Supplementary information

Histidine-rich branched peptides as Zn(II) and Cu(II) chelators with potential therapeutic application in Alzheimer's disease

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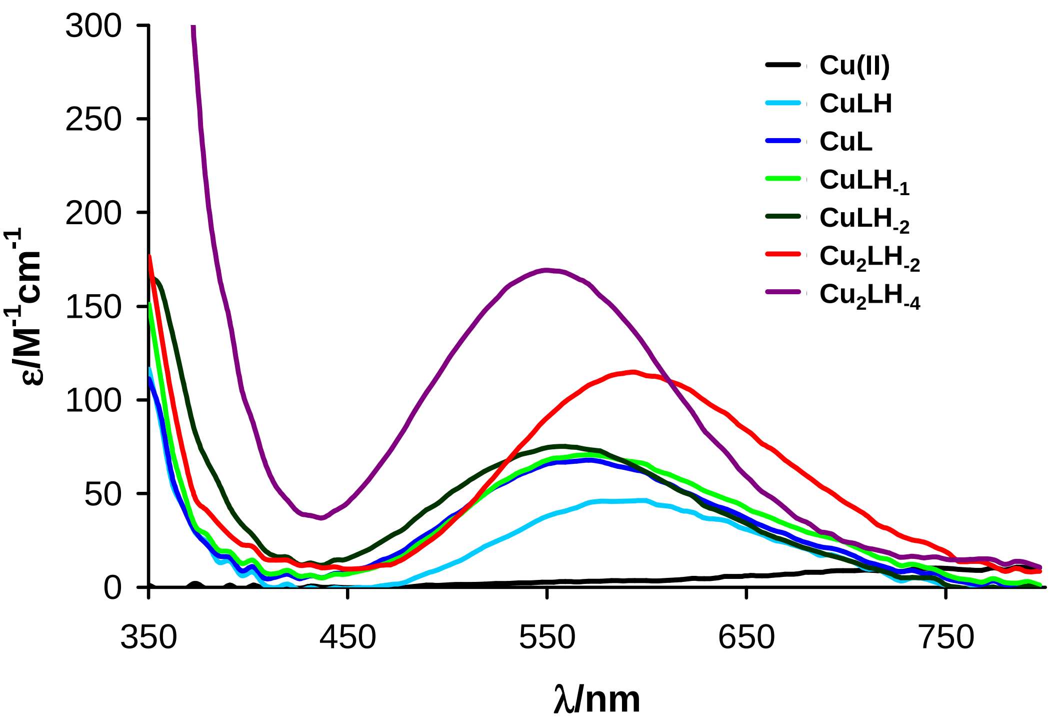
(a)



(b)

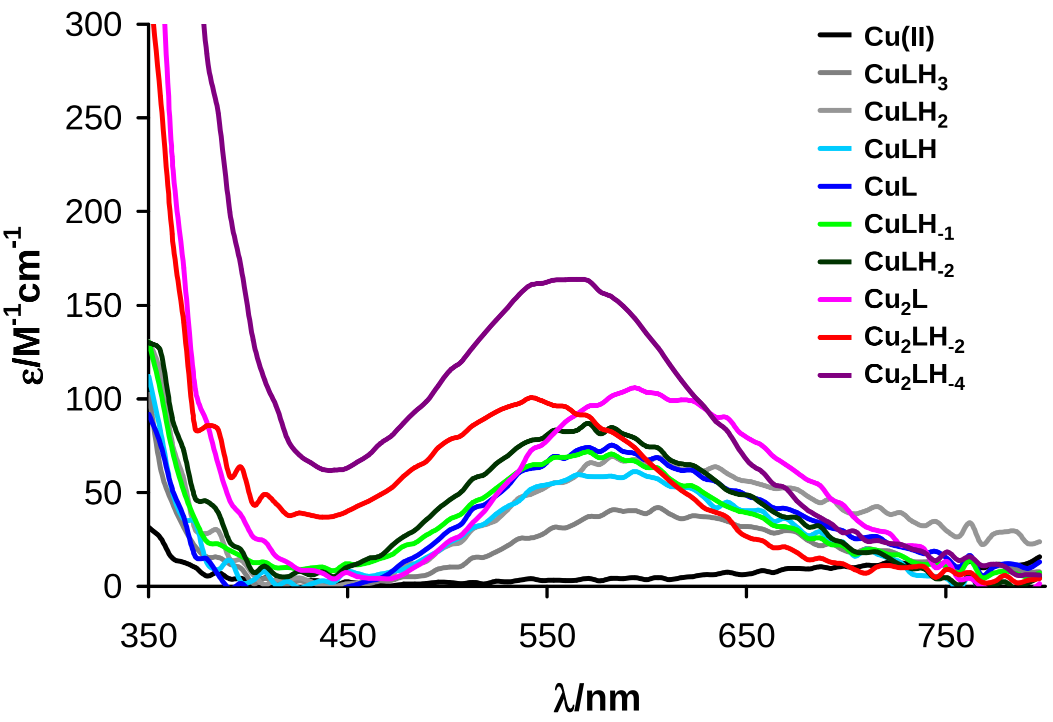


Figure S1. Molar absorption spectra of the Cu(II) complexes formed with $(GH)_2K$ (a) and $(HH)_2K$ (b).

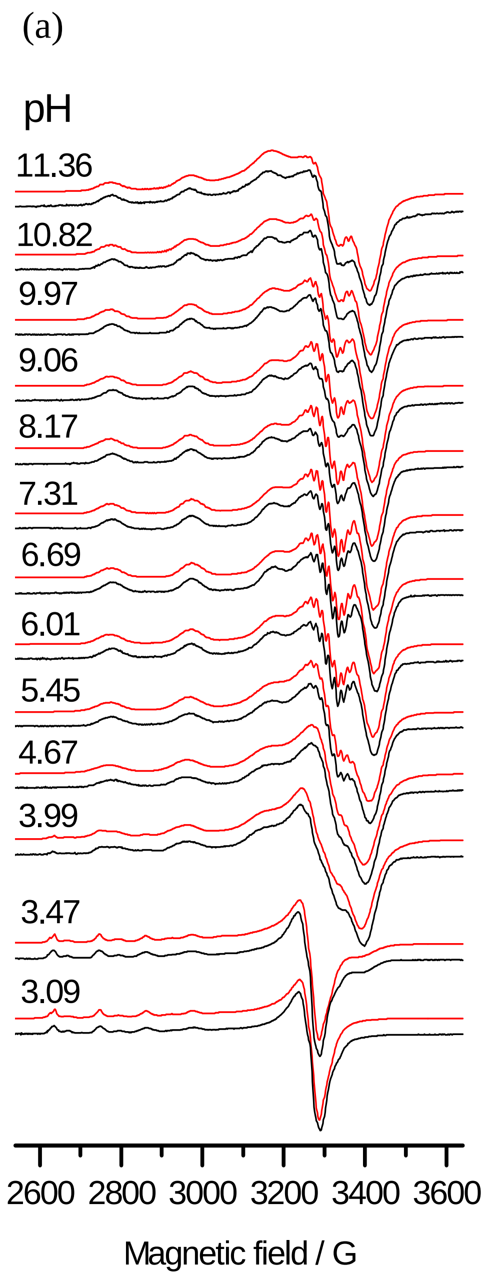
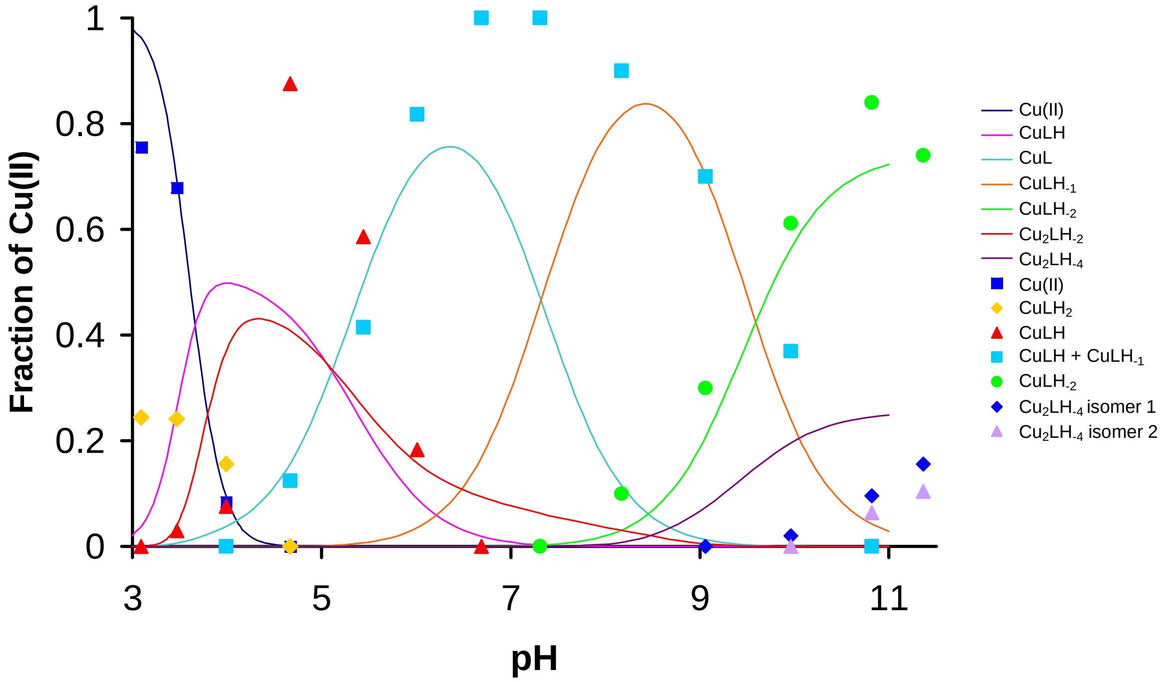


Figure S2. Anisotropic EPR spectra recorded at (a) c_{Cu} = 1 mM and c_L= 1 mM, and (b) c_{Cu} = 2 mM and c_L = 1 mM, at 77 K for $(GH)_2K$ – Cu(II) system. Measured spectra (black) together with the simulated curves (red) (The maximum amplitud of all spectrum were normalized to one).

(a)



(b)

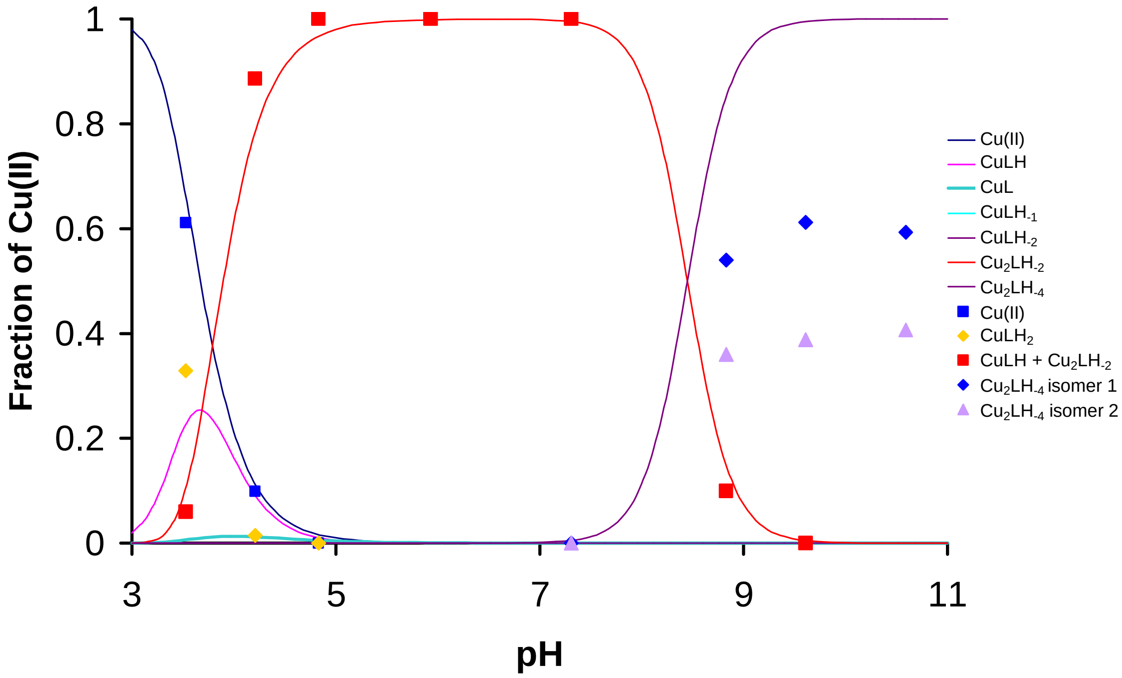


Figure S3. Comparison of the species distrubution curves for L = $(GH)_2K$ (a) $c_{Cu(II)}$ = 1 mM and c_L = 1 mM (b) $c_{Cu(II)}$ = 2mM and c_L = 1 mM obtained from pH-potentiometry (lines) and from the simulation of anisotropic EPR spectra (symbols)

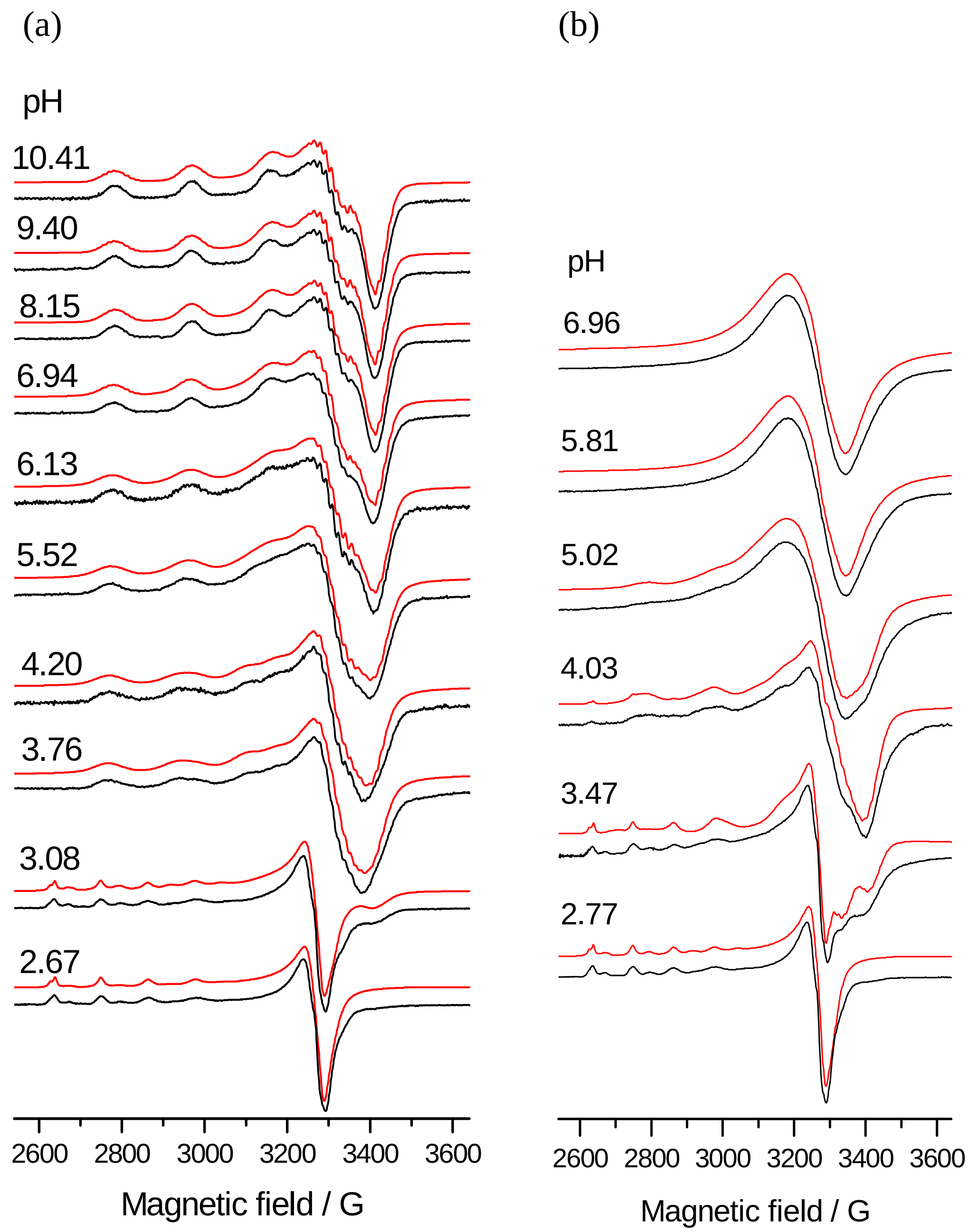
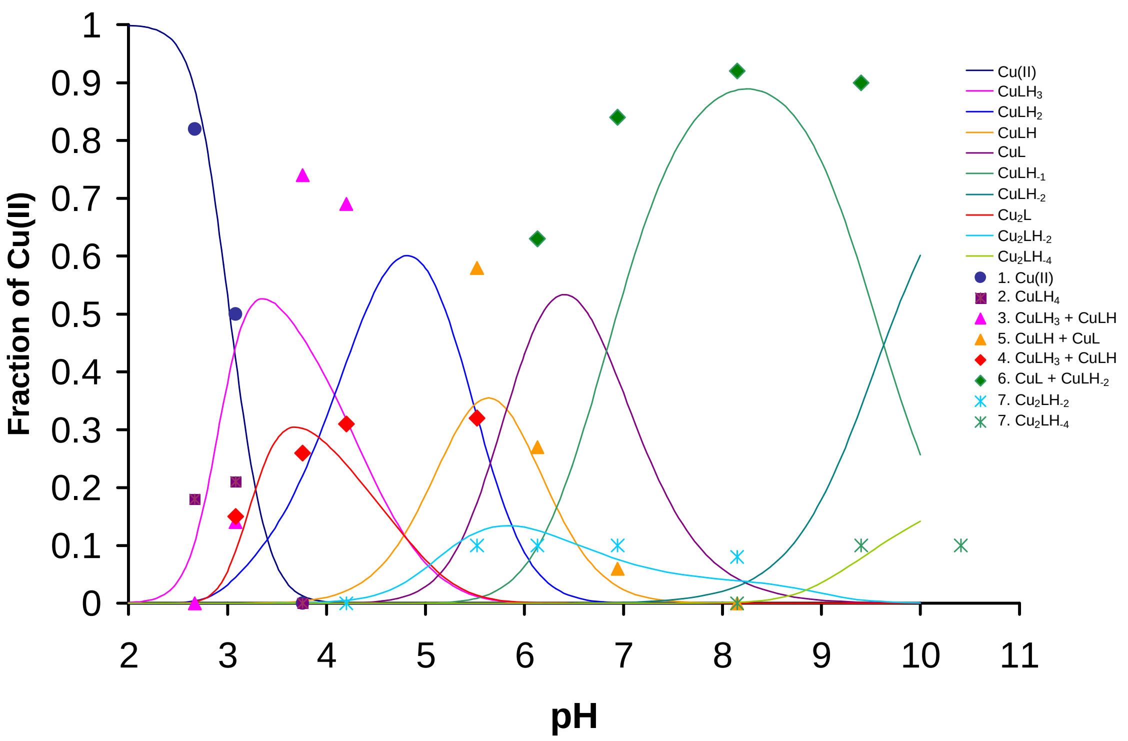


Figure S4. Anisotropic EPR spectra recorded at (a) c_{Cu} = 1 mM and c_L = 1 mM, and (b) c_{Cu} = 2 mM and c_L = 1 mM, at 77 K for $(HH)_2K$ – Cu(II) system. Measured spectra (black) together with the simulated curves (red) (The maximum amplitud of all spectrum were normalized to one).

(a)



(b)

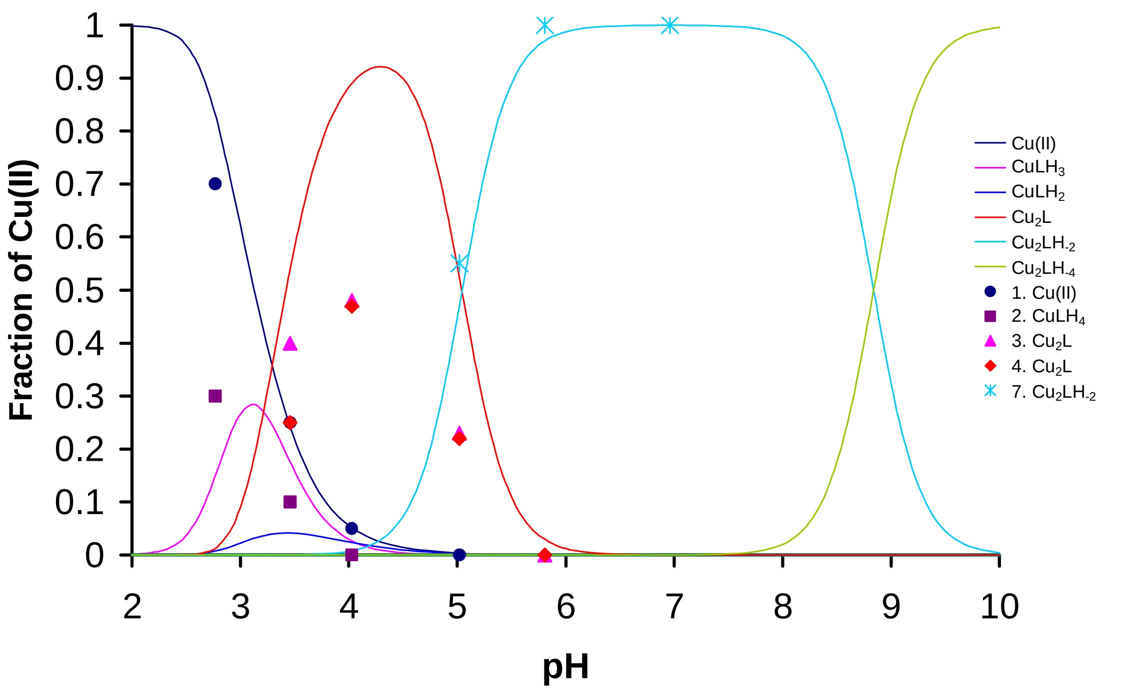


Figure S5. Comparison of the species distrubution curves for L = $(HH)_2K$ (a) $c_{Cu(II)}$ = 1 mM and c_L = 1 mM (b) $c_{Cu(II)}$ = 2 mM and c_L = 1 mM obtained from pH-potentiometry (lines) and from the simulation of anisotropic EPR spectra (symbols)