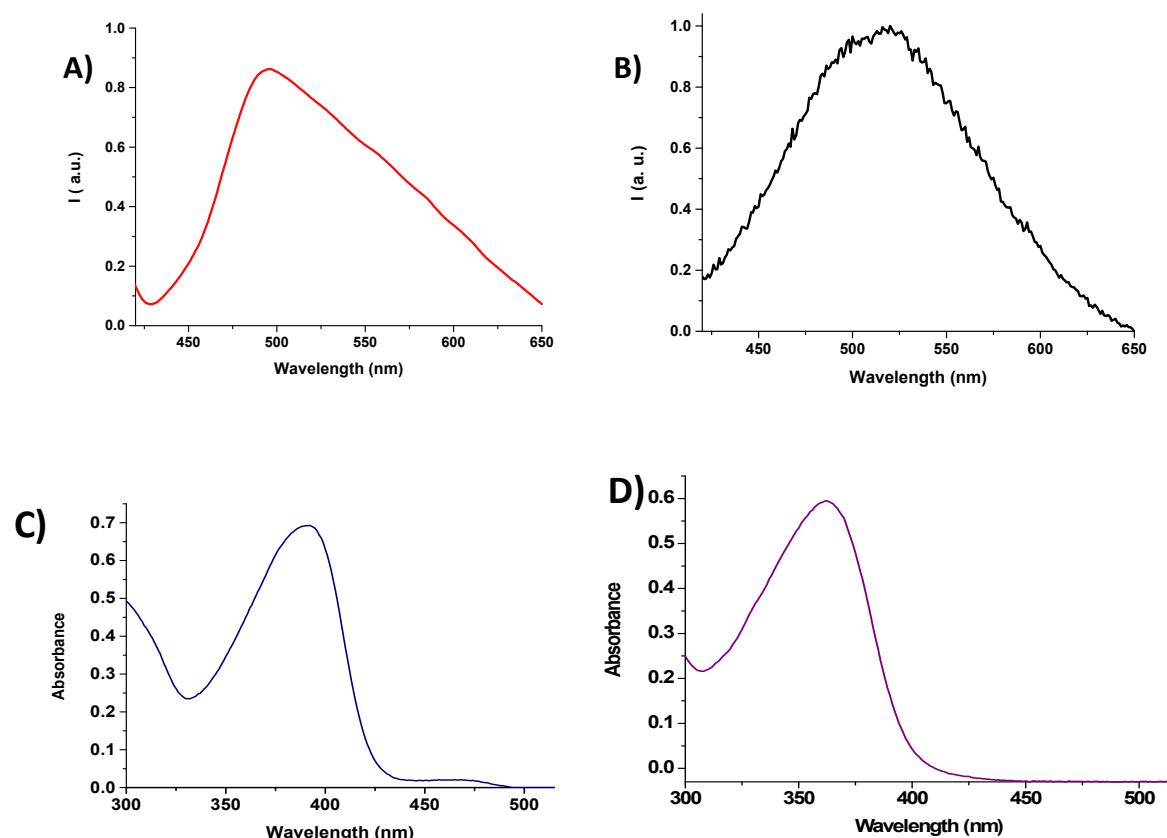
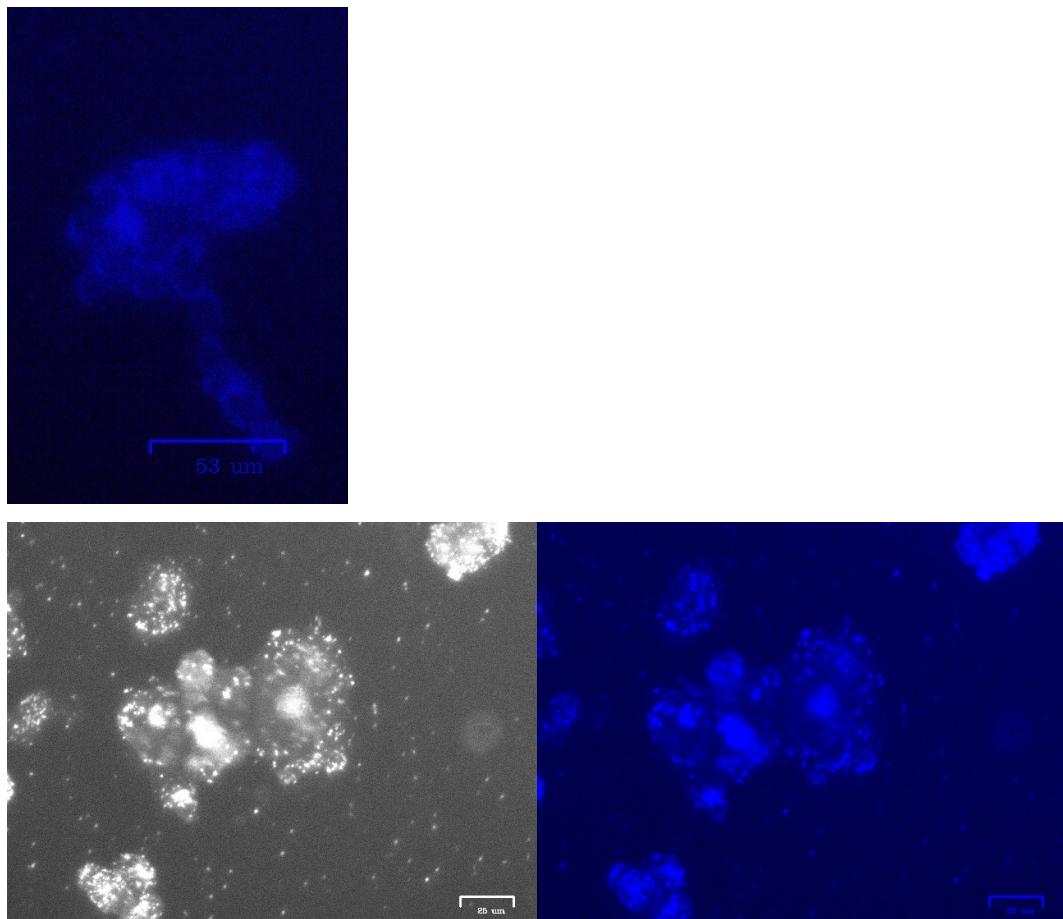


## Fluorescent squaramide ligands for cellular imaging and their encapsulation in cubosomes

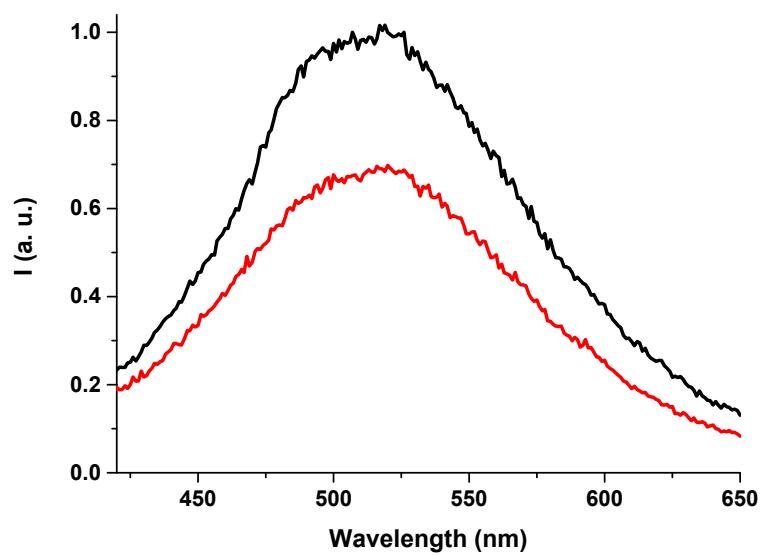
Joanna I. Lachowicz, Giacomo Picci, Pierpaolo Coni, Vito Lippolis, Marianna Mamusa, Sergio Murgia\*, Giuseppina Pichiri, Claudia Caltagirone\*



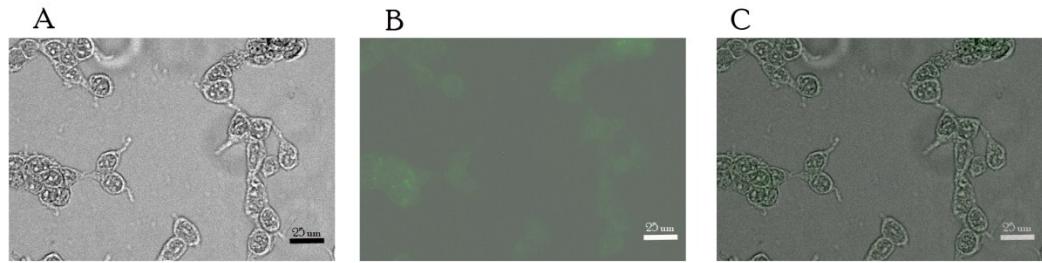
**Figure S1** Normalized emissions (A and B) and absorptions (C and D) for **L1** and **L2**, respectively of DMSO solution (1 mM) diluted in water (25  $\mu$ M).  $\lambda_{\text{Ex}}$  355 nm.



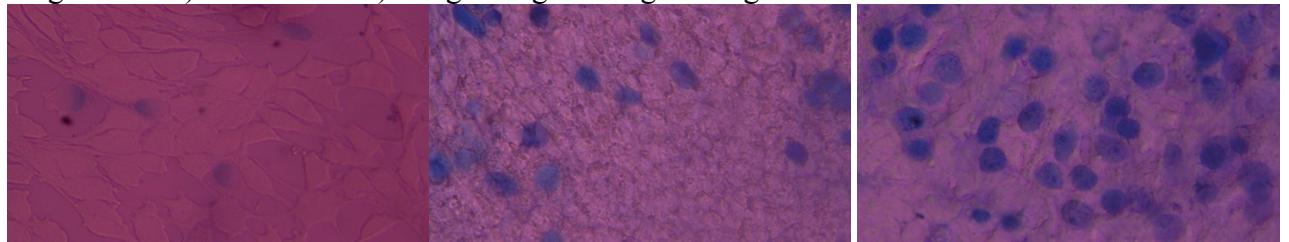
**Figure S2.** 293T (up) and Caco-2 cells (down) incubated for 10 min with **L1** ligand 200  $\mu\text{M}$ .



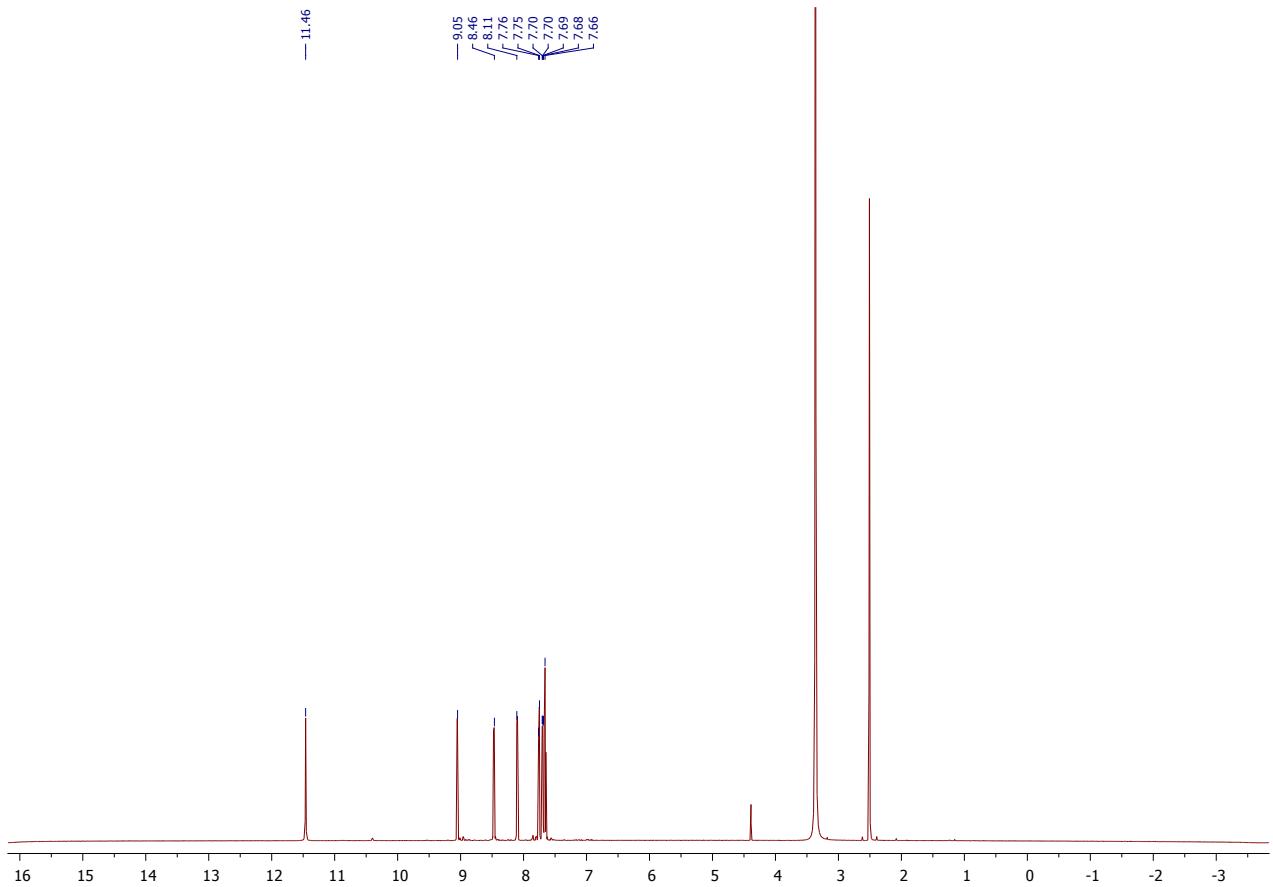
**Figure S3** Normalized emissions of **L2** (red) and **L2** in the presence of 1 eq of TBAH<sub>2</sub>PO<sub>4</sub> (black) of a DMSO solution (1 mM) diluted in water (25  $\mu\text{M}$ ).  $\lambda_{\text{Ex}}$  480 nm.

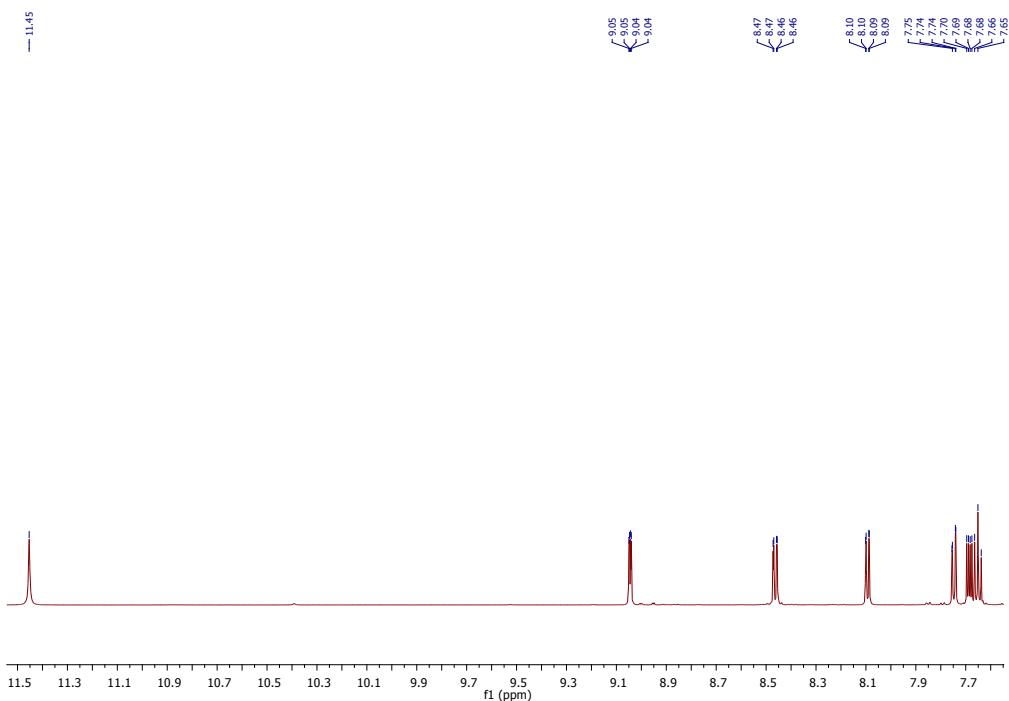


**Figure S4.** 293T cells incubated for 30 min with cubosomes containing **L1** ligand 0.035  $\mu\text{M}$ . A) Bright filed B) Green filed C) merge image of bright and green filed.

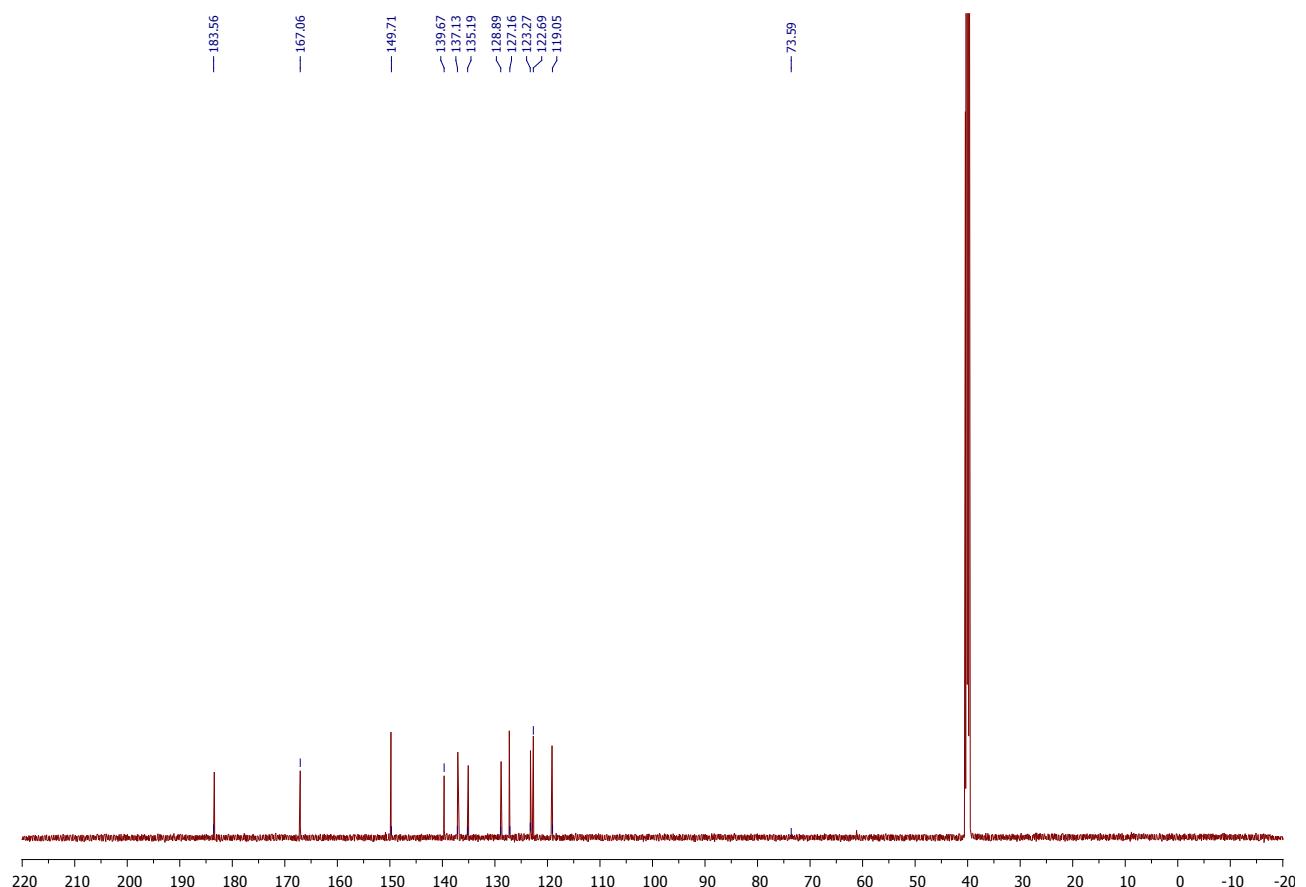


**Figure S5.** Image of 293T cells without cubosomes (left), treated with 10  $\mu\text{l}$  (middle) and 20  $\mu\text{l}$  (right) of cubosomes and stained with 0.1 % Trypan Blue after 24 h. iLED, 40x.

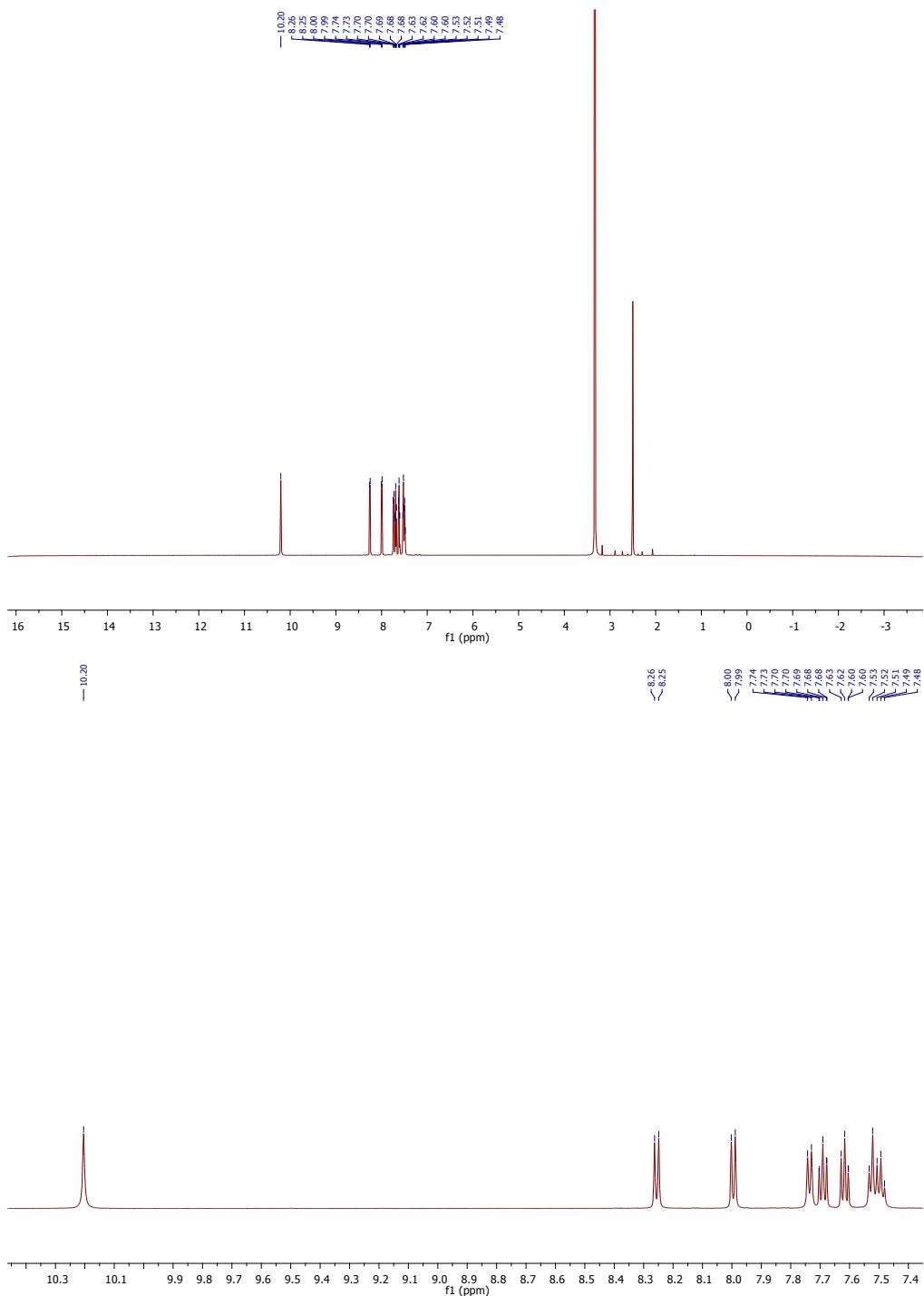




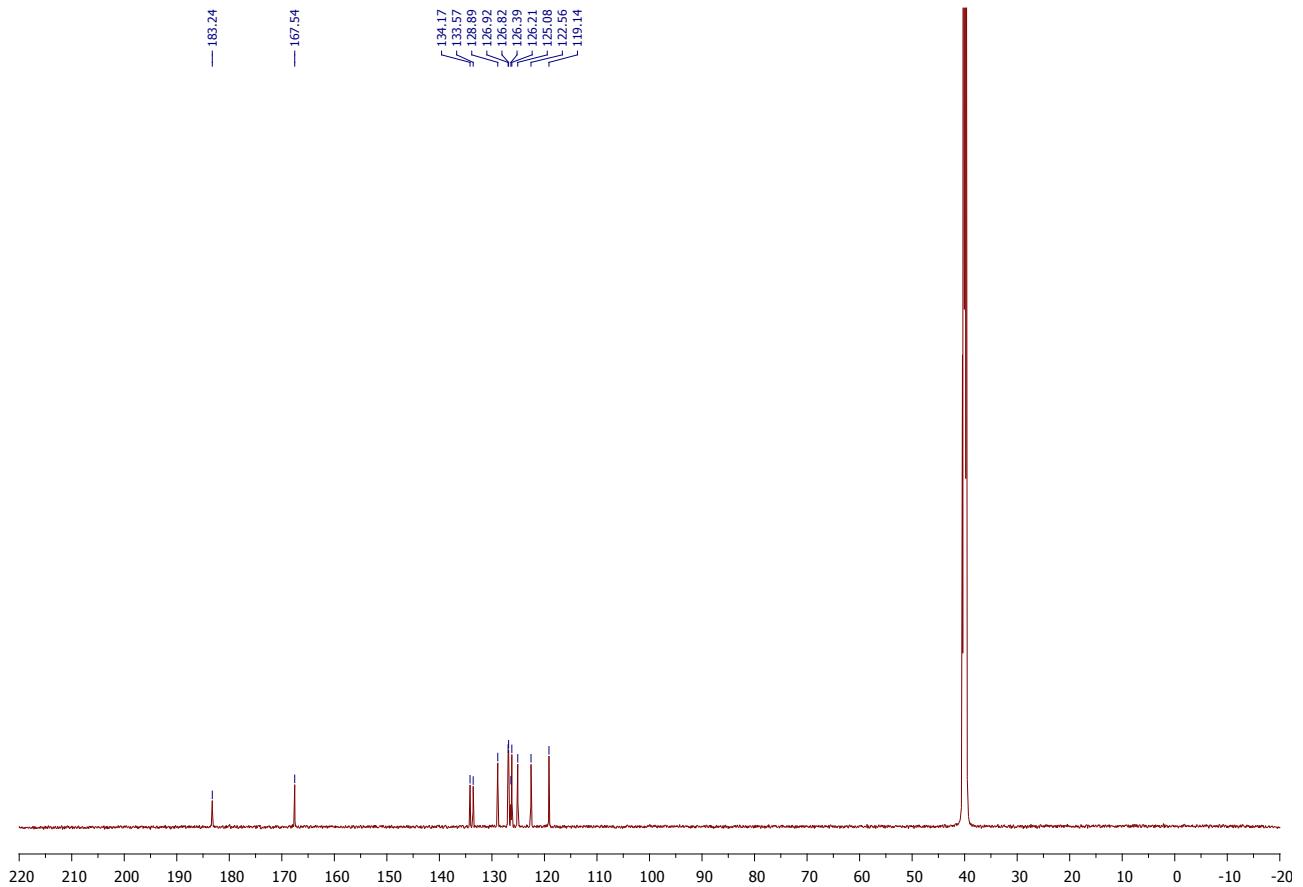
**Figure S6.** <sup>1</sup>H-NMR spectrum of L1 in DMSO-*d*<sub>6</sub>.



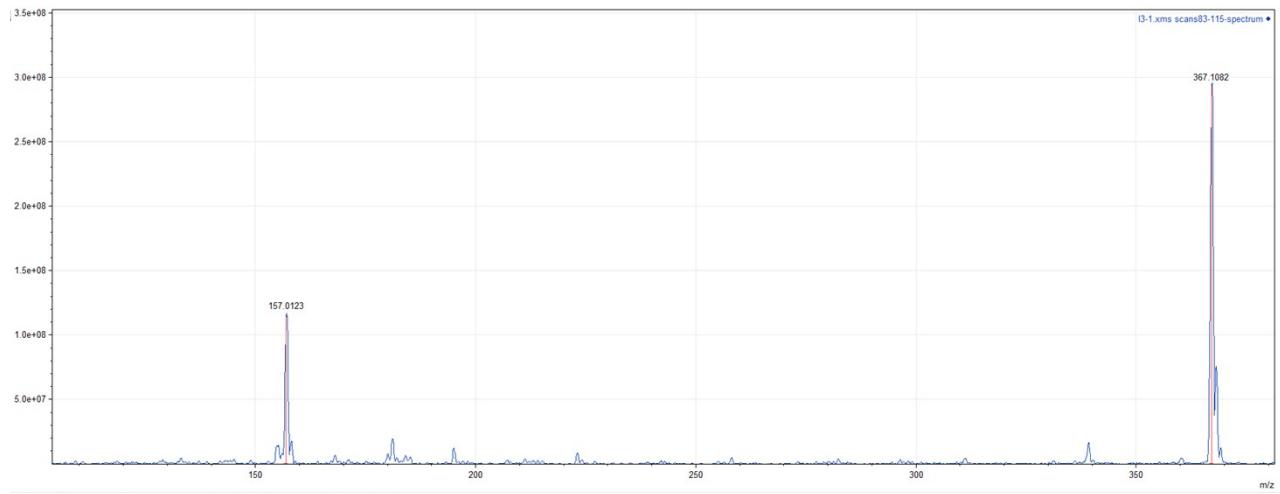
**Figure S7.** <sup>13</sup>C-NMR spectrum of L1 in DMSO-*d*<sub>6</sub>.



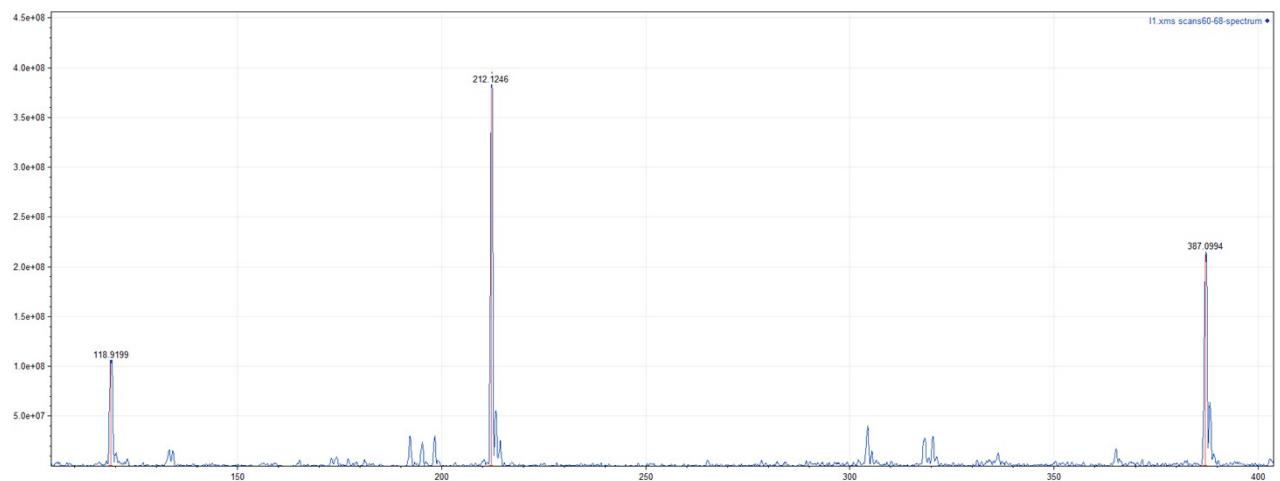
**Figure S8.**  $^1\text{H}$ -NMR spectrum of **L2** in  $\text{DMSO}-d_6$ .



**Figure S9.** <sup>13</sup>C-NMR spectrum of L2 in DMSO-*d*<sub>6</sub>.



**Figure S10.** ESI-MS spectrum of L1.



**Figure S11.** ESI-MS spectrum of L2.