

## **Supplementary Information**

### **Novel Alkylimidazolium Ionic Liquids as an Antibacterial Alternative to**

### **Pathogens of the Skin and Soft Tissue Infections**

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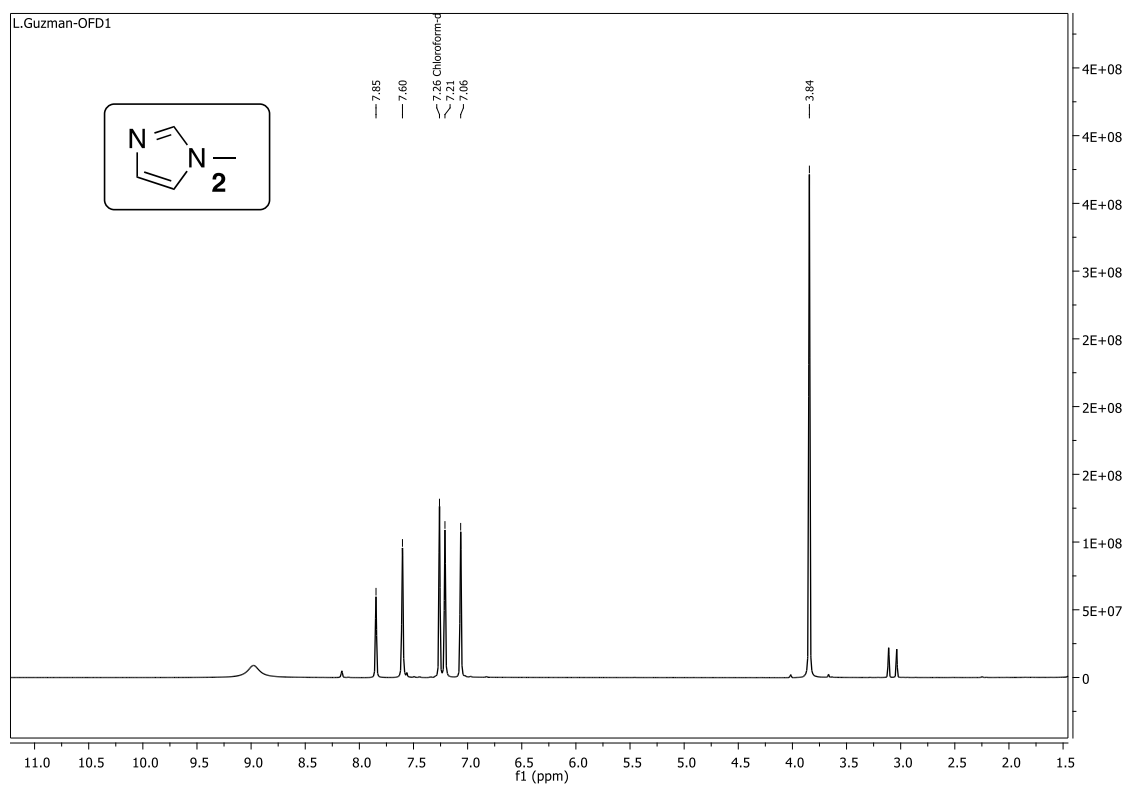
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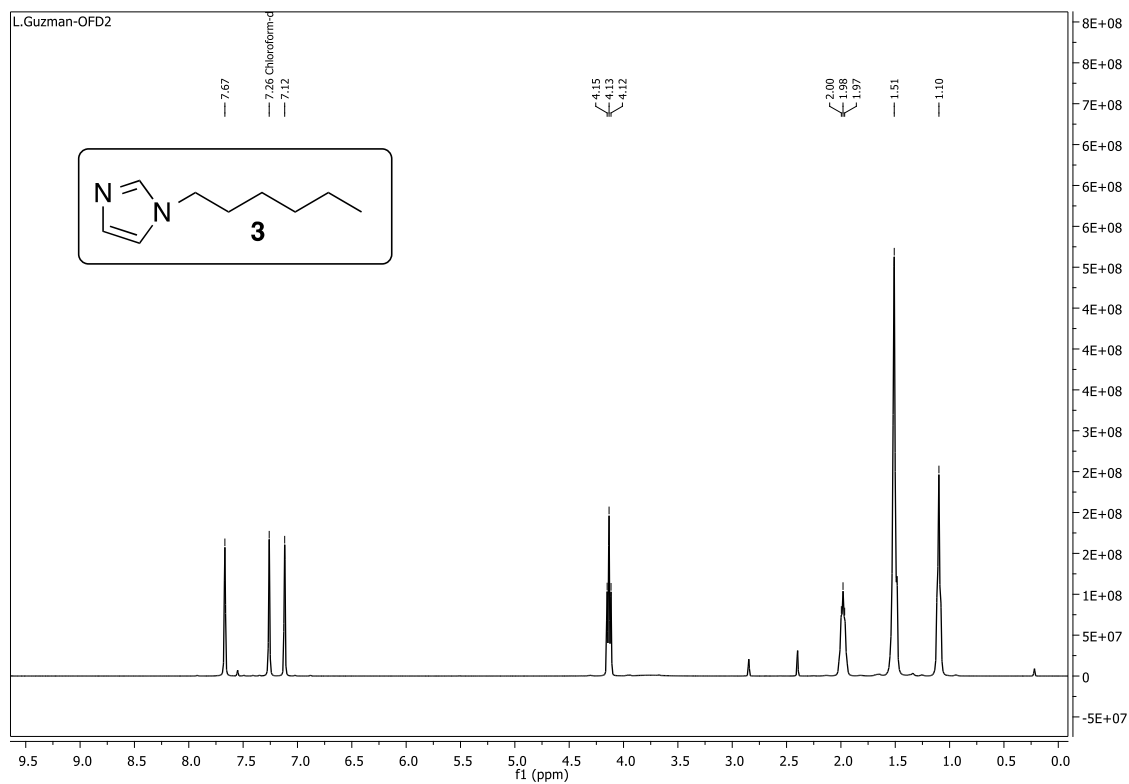
Tel.: +56-71-2200490

E-mail address: lguzman@utalca.cl

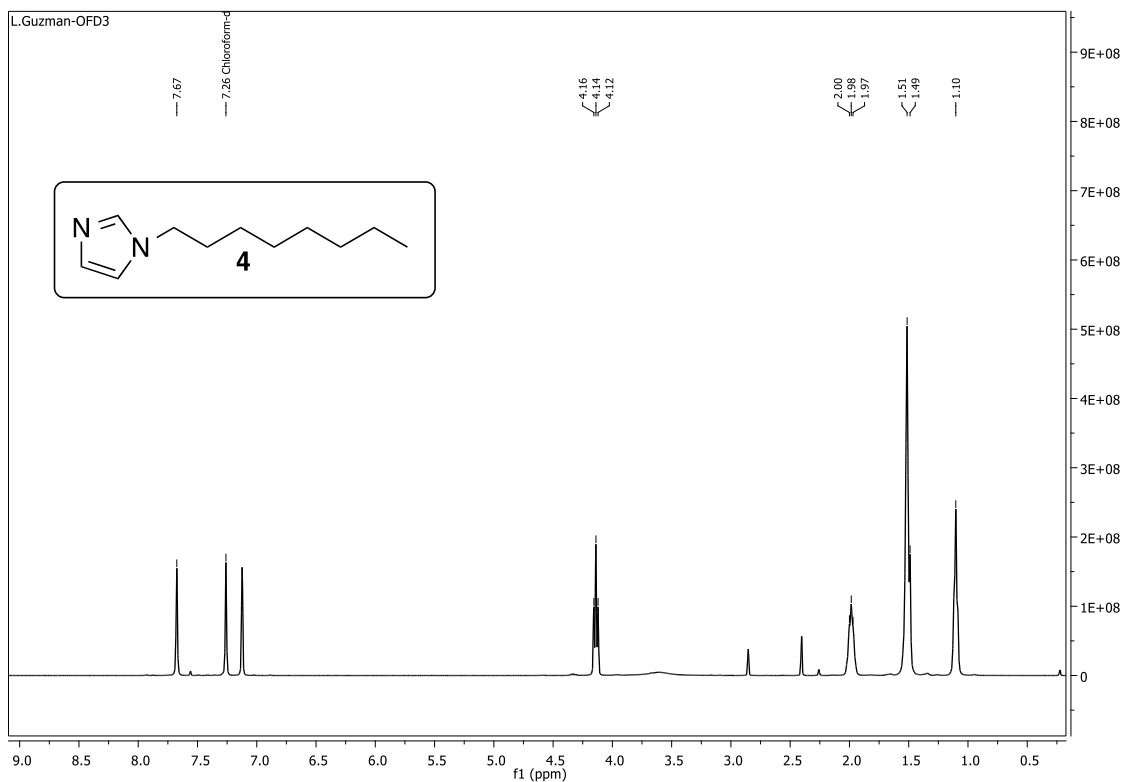
## I. $^1\text{H}$ and $^{13}\text{C}$ NMR spectra



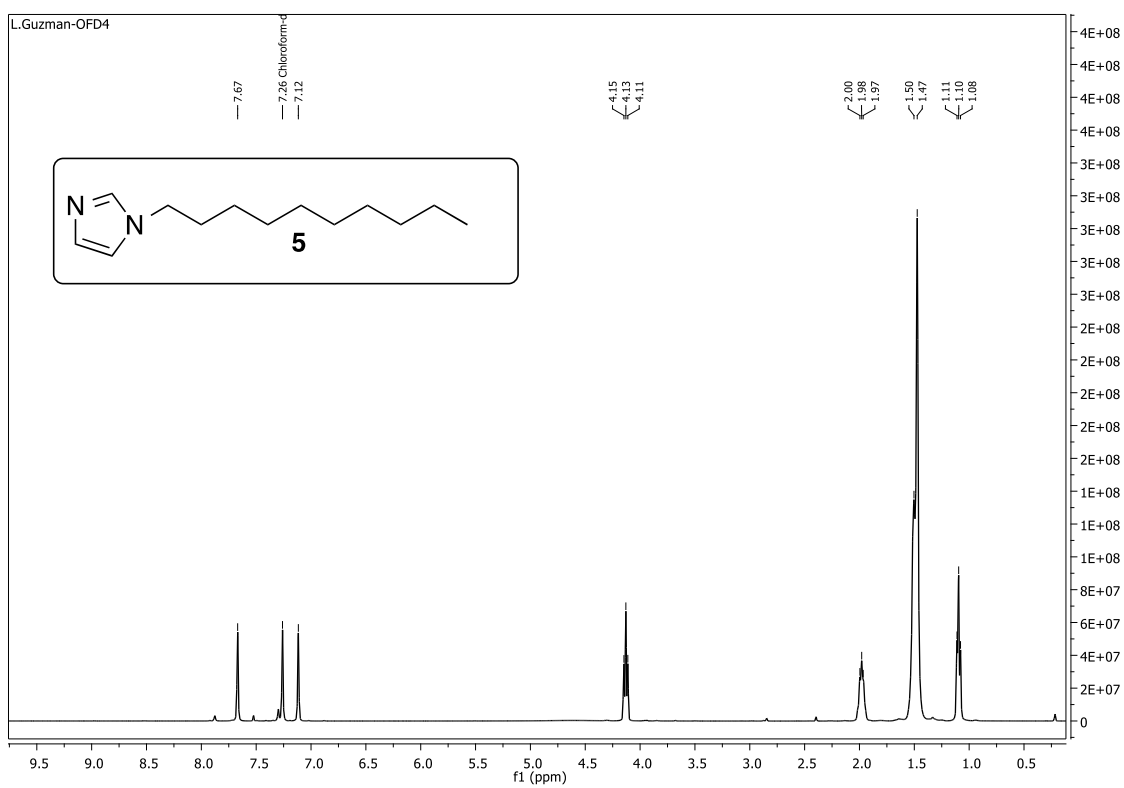
**Figure S1.**  $^1\text{H}$  NMR spectrum (400 MHz,  $\text{CDCl}_3$ ) of compound **2**.



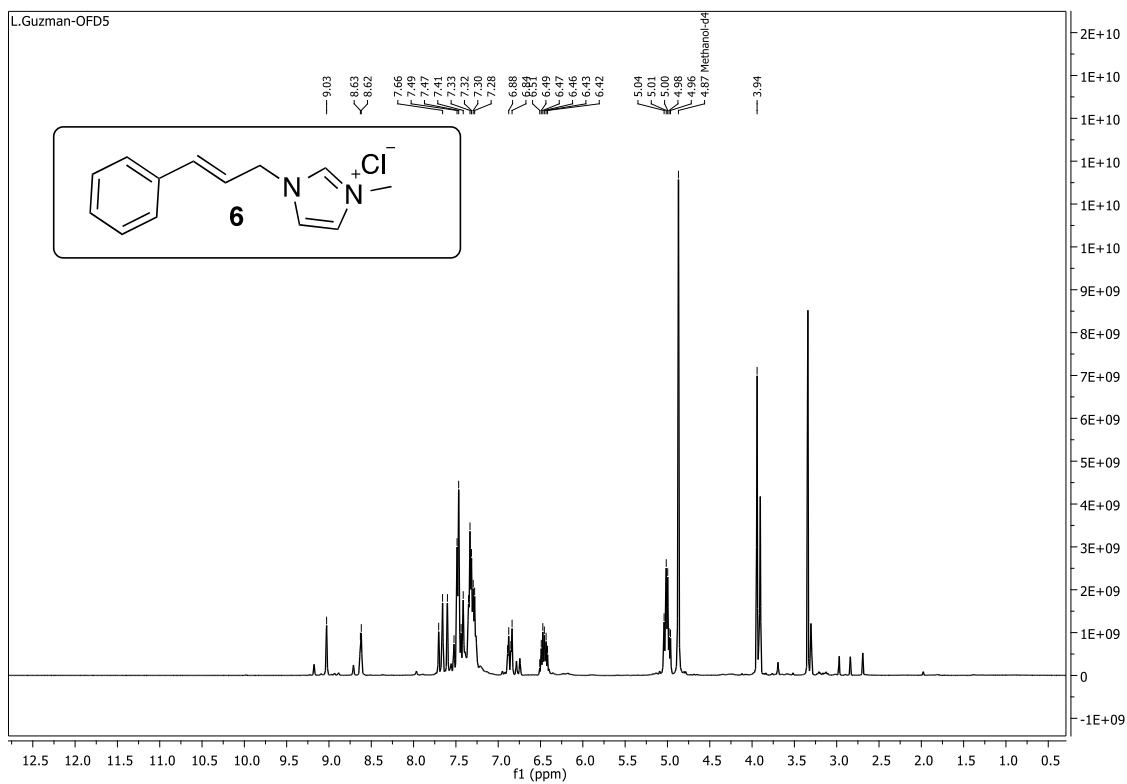
**Figure S2.**  $^1\text{H}$  NMR spectrum (400 MHz,  $\text{CDCl}_3$ ) of compound **3**.



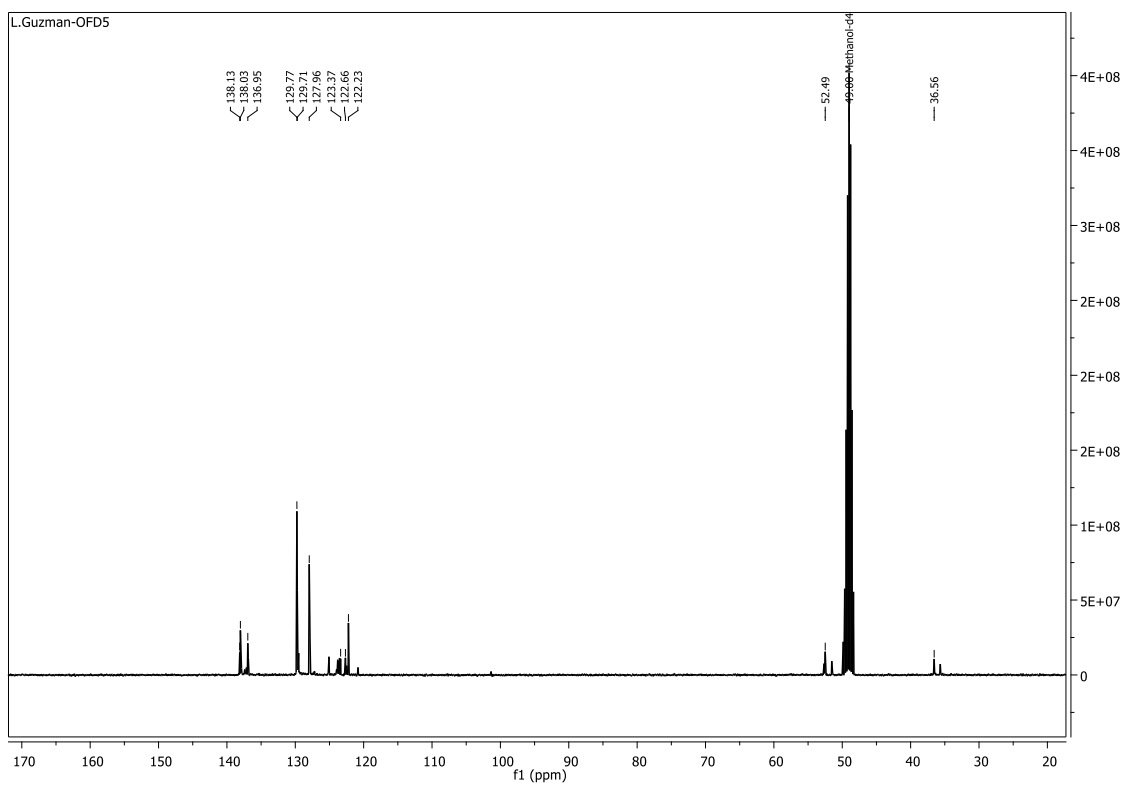
**Figure S3.**  $^1\text{H}$  NMR spectrum (400 MHz,  $\text{CDCl}_3$ ) of compound **4**.



**Figure S4.**  $^1\text{H}$  NMR spectrum (400 MHz,  $\text{CDCl}_3$ ) of compound **5**.

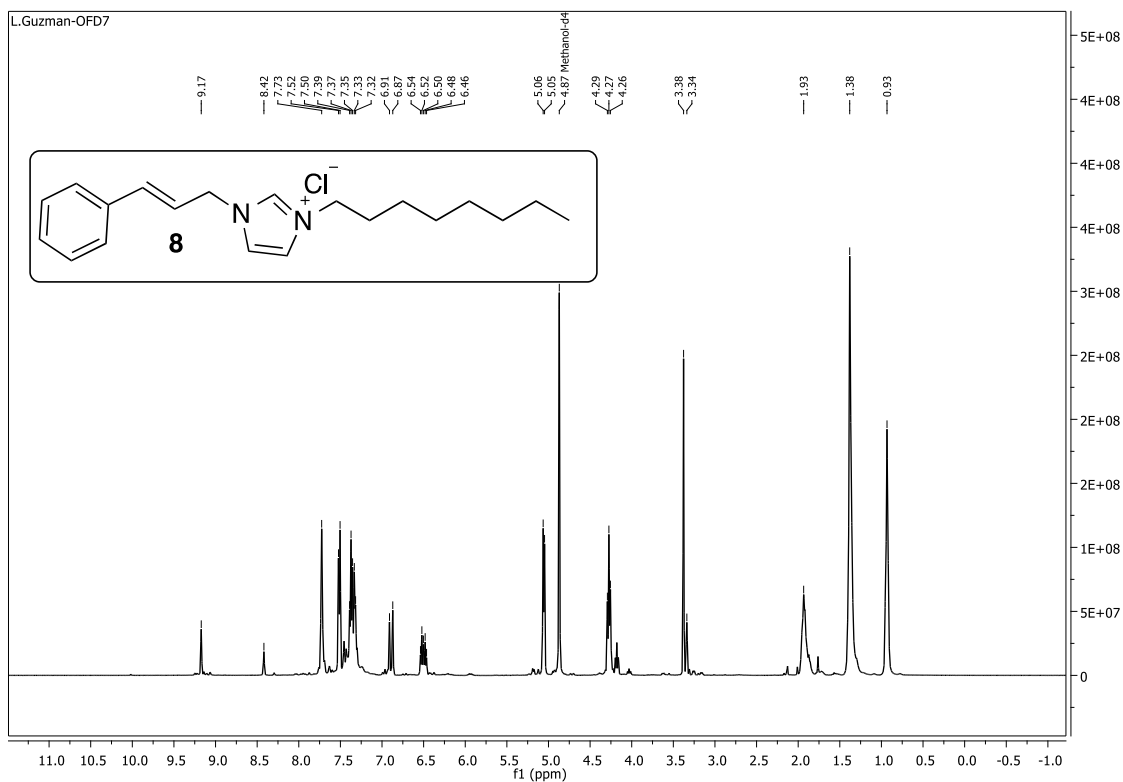


**Figure S5.**  $^1\text{H}$  NMR spectrum (400 MHz, MeOD) of compound **6**.

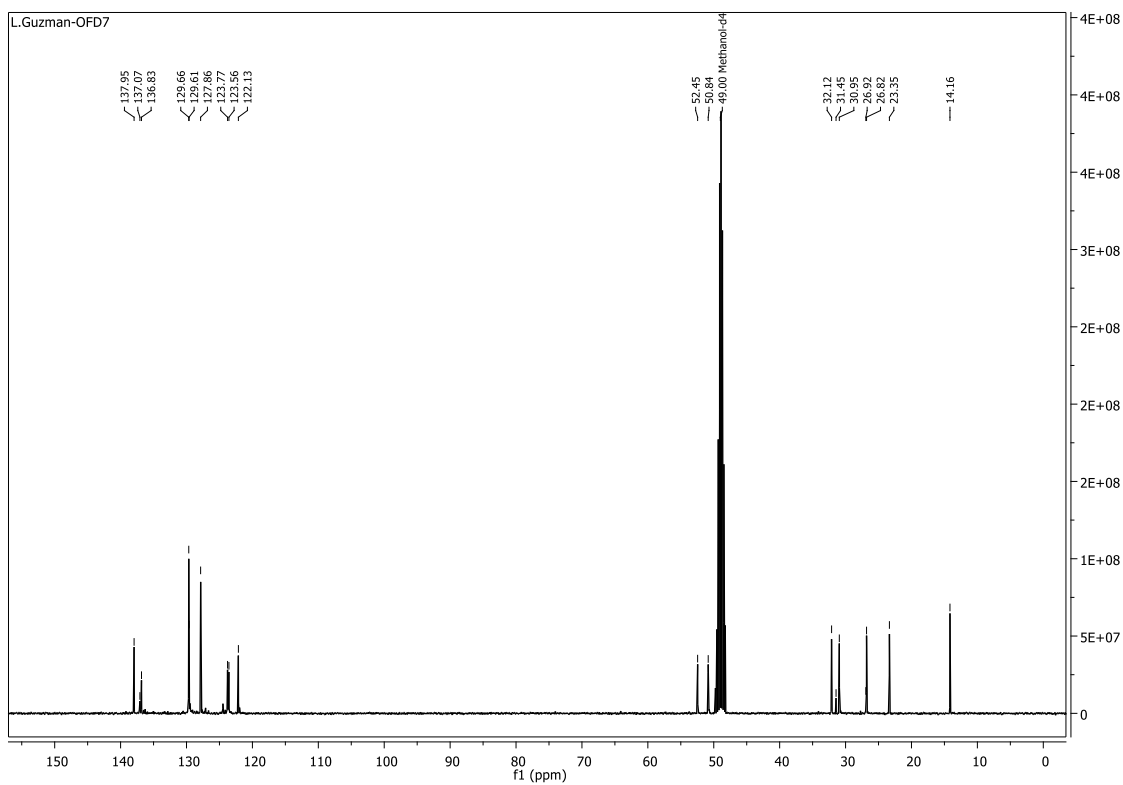


**Figure S6.**  $^{13}\text{C}$  NMR spectrum (101 MHz, MeOD) of compound **6**.

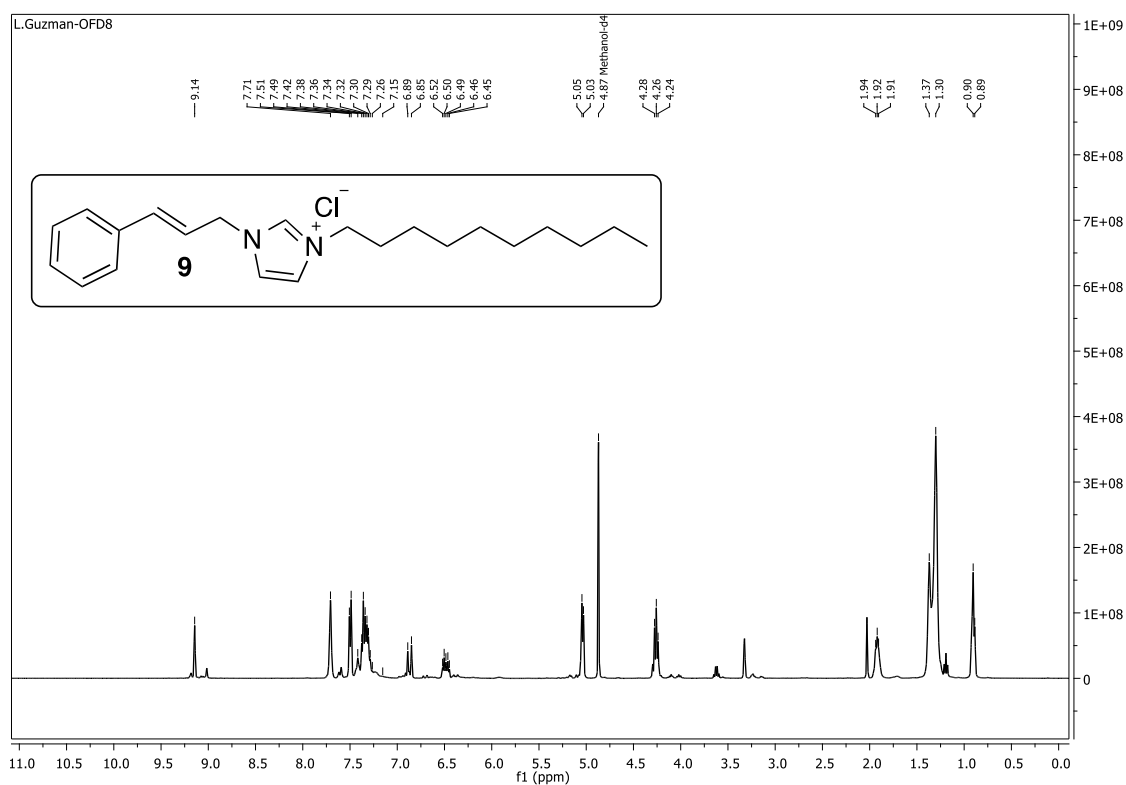




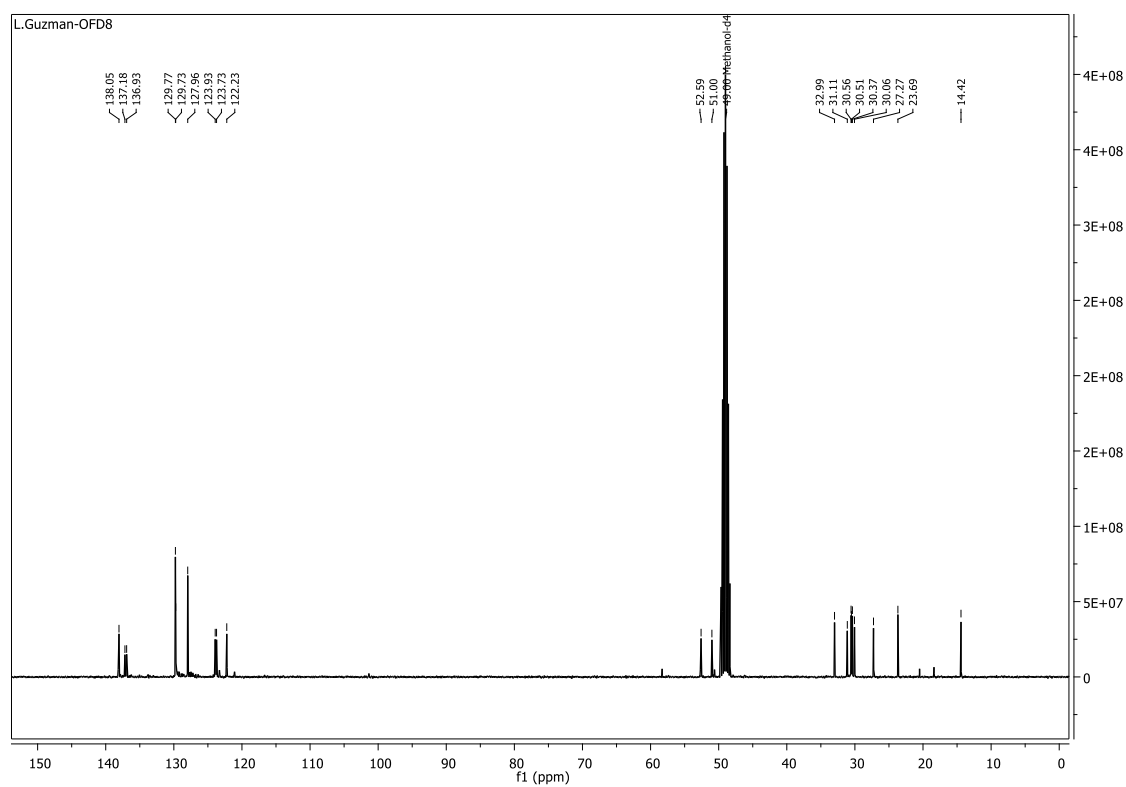
**Figure S9.**  $^1\text{H}$  NMR spectrum (400 MHz, MeOD) of compound **8**.



**Figure S10.**  $^{13}\text{C}$  NMR spectrum (101 MHz, MeOD) of compound **8**.

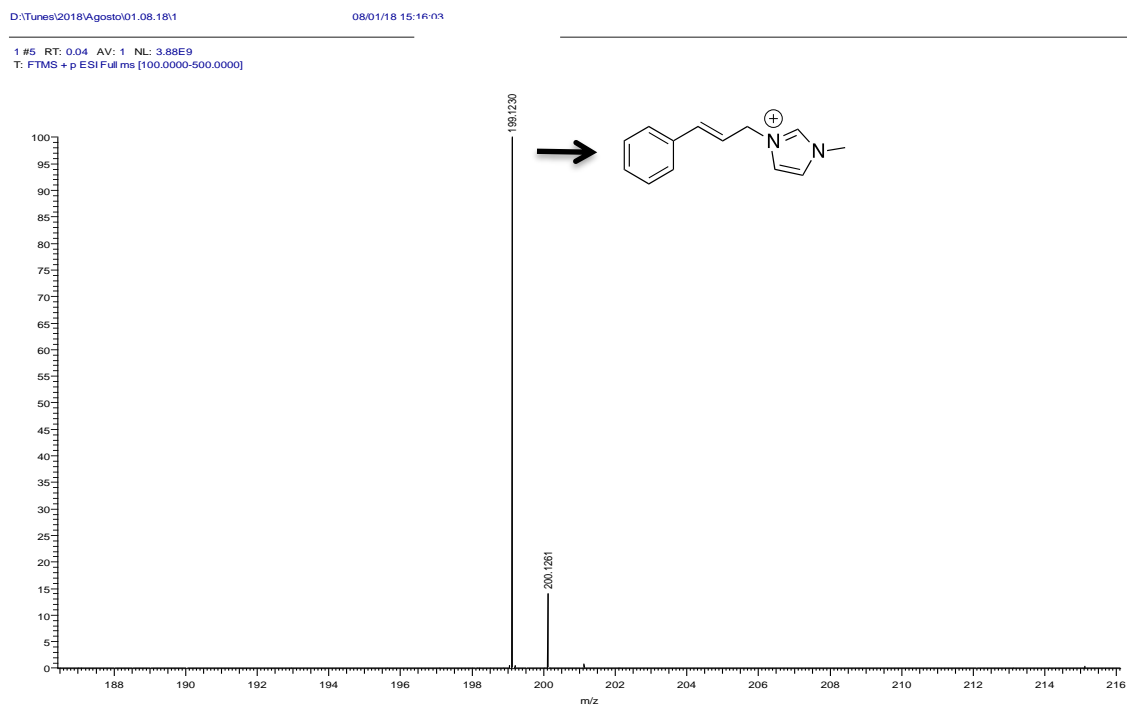


**Figure S11.**  $^1\text{H}$  NMR spectrum (400 MHz, MeOD) of compound **9**.

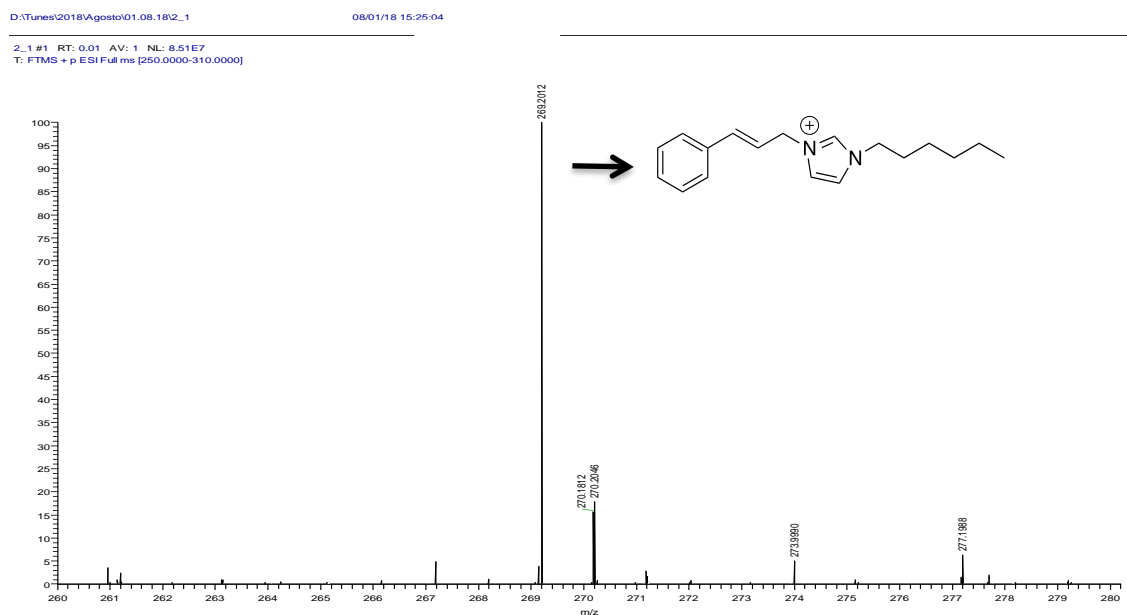


**Figure S12.**  $^{13}\text{C}$  NMR spectrum (101 MHz, MeOD) of compound **9**.

## II. HRMS spectra



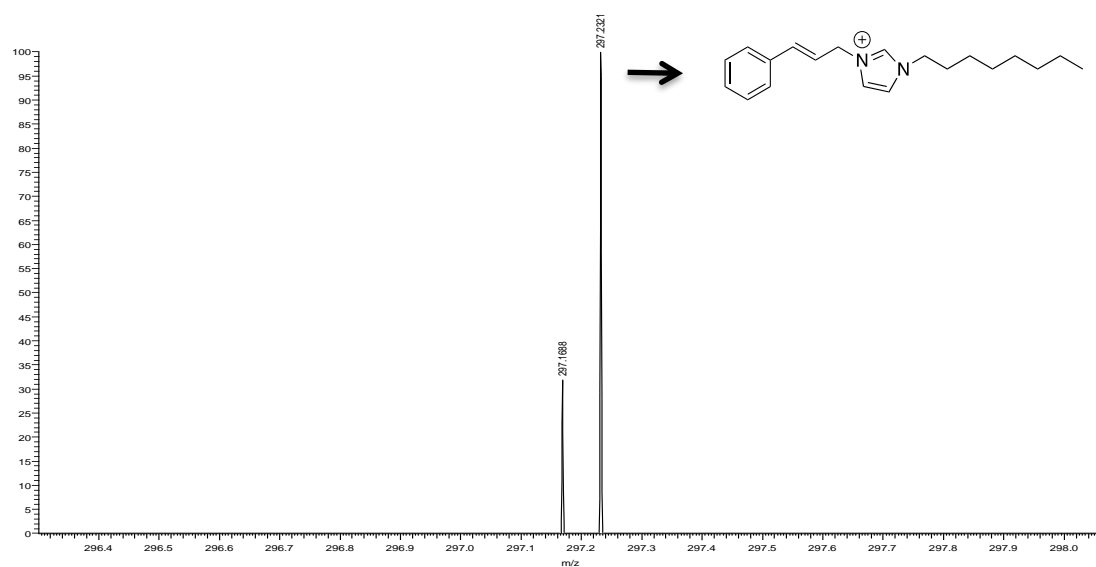
**Figure S13.** HRMS spectrum of compound 6



**Figure S14.** HRMS spectrum of compound 7



3\_1 #15 RT: 0.13 AV: 1 NL: 2.37E6  
T: FTMS + p ESI Full ms [295.0000-300.0000]



**Figure S15.** HRMS spectrum of compound 8

4\_1 #1 RT: 0.01 AV: 1 NL: 6.94E8  
T: FTMS + p ESI Full ms [320.0000-335.0000]



**Figure S16.** HRMS spectrum of compound 9