

Electronic Supplementary Information

Novel platinum(II)-based anticancer complexes and molecular hosts as their drug delivery vehicles

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Table S1 Cytotoxicities of selected platinum(II)-based DNA intercalators with chiral ancillary ligands in human cancer cell lines. Data taken from reference 1.

Intercalating Ligand	Ancillary Ligand	IC ₅₀ (μM)									
		HeLa	KYSE 520	A-427	LCLC -103H	5637	2008	C13*5	SKOV-3	L1210	L1210/DDP
Cisplatin		n.t.	6.63	4.46	1.44	0.88	0.6	10	3	0.5	6.9
1,10-phenathroline	2 <i>R</i> ,3 <i>R</i> -butane-2,3-diamine	18	0.67	0.54	0.78	0.32	3.1	7.2	3.3	1.5	2.2
1,10-phenathroline	2 <i>S</i> ,3 <i>S</i> -butane-2,3-diamine	1.9	1.87	1.35	2.39	1.11	12.7	25	10	3.4	6.7
1,10-phenathroline	<i>Meso</i> -butane-2,3-diamine	0.86	1.09	0.92	1.07	0.61					
1,10-phenathroline	1 <i>R</i> -propane-1,2-diamine	8.0									
1,10-phenathroline	1 <i>S</i> -propane-1,2-diamine	3.6									
dpq	<i>Meso</i> -butane-2,3-diamine	18									
dpq	1 <i>R</i> -propane-1,2-diamine	7.3									
dpq	2 <i>S</i> -propane-1,2-diamine	16									
1,10-phenathroline	<i>N,N'</i> -dimethyl-1 <i>R</i> -propane-1,2-diamine	570									
1,10-phenathroline	<i>N,N'</i> -dimethyl-1 <i>S</i> -propane-1,2-diamine	110									
dpq	<i>N,N'</i> -dimethyl-1 <i>R</i> -propane-1,2-diamine	90									
dpq	<i>N,N'</i> -dimethyl-1 <i>S</i> -propane-1,2-diamine	75									

References

1. G. H. Bulluss, Ph.D Thesis, *Platinum compounds, DNA interactions, and their role in anti-cancer activity*, University of Sydney, 2004.

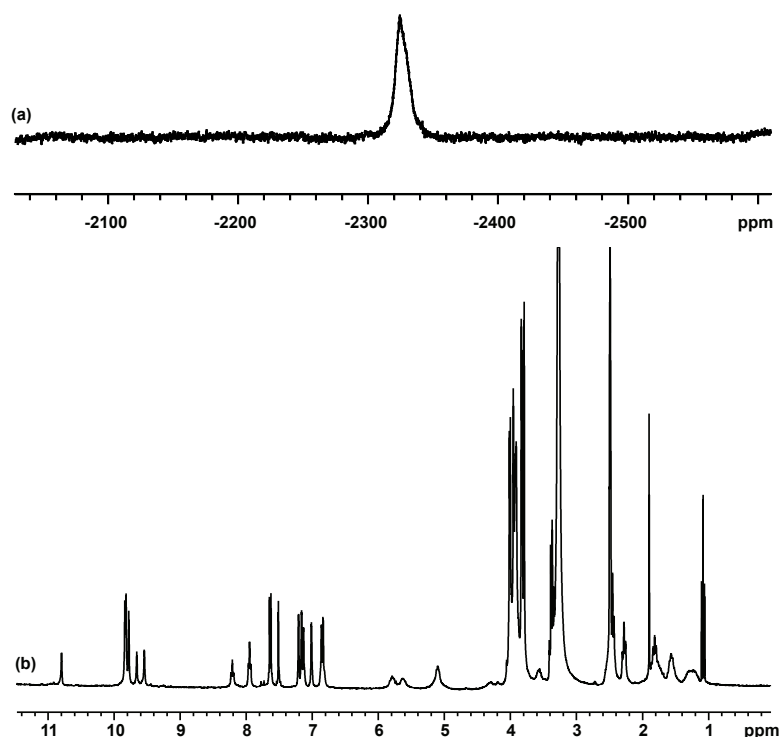


Figure S1. The (a) ^1H ($\text{d}_6\text{-DMSO}$, 400 MHz) and (b) ^{195}Pt ($\text{d}_7\text{-DMF}$, 85 MHz) NMR spectra of DNHLSP-6.

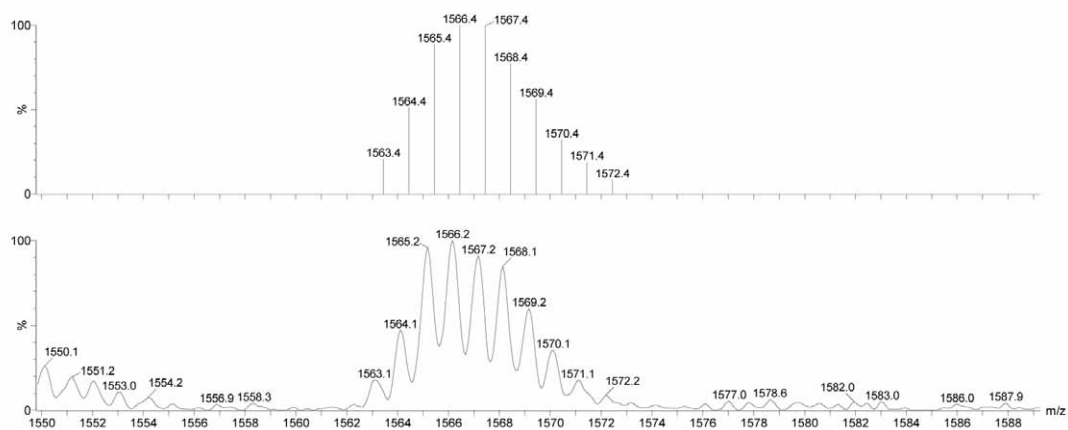


Figure S2. The theoretical and experimental ES^+ mass spectra of $\text{C}_{46}\text{H}_{71}\text{Cl}_2\text{N}_{23}\text{O}_{10}\text{Pt}_2$ (DNHLSP-6) showing the mass fragment for the $[\text{M}-\text{H}^+-2\text{Cl}]^+$ 1566.4 m/z complex.