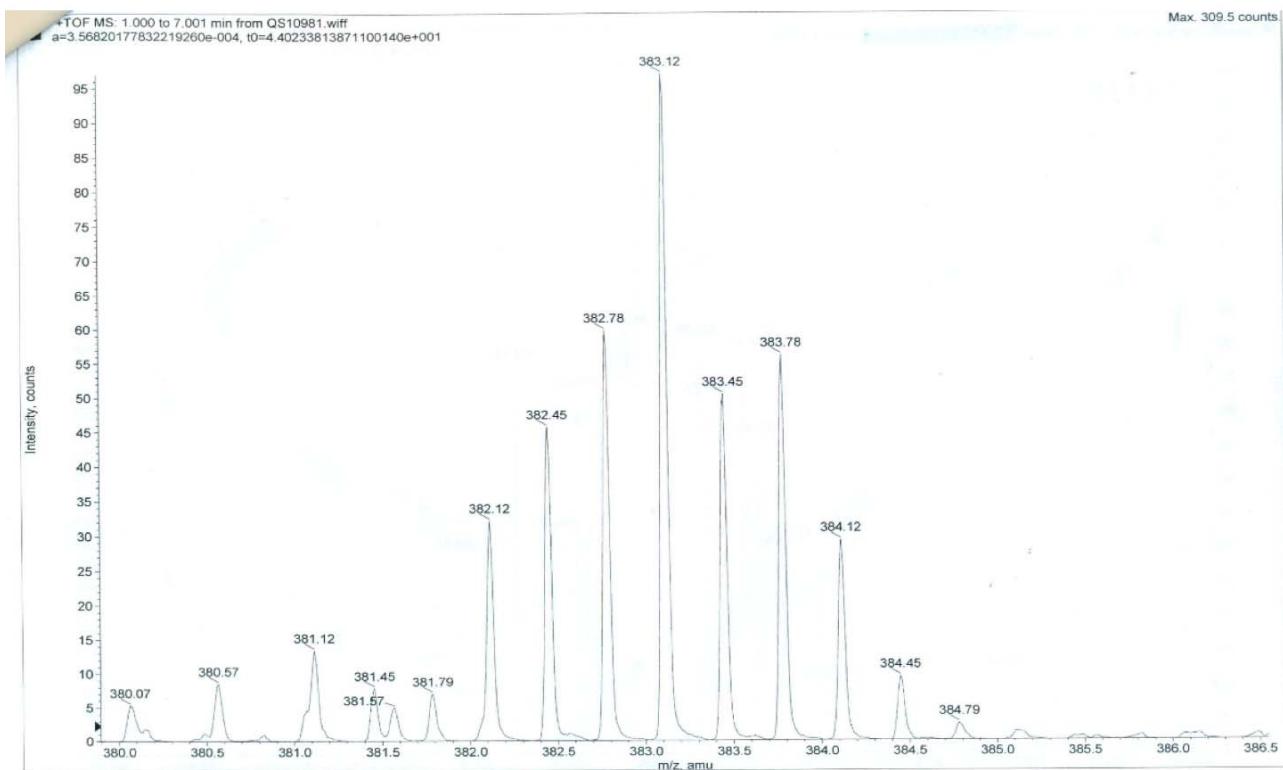


Fig. S8d. ESI -TOF MS spectrum of RuPc.

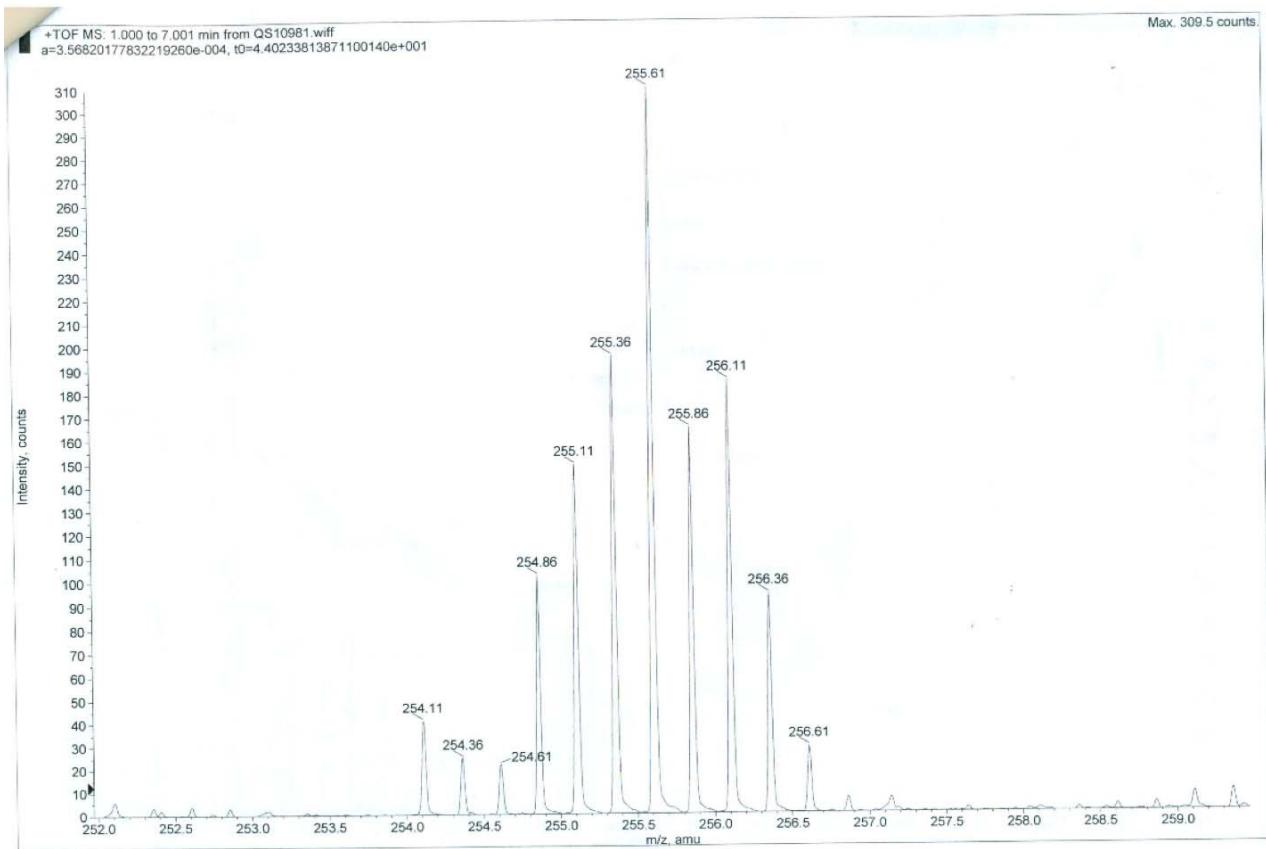


Fig. S8e. ESI -TOF MS spectrum of RuPc.

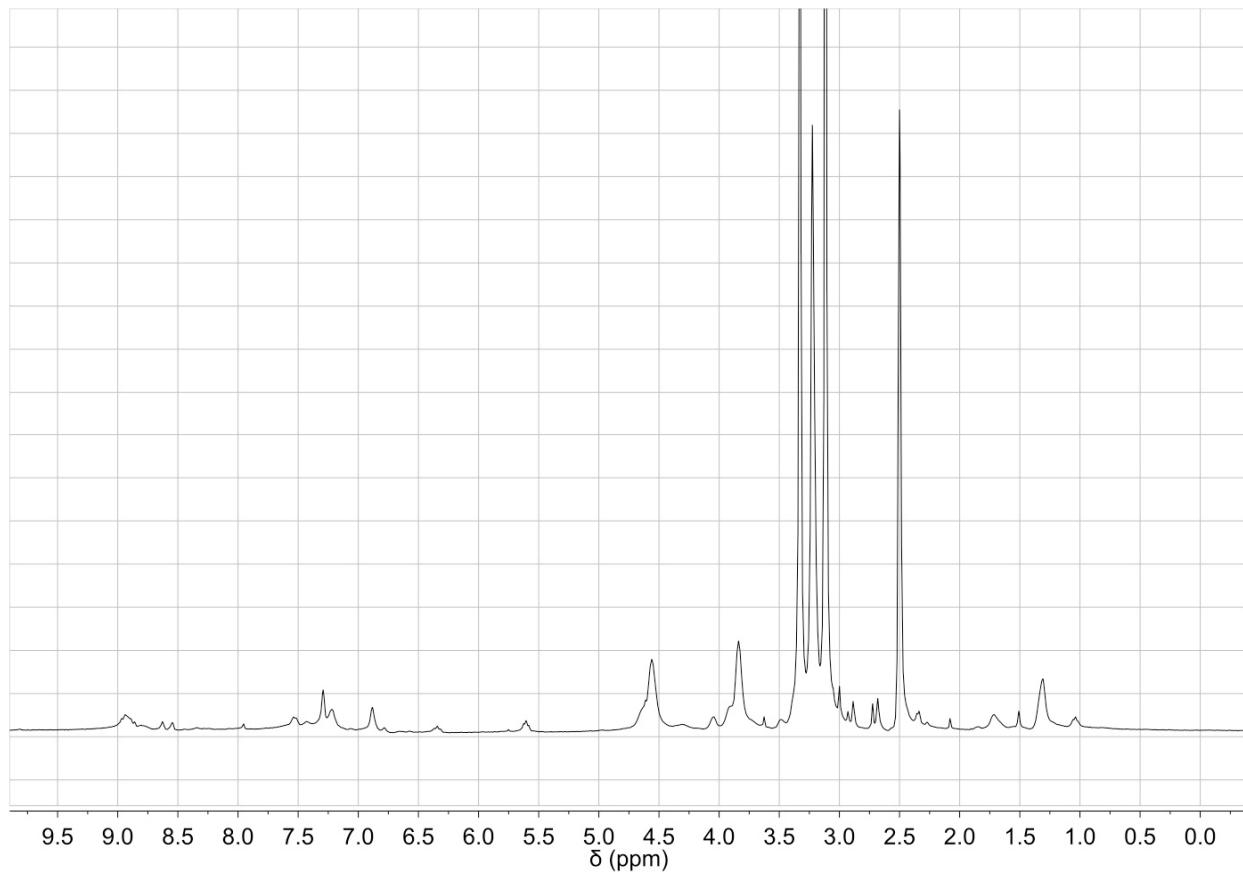


Fig. S9a. ¹H NMR spectrum of RuPc1 (DMSO-d₆, 300 MHz).

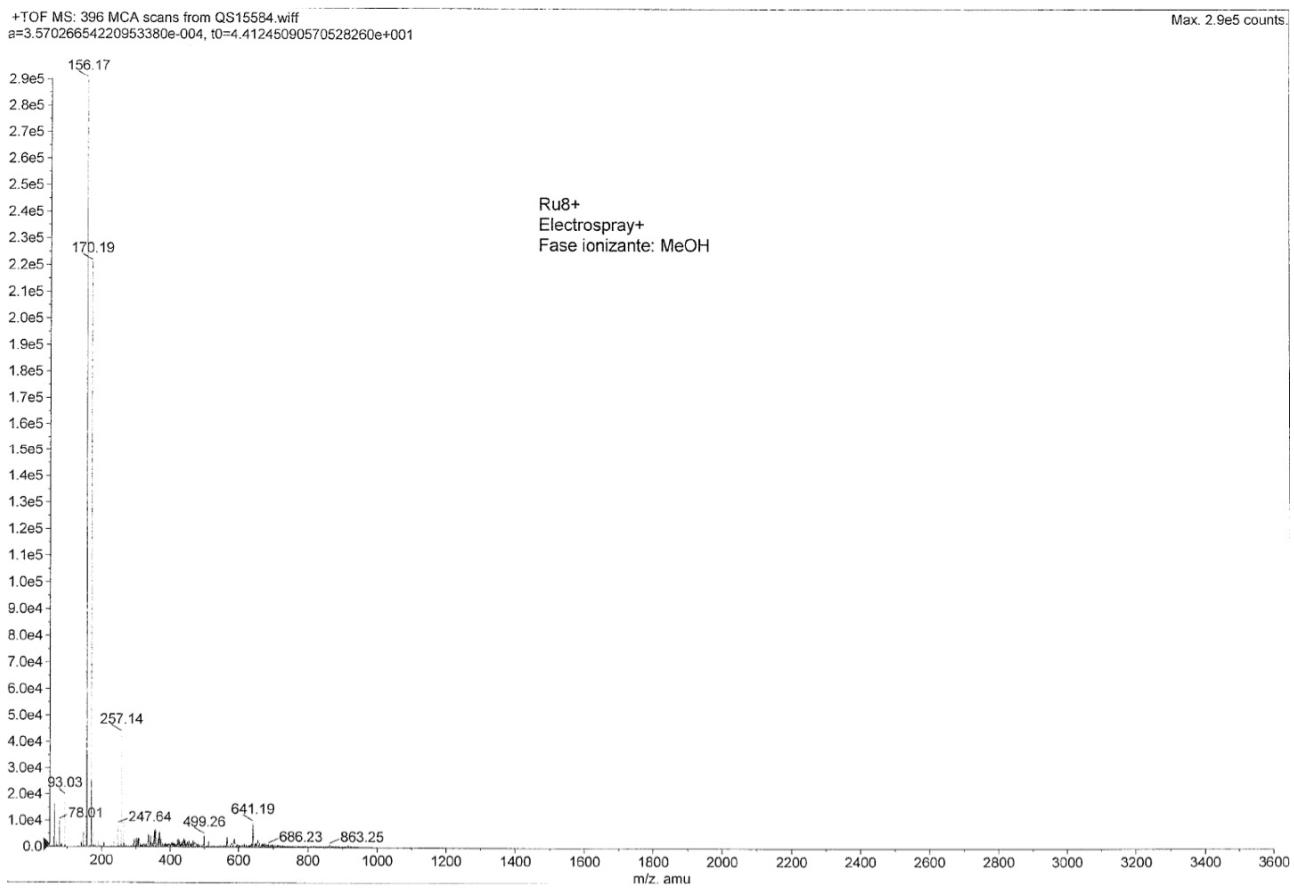


Fig. S9b. ESI -TOF MS spectrum of **RuPc1**.

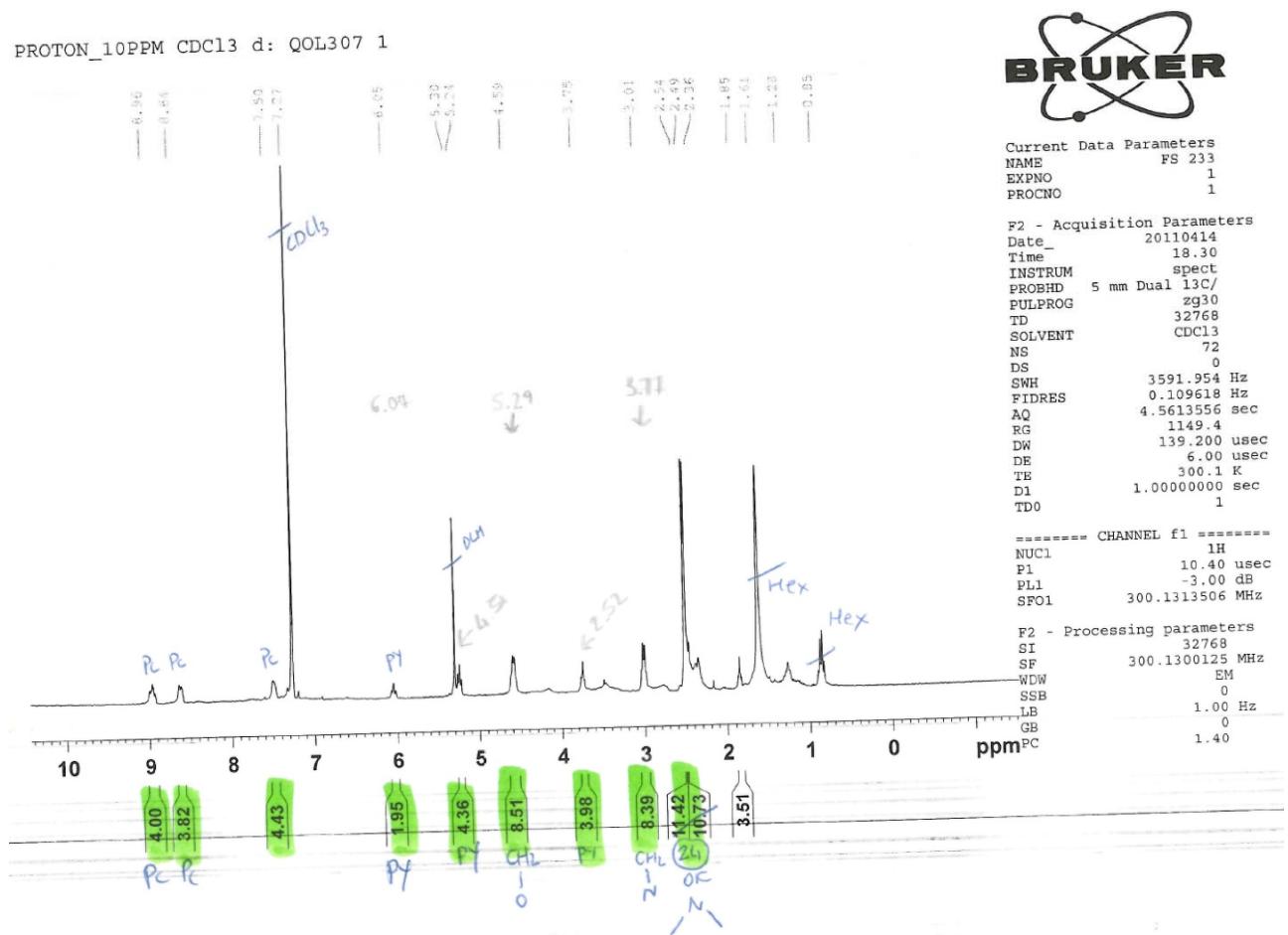


Fig. S10a. ¹H NMR spectrum of **3** (DMSO-d₆, 300 MHz).

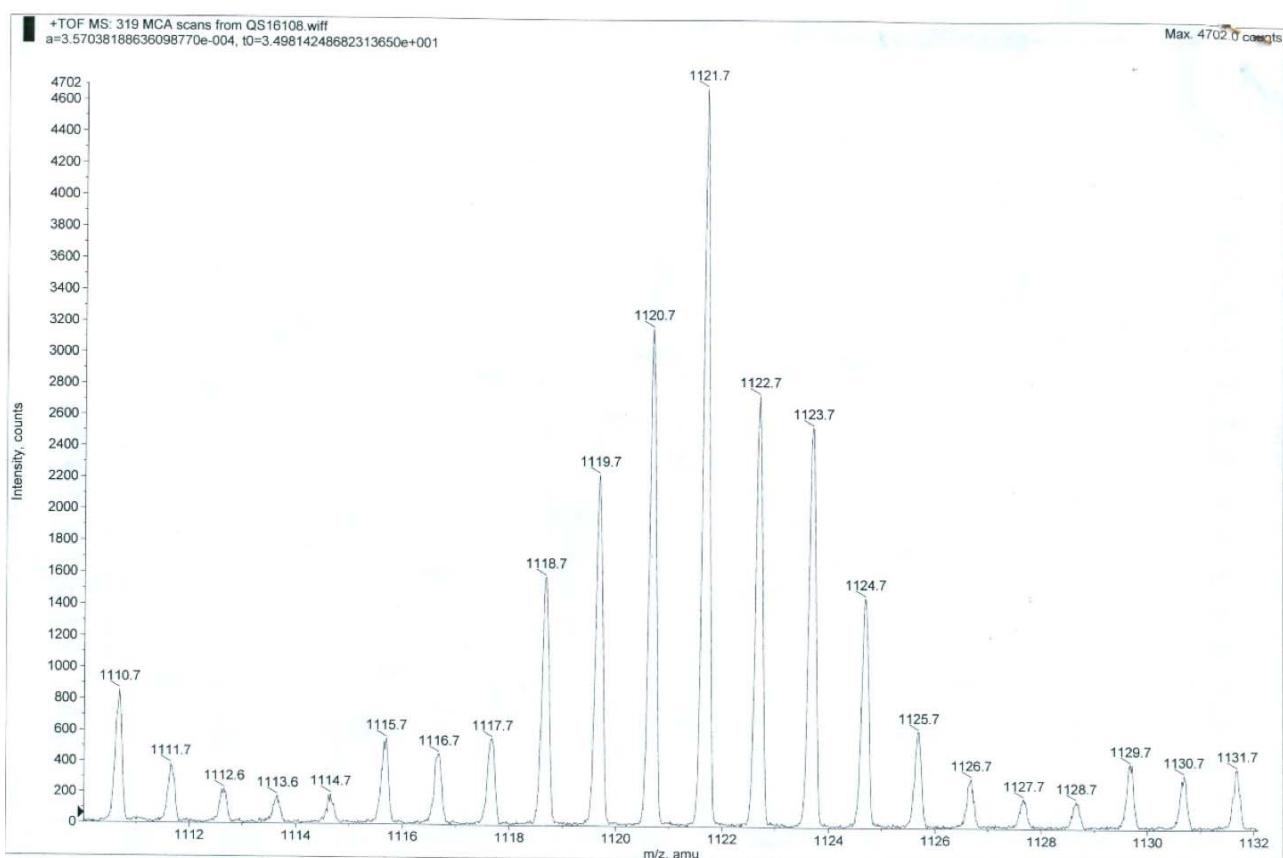


Fig. S10b. ESI-TOF MS spectrum of **3**.