

## Supporting Information

Figure S1. Titration and fitted curve of 1.00 mM 1,5-NAP-[Pd(en)(H<sub>2</sub>O)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub> with 1 equivalent HNO<sub>3</sub> at 298K, I=0.1 M NaNO<sub>3</sub>.

Figure S2. <sup>1</sup>H NMR spectrum of 10 mM 1,5-NAP in D<sub>2</sub>O, pD 6.3, 26 °C.

Figure S3. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub>-1,5-NAP in D<sub>2</sub>O at 1:1 mole ratio, 10 mM total conc., pD 6.3, 26 °C.

Figure S4. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub>-1,5-NAP in D<sub>2</sub>O at 2:1 mole ratio, 10 mM total conc., pD 6.3, 26 °C.

Figure S5. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub>-1,5-NAP in D<sub>2</sub>O at 1:2 mole ratio, 10 mM total conc., pD 6.3, 26 °C.

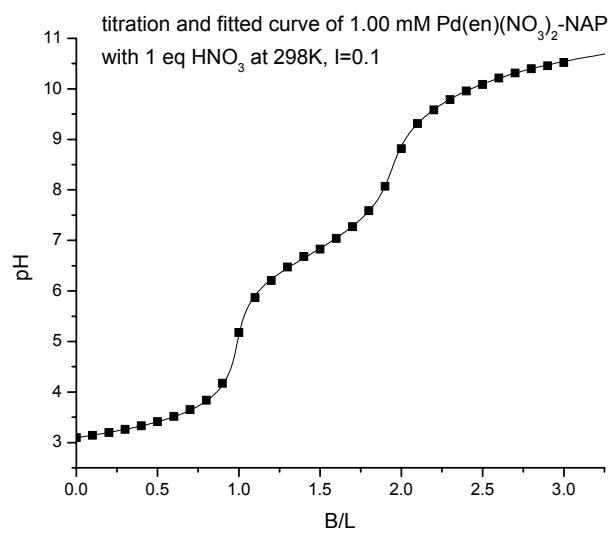


Figure S1

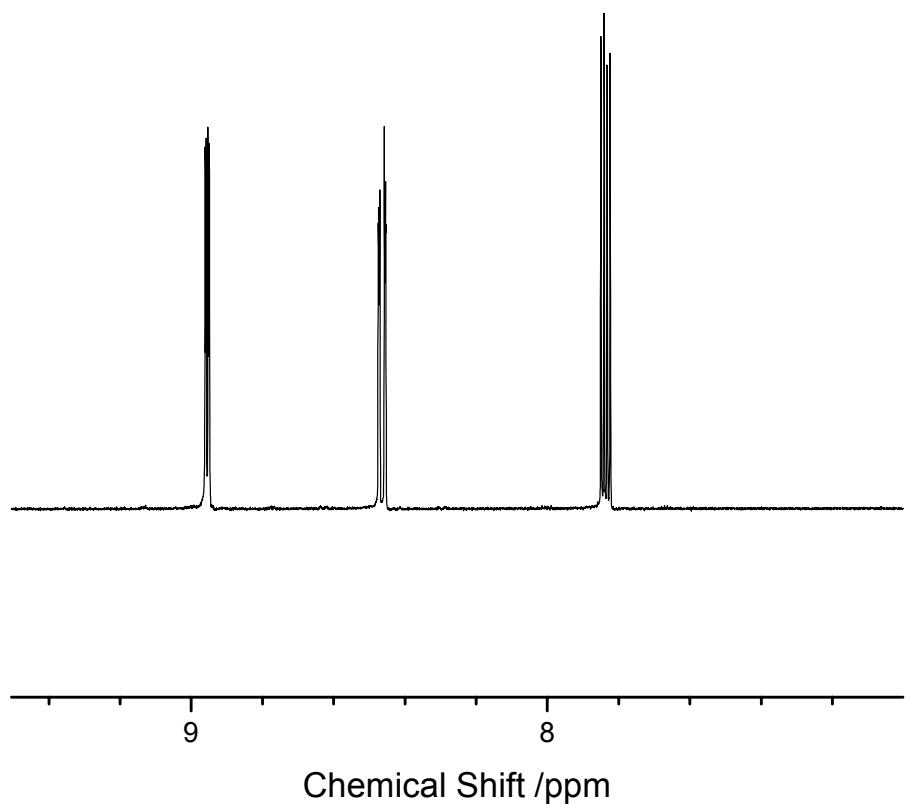


Figure S2. <sup>1</sup>H NMR spectrum of 10 mM 1,5-NAP in D<sub>2</sub>O, pD 6.3, 26 °C.

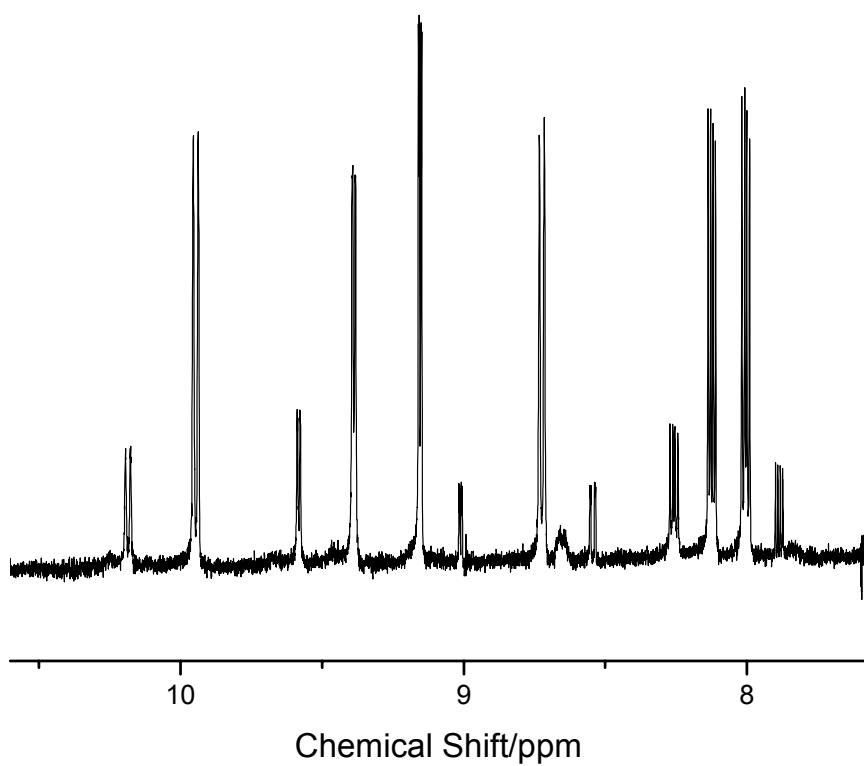


Figure S3. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub>-1,5-NAP in D<sub>2</sub>O at 1:1 mole ratio, 10 mM total conc., pD 6.3, 26°C

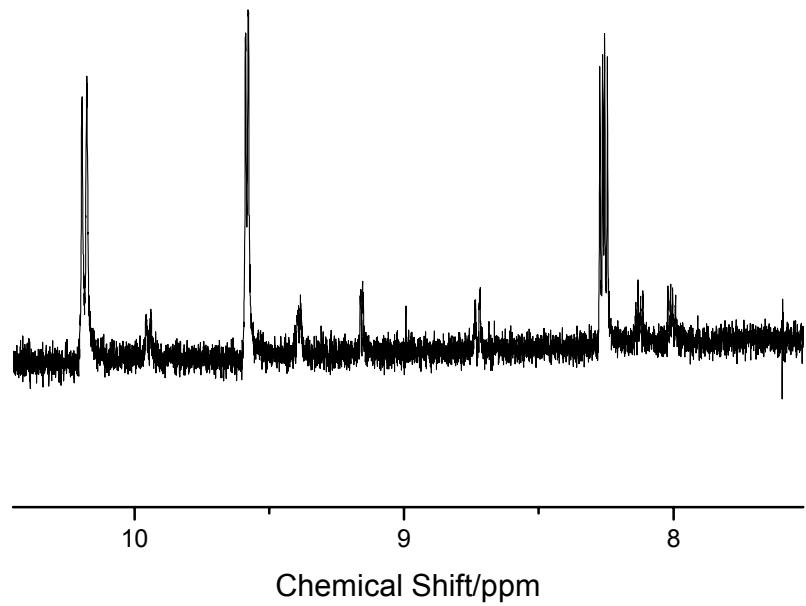


Figure S4. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub>-1,5-NAP in D<sub>2</sub>O at 9:1 mole ratio, 10 mM total conc., pD 6.3, 26 °C.

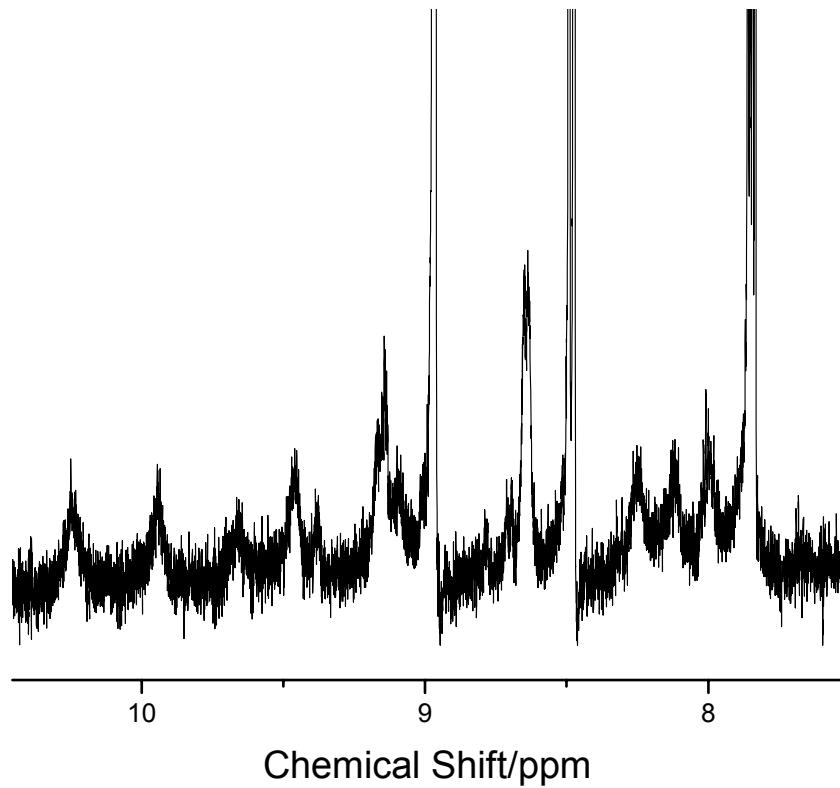


Figure S5. <sup>1</sup>H NMR spectrum of Pd(en)Cl<sub>2</sub> in D<sub>2</sub>O at 1:9 mole ratio, 10 mM total conc., pD 6.3, 26°C; also contains some 1:1 and substantial free 1,5-NAP.