Supplementary Materials

D-HA	d(D-H)	d(HA)	d(DA)	<(DHA)
N2A-H2AO34 ⁱ	0.88	2.19	2.958(5)	146
N2A-H2AO2 ⁱⁱ	0.88	2.37	3.079(5)	138
N2B-H2BO1S	0.88	1.96	2.811(5)	161
N2C-H2CO33 ⁱⁱⁱ	0.88	2.13	2.890(5)	145
N2D-H2DO14 ^{iv}	0.88	2.02	2.894(6)	177
N2E-H2EO24 ^v	0.88	2.03	2.893(5)	166
N2F-H2FO2W	0.88	1.96	2.818(6)	164
O1S-H1SO1W	0.84	1.92	2.740(7)	165

Table S1. Hydrogen bonds for 1 (Å, °).

Symmetry transformations used to generate equivalent atoms: (i): x, y, z + 1; (ii): -x + 1, -y + 1, -z + 2; (iii): x - 1, y, z; (iv): -x + 1, -y + 1, -z + 1; (v): -x + 1, -y, -z + 1.

D-HA	d(D-H)	d(HA)	d(DA)	<(DHA)
N1A-H1AN3D	0.88	1.85	2.719(4)	169
N2A-H2AO1	0.88	1.97	2.818(4)	160
N1B-H1BN1E	0.88	2.46	3.160(4)	136
N1B-H1BS1E	0.88	2.48	3.295(3)	154
N2B-H2BS2E ⁱ	0.88	2.48	3.274(3)	151
N2B-H2BN1E ⁱ	0.88	2.57	3.125(4)	122
N1C-H1CS2E ⁱⁱ	0.88	2.42	3.273(3)	164
N2C-H2CS1E ⁱⁱⁱ	0.88	2.40	3.274(3)	172
N3C-H3CO1	0.88	2.10	2.952(4)	162
N1D-H1DS1D ^{iv}	0.88	2.49	3.359(3)	168
N2D-H2DS3D ^v	0.88	2.43	3.306(3)	174
N2E-H2ES1C vi	0.88	2.42	3.287(3)	170
N3E-H3ES3C vii	0.88	2.45	3.330(3)	175
O1-H1S3D viii	0.80(5)	2.53(5)	3.302(3)	164
O1-H2S1C	0.83(5)	2.88(5)	3.344(3)	117

Table S2. Hydrogen bonds for 2 (Å, °).

Symmetry transformations used to generate equivalent atoms: (i): -x, -y + 2, -z + 2; (ii): x, y - 1, z + 1; (iii): x, y, z + 1; (iv): -x + 1, -y + 2, -z + 1; (v): -x + 1, -y + 1, -z + 1; (vi): x, y + 1, z - 1; (vii): x, y, z - 1; (viii): -x + 1, -y + 1, -z + 2.

Electrochemical behaviour of the prepared complexes was studied in water solution using cyclic voltammetry. Electrochemical measurements were performed with an AUTOLAB Analyzer (Metrohm, Herisau, Switzerland) connected to a VA-Stand 663 (Metrohm), using a standard cell with three electrodes. The three-electrode cell used a reference Li^+/Li electrode (E0 of the ferrocene/ferrocenium couple +470 mV) with a Luggine capillary and a Pt wire sealed in glass (0.5 mm diameter, 0.00196 cm²). For smoothing and baseline correction the software GPES 4.9 supplied by EcoChemie (Utrecht, Netherlands) was employed. The analysed samples were deoxygenated prior to measurements by purging with argon (99.999%) for 120 s. All experiments were carried out at room temperature 20 °C. Tetramethylammonium perchlorate (TMAP, 0.1 M) was used as supporting electrolyte and the solutions were 1×10^{-3} M in complex. All the potentials are referred against

reference electrode used in this work. The CV studies were also performed in the presence of serum as a function of time and also in a growth medium which contained 10 g/L of glucose, 10 g/L of tryptone (mixture of aminoacids) and 5 g/L of yeast extract at pH 7. The result of the study shows on the stability of the complexes (see Figure S1).



Figure S1. Cyclic voltammograms of the complexes 1 and 3 measured in LB medium.