**Electronic Supplementary Information** 

# Steric Hindrance Effects in Tripodal Ligands for Extraction and Back-Extraction of Ag<sup>+</sup>

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1H- and 13C-NMR spectra of synthesized molecules	2 - 31
HRMS spectra of tripodal ligands ( <b>6a</b> – <b>6g</b> )	32 - 38
ESI-MS spectra of tripodal ligands $(6a - 6g + Ag^+)$	39 - 42

<sup>1</sup>H NMR Spectrum of 3a



<sup>13</sup>C NMR Spectrum of **3a** 



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 $^{1}\text{H}$  NMR Spectrum of **3b** 



<sup>13</sup>C NMR Spectrum of **3b** 



 $^1\mathrm{H}$  NMR Spectrum of 3c



 $^{13}\mathrm{C}$  NMR Spectrum of 3c



<sup>1</sup>H NMR Spectrum of 4c



<sup>13</sup>C NMR Spectrum of **4c** 



 $^{1}H$  NMR Spectrum of 5a



 $^{13}\mathrm{C}$  NMR Spectrum of 5a



 $^{1}\text{H}$  NMR Spectrum of **5b** 



<sup>13</sup>C NMR Spectrum of **5b** 



 $^1\mathrm{H}$  NMR Spectrum of 5c



 $^{13}\mathrm{C}$  NMR Spectrum of  $5\mathrm{c}$ 



 $^{1}H$  NMR Spectrum of **6a** 



<sup>13</sup>C NMR Spectrum of **6a** 



#### <sup>1</sup>H Spectrum of $6a + AgNO_3$

Peaks marked with an asterisk (\*) showed significant changes compared to the spectra of 6a recorded in the absence of AgNO<sub>3</sub>.



<sup>13</sup>C NMR Spectrum of **6a** + AgNO<sub>3</sub>

Peaks marked with an asterisk (\*) showed significant changes compared to the spectra of 6a recorded in the absence of AgNO<sub>3</sub>.



<sup>1</sup>H NMR Spectrum of **6b** 



<sup>13</sup>C NMR Spectrum of **6b** 



## $^{1}\text{H}$ NMR Spectrum of **6c**



<sup>13</sup>C NMR Spectrum of **6c** 



23

 $^1\mathrm{H}$  NMR Spectrum of  $\mathbf{6d}$ 



 $^{13}\mathrm{C}$  NMR Spectrum of  $\mathbf{6d}$ 



# <sup>1</sup>H NMR Spectrum of **6e**



<sup>13</sup>C NMR Spectrum of **6e** 



# $^{1}\text{H}$ NMR Spectrum of **6f**



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 $^{13}\mathrm{C}$  NMR Spectrum of  $\mathbf{6f}$ 



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# <sup>1</sup>H NMR Spectrum of **6g**



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<sup>13</sup>C NMR Spectrum of **6g** 



HRMS Spectrum of 6a



HRMS Spectrum of **6b** 989.2559 1000 1000 1: TOF MS ES+ 7.88e6 S<sub>`Me</sub> 006 877.2912 g-√  $\overline{}$ *i*-Pr\_S 80 698.2083 200 510.2323 576.1888 614.2020 009 455.1729 457.1696 456.1680 200 [M+H]<sup>+</sup> 454.1701 426.1387 400 143.1069165.0886 288.0894.316.1198 30 **iPrx1 3ppm 5ul/min** iPrx1\_01 104 (0.968) Cm (100:120) 200 9 100-% 5









HRMS Spectrum of 6e



HRMS Spectrum of  $\mathbf{6f}$ 



HRMS Spectrum of 6g





#### ESI-MS Spectrum of 6a + AgClO<sub>4</sub>

## ESI-MS Spectrum of $6b + AgClO_4$





## ESI-MS Spectrum of 6c + AgClO<sub>4</sub>

#### ESI-MS Spectrum of 6d + AgClO<sub>4</sub>





# ESI-MS Spectrum of $6e + AgClO_4$

# ESI-MS Spectrum of 6f + AgClO<sub>4</sub>





# ESI-MS Spectrum of 6g + AgClO<sub>4</sub>