Supporting Information

for

A switchable [2]rotaxane with two active alkenyl groups

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^{1}H, ^{13}C NMR spectra and HRESI mass spectra of compounds 3, 4, 5, 8 and [2]rotaxane R1

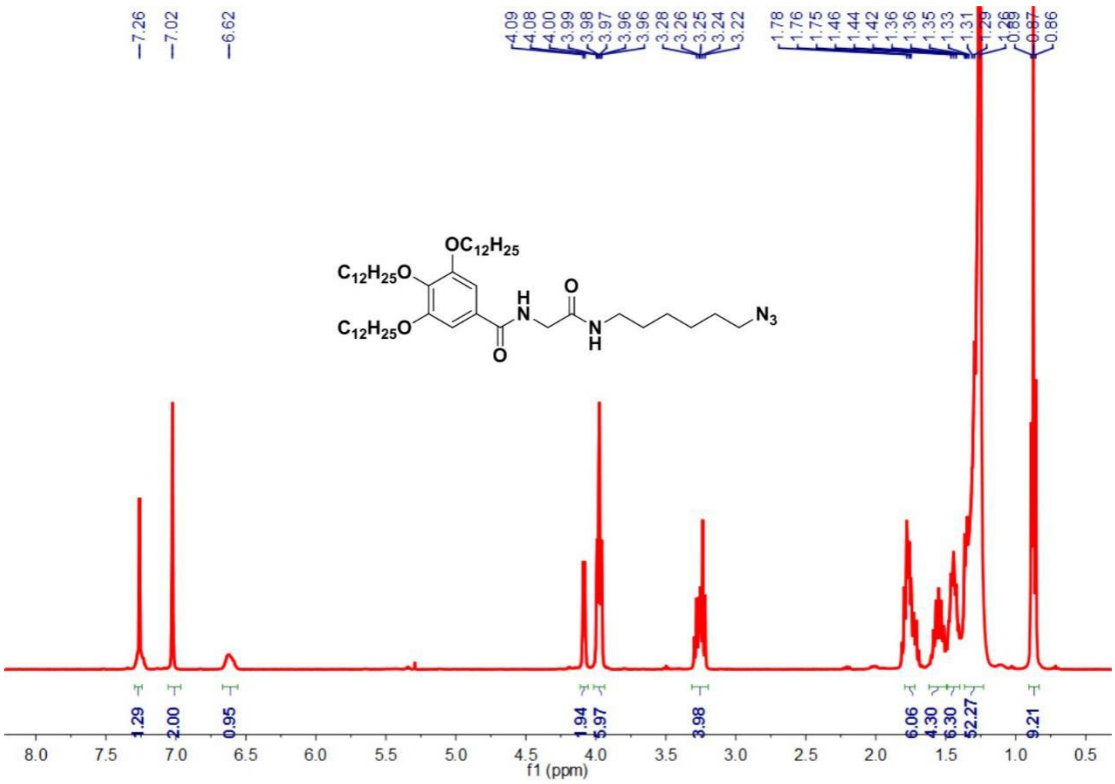

Figure S1: ^{1}H NMR spectrum of compound **8** (400 MHz, $CDCl_3$, 298 K).

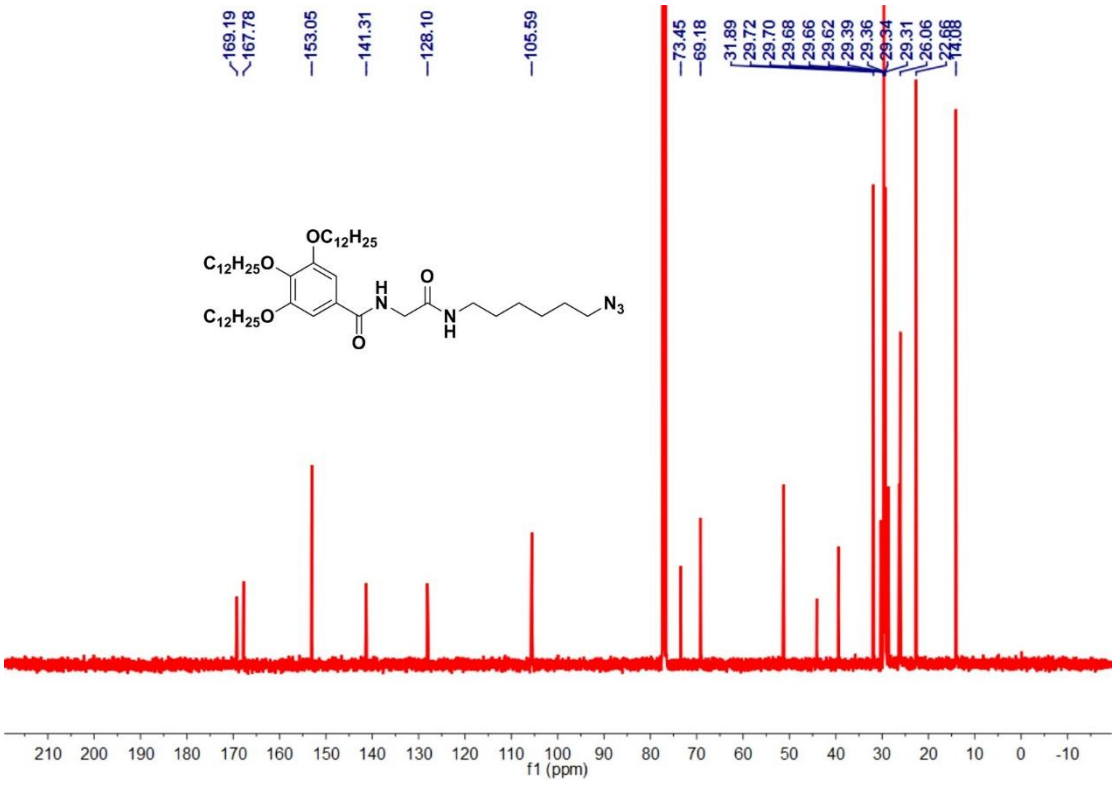

Figure S2: ^{13}C NMR spectrum of compound **8** (100 MHz, $CDCl_3$, 298 K).

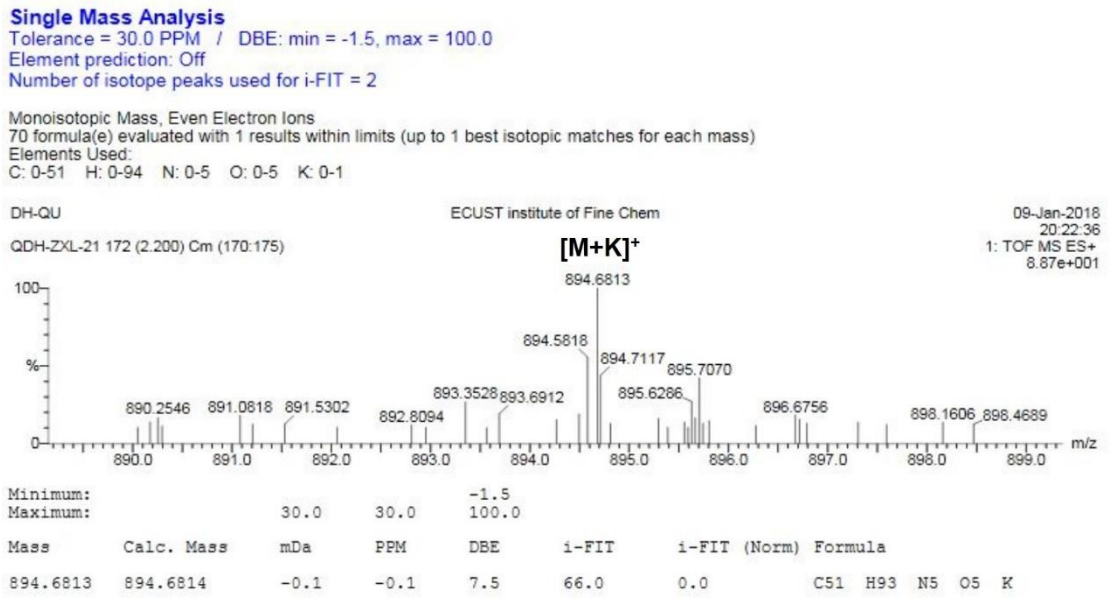

Figure S3: HRESI mass spectrum of compound **8**.

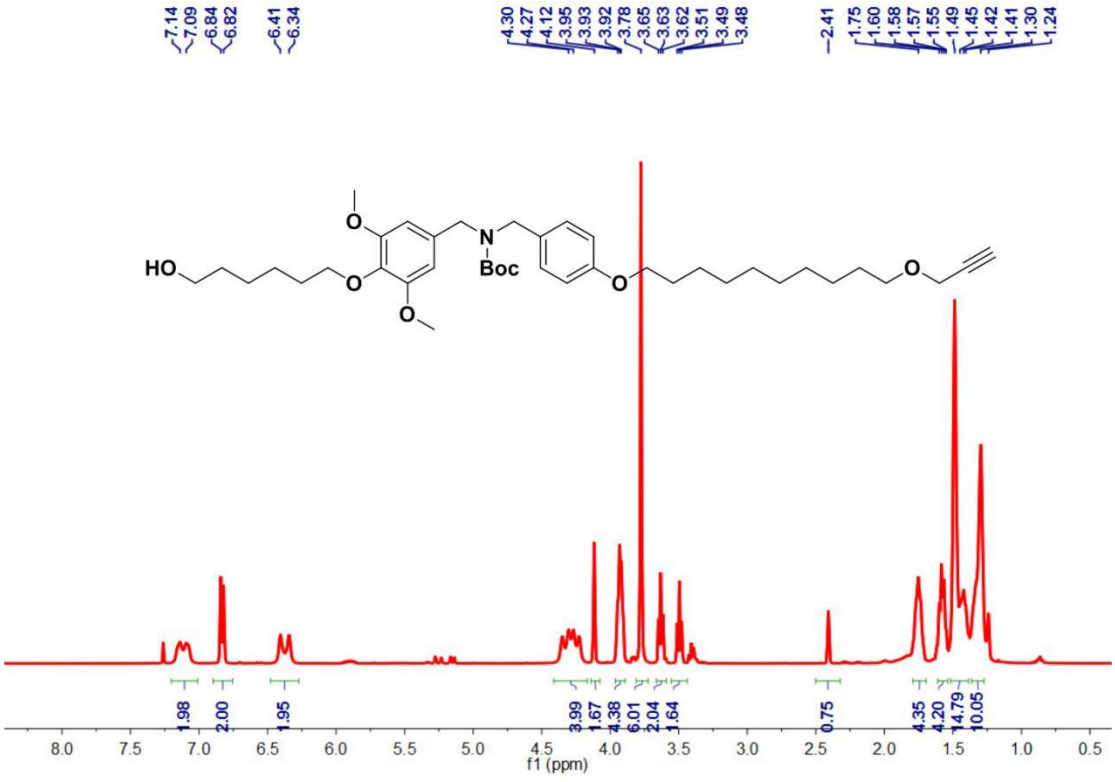

Figure S4: ^{1}H NMR spectrum of compound **3** (400 MHz, $CDCl_3$, 298 K).

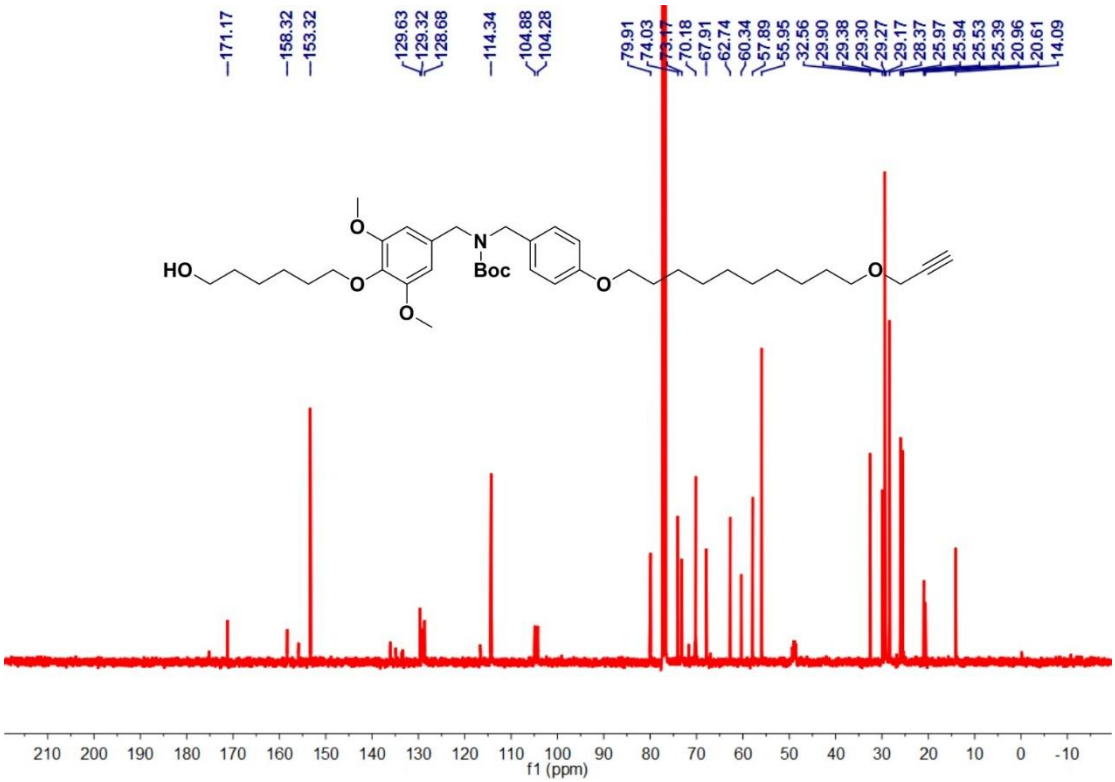

Figure S5: ^{13}C NMR spectrum of compound **3** (100 MHz, $CDCl_3$, 298 K).

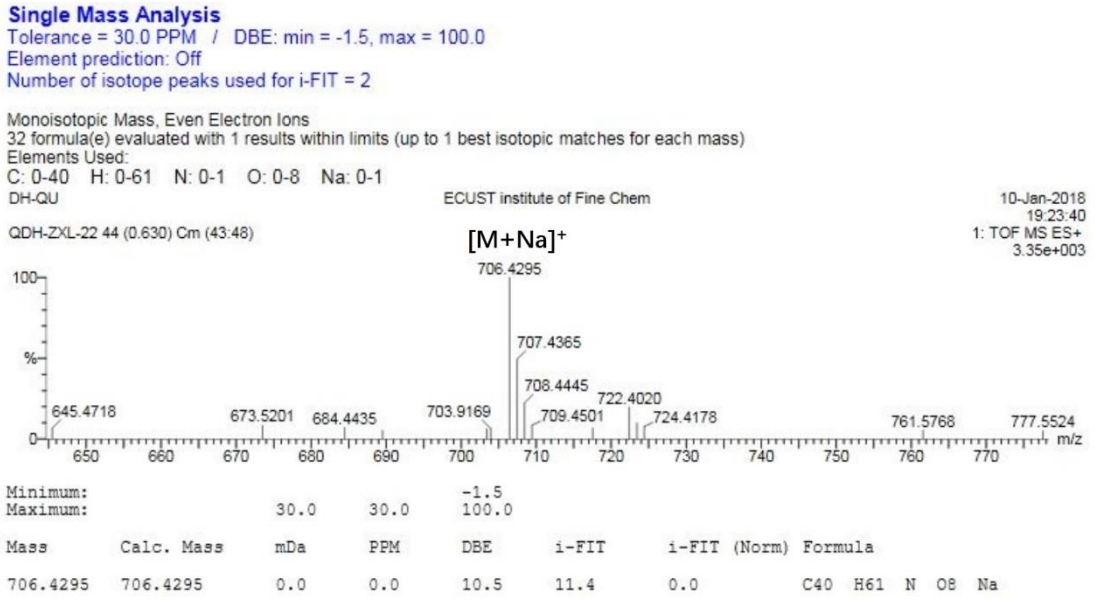

Figure S6: HRESI mass spectrum of compound **3**.

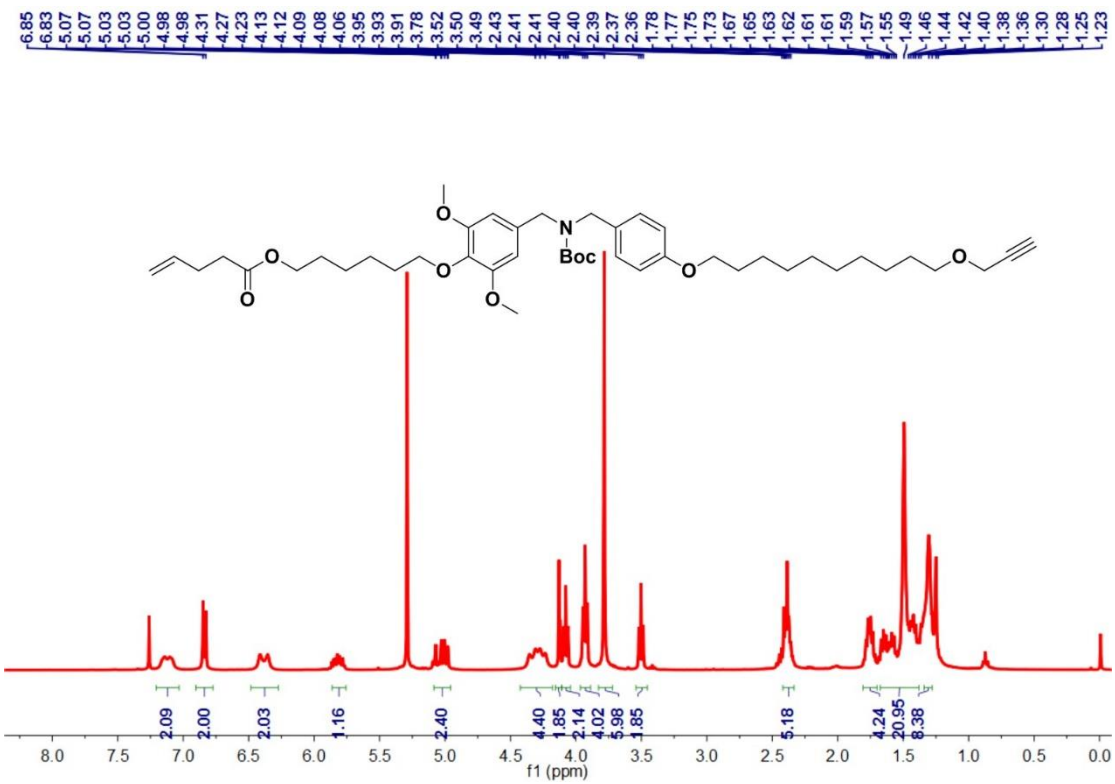

Figure S7: ^{1}H NMR spectrum of compound **4** (400 MHz, $CDCl_3$, 298 K).

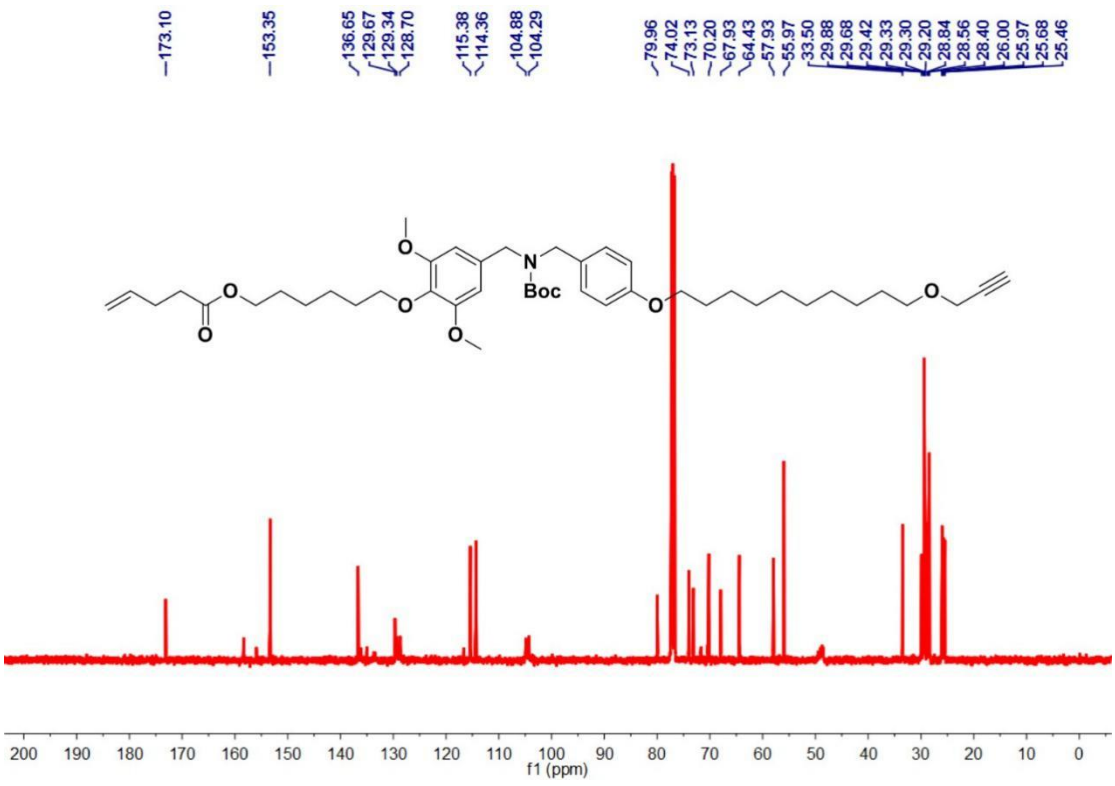

Figure S8: ^{13}C NMR spectrum of compound **4** (100 MHz, $CDCl_3$, 298 K).

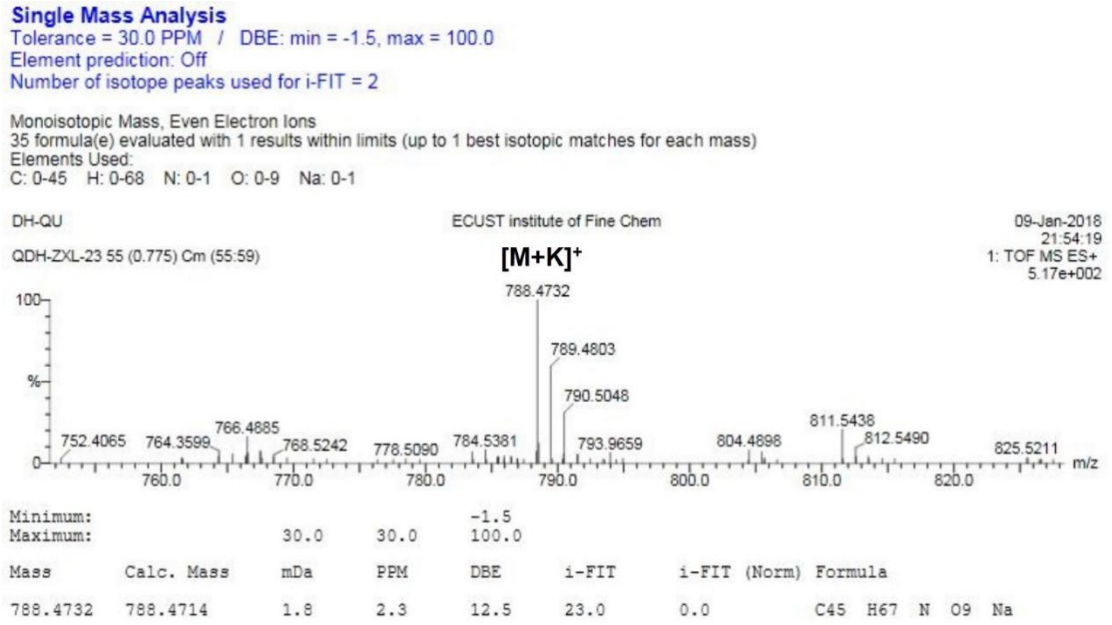

Figure S9: HRESI mass spectrum of compound **4**.

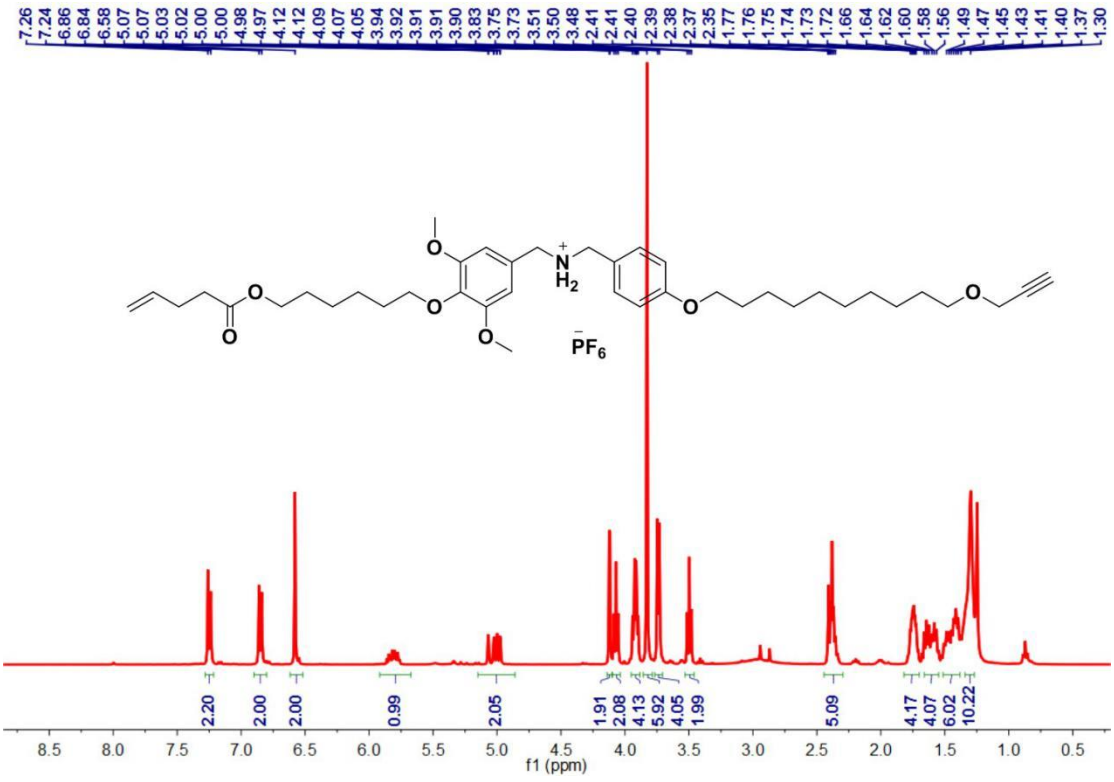

Figure S10: ^{1}H NMR spectrum of compound **5** (400 MHz, $CDCl_3$, 298 K).

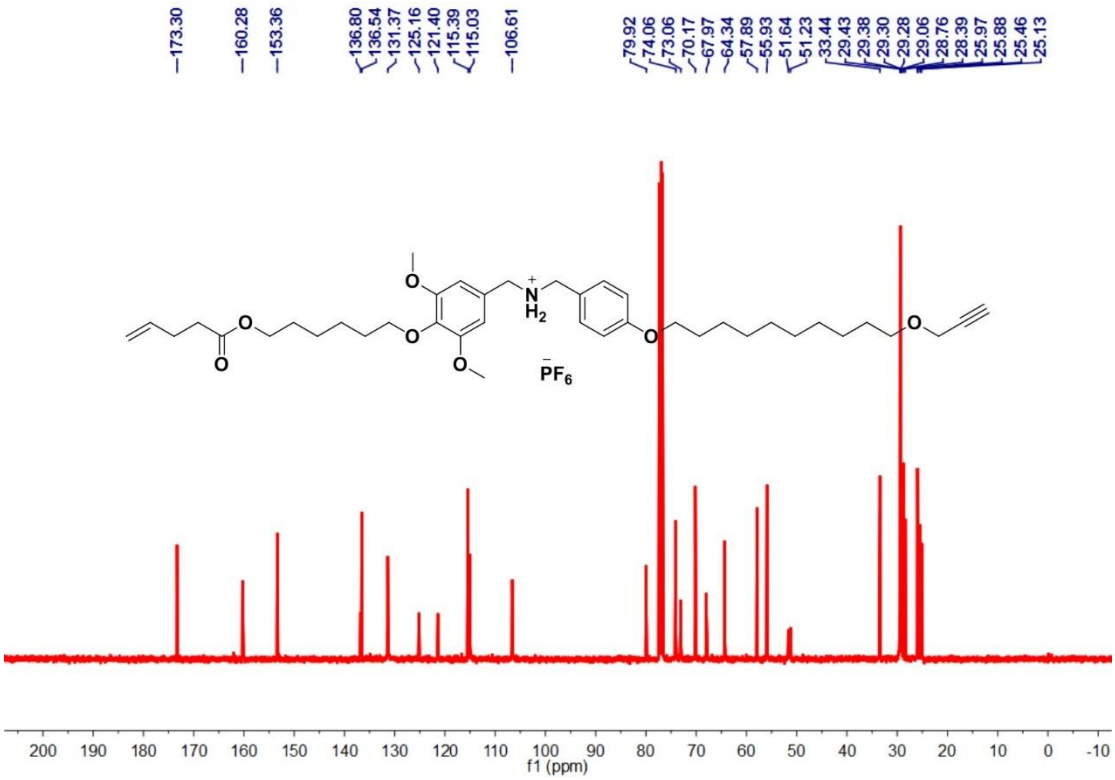

Figure S11: ^{13}C NMR spectrum of compound **5** (100 MHz, $CDCl_3$, 298 K).

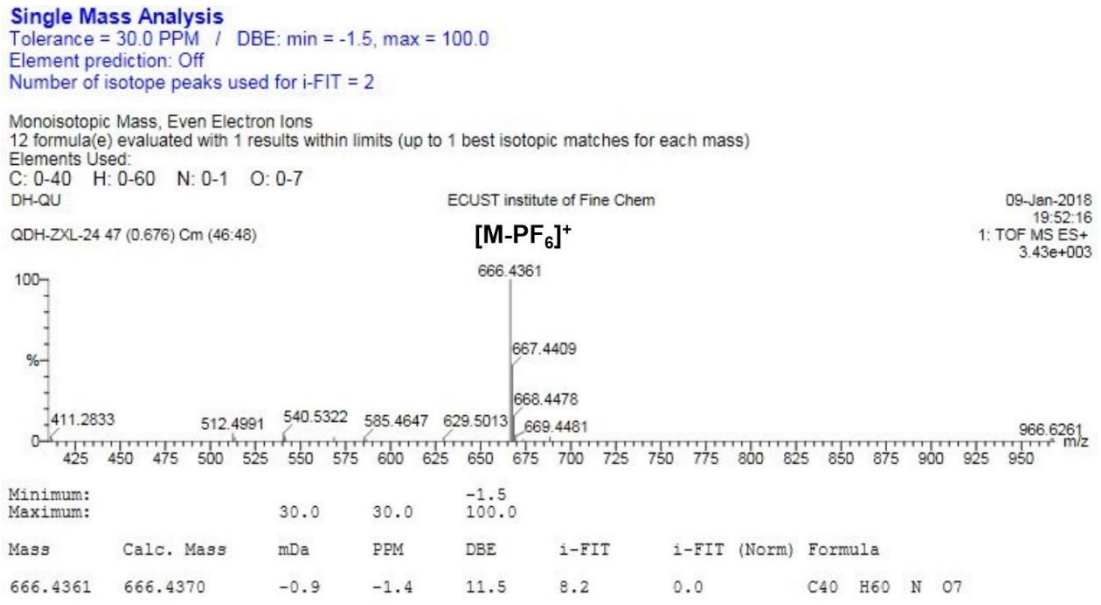

Figure S12: HRESI mass spectrum of compound **5**.

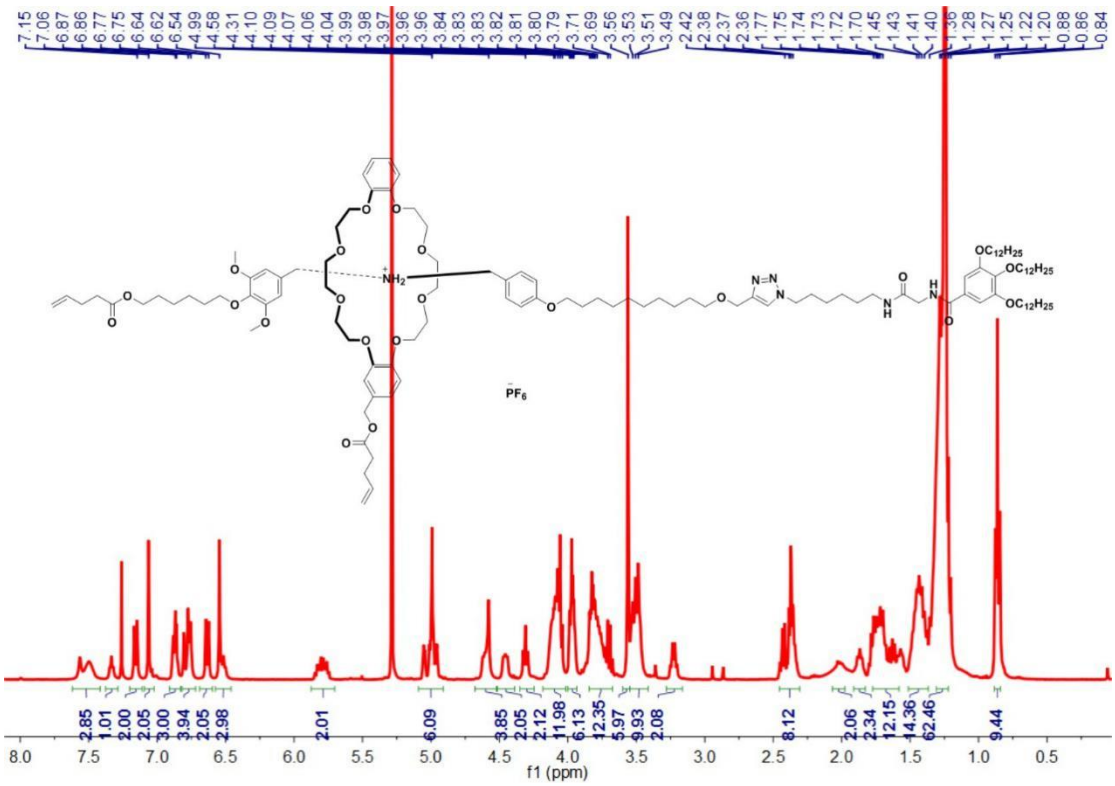

Figure S13: ^{1}H NMR spectrum of [2]rotaxane **R1** (400 MHz, $CDCl_3$, 298 K).

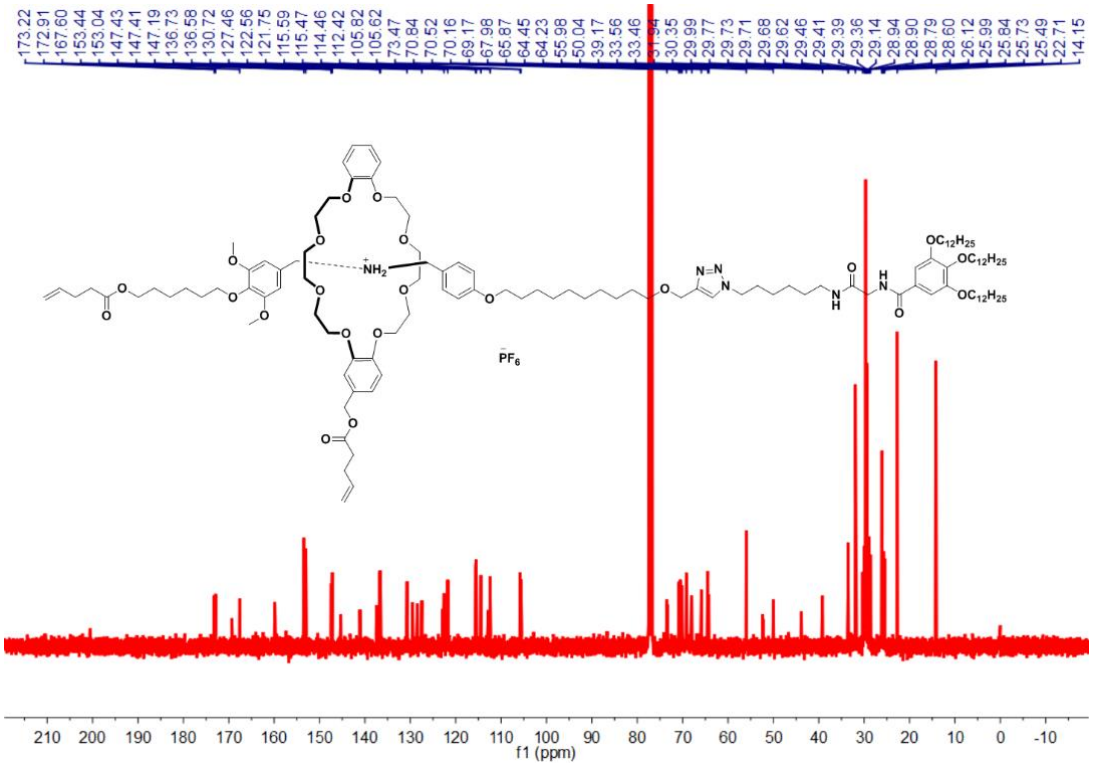

Figure S14: ^{13}C NMR spectrum of [2]rotaxane **R1** (100 MHz, $CDCl_3$, 298 K).

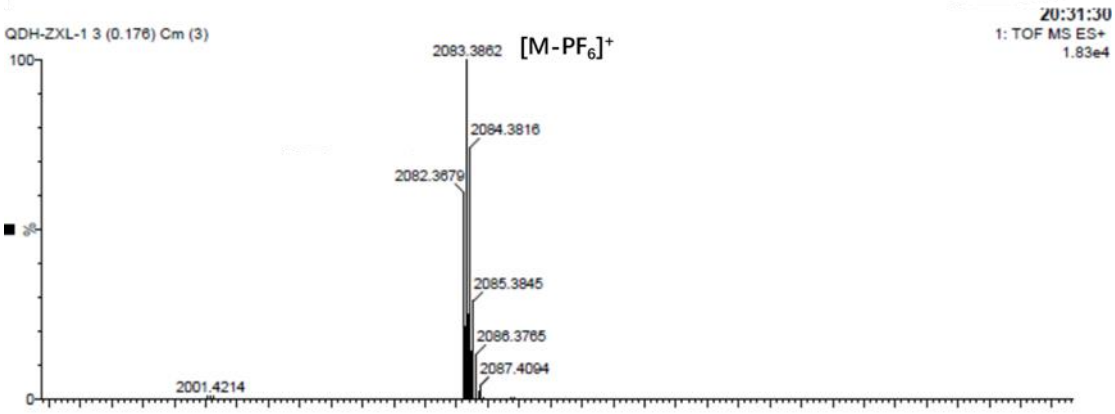

Figure S15: HRESI mass spectrum of [2]rotaxane **R1**.