Fig. 1S

**Fig 1S.** pH-metric titration curve for the (1-2,7-21)NPG ligand. The volume of the ligand solution was 2 cm$^3$. 
**Fig. 2S.** pH-metric titration curve for the Ac-(1-2,7-21)NPG ligand. The volume of the ligand solution was 1.9 cm$^3$. 
Fig. 3S

**Fig 3S.** pH-metric titration curve for the Cu(II) - (1-2,7-21)NPG 1:1 molar ratio system. The volume of the ligand solution was 1.5 cm$^3$. 
Fig. 4S

**Fig 4S.** The EPR spectra for the copper(II) complexes formed with (1-2,7-21)NPG at different pH and metal-to-ligand 1:1 molar ratio.
Fig. 5S. The visible absorption spectra for the copper(II) complexes formed with (1-2,7-21)NPG at different pH and metal-to-ligand 1:1 molar ratio.
Fig. 6S

**Fig 6S.** pH-metric titration curve for the Cu(II) – Ac-(1-2,7-21)NPG 1:1 molar ratio system. The volume of the ligand solution was 1.6 cm$^3$. 
Fig. 7S

**Fig 7S.** The visible absorption spectra for the copper(II) complexes formed with Ac-(1-2,7-21)NPG at different pH and metal-to-ligand 1:1 molar ratio.
Fig. 8S. CD spectra of the species formed in the copper(II)-Ac-(1-2,7-21)NPG system at different pH; metal-to-ligand molar ratio 1:1.