

Supplementary Materials: Synthesis and Characterization of Novel Cu(II), Pd(II) and Pt(II) Complexes with 8-Ethyl-2-hydroxytricyclo(7.3.1.0^{2,7})tridecan-13-one-thiosemicarbazone Antimicrobial and *In vitro* Antiproliferative Activity

Elena Pahonțu, Codruța Parascivescu, Diana-Carolina Ilieș, Donald Poirier, Camelia Oprean, Virgil Păunescu, Aurelian Gulea, Tudor Roșu and Ovidiu Bratu

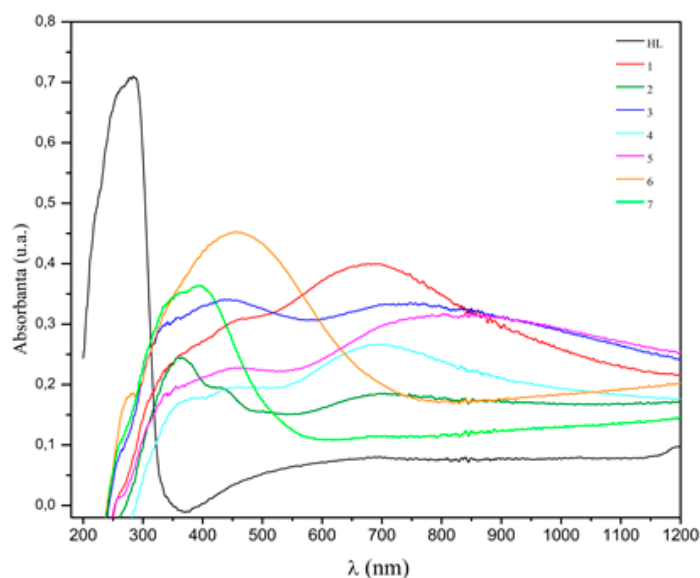


Figure S1. Electronic spectra of complexes 1–7.

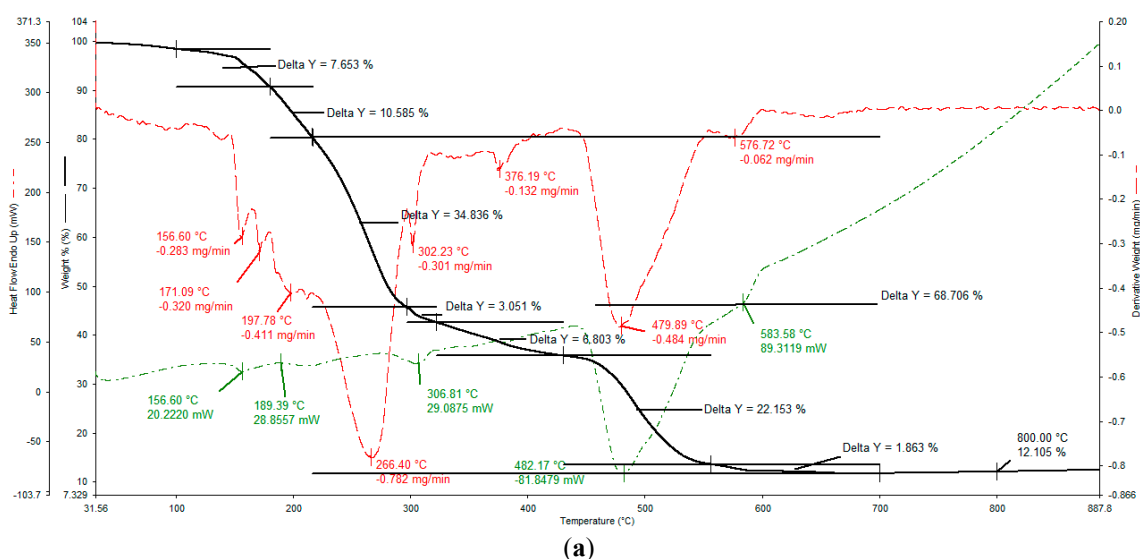
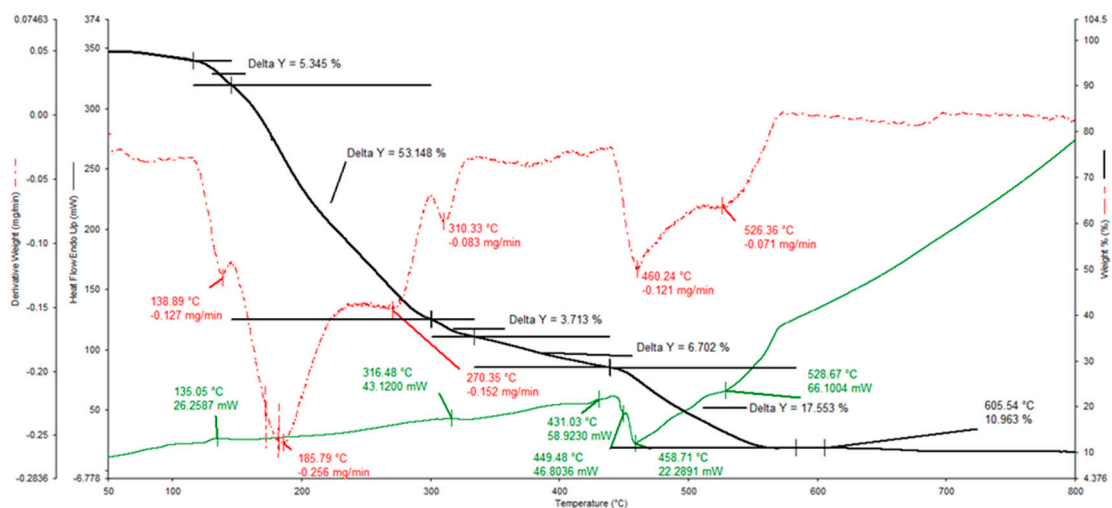
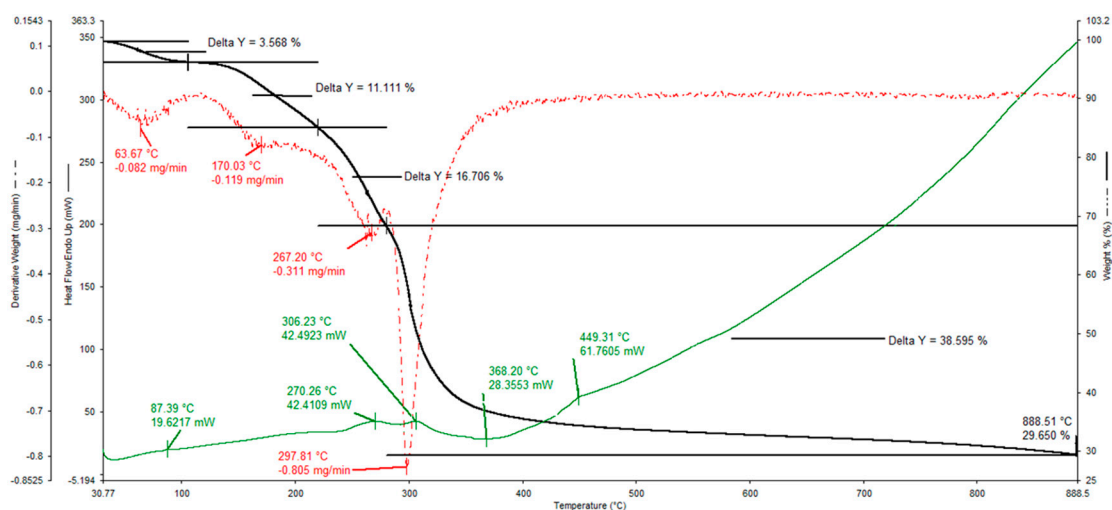


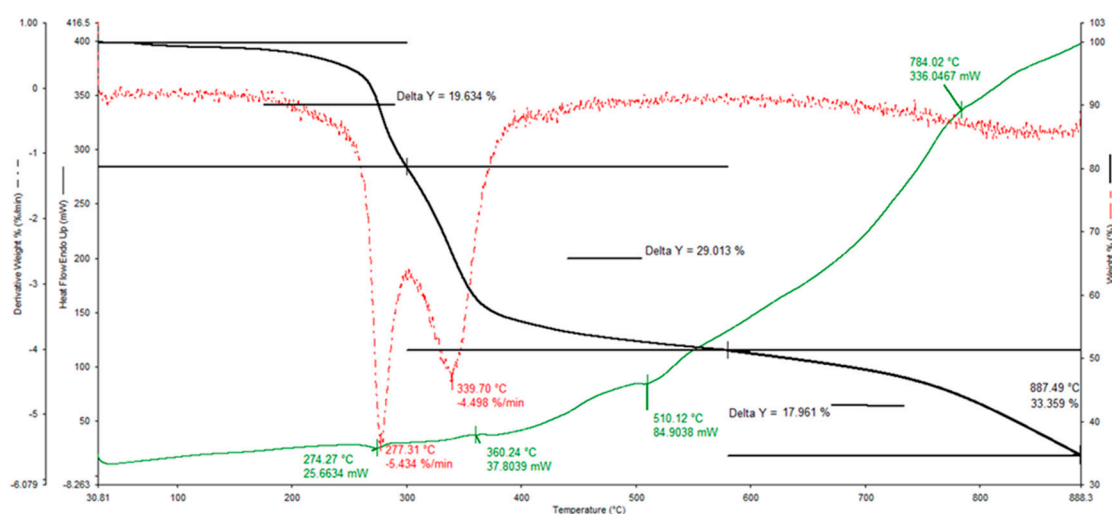
Figure S2. Cont.



(b)



(c)



(d)

Figure S2. Thermogravimetric analysis of complexes (a) 1, (b) 5, (c) 6 and (d) 7.

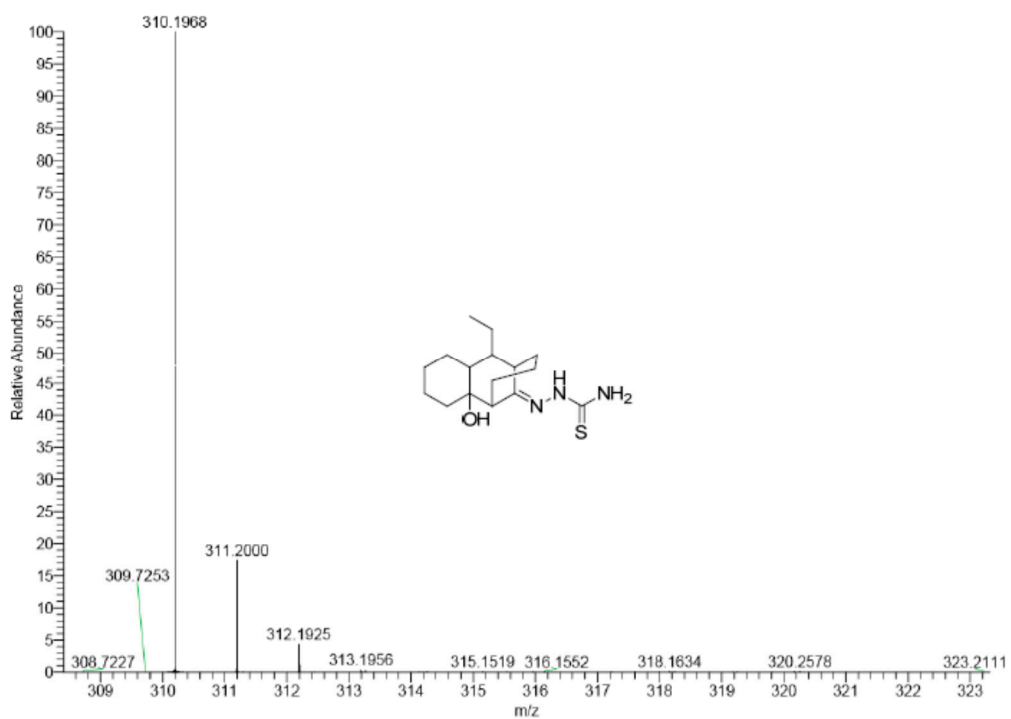
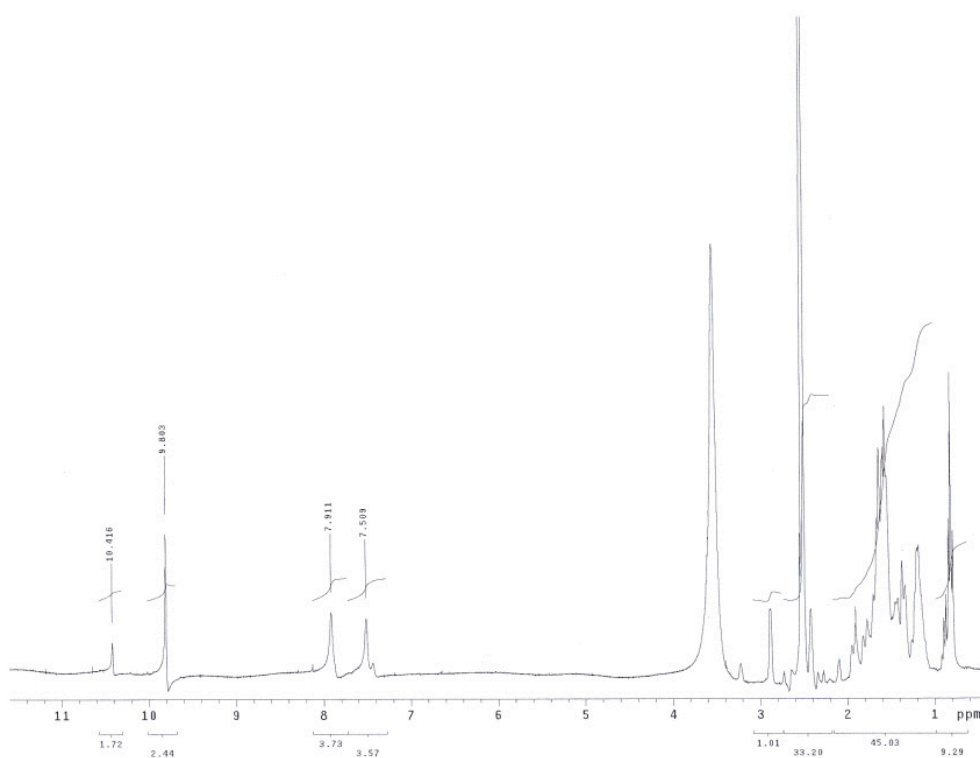
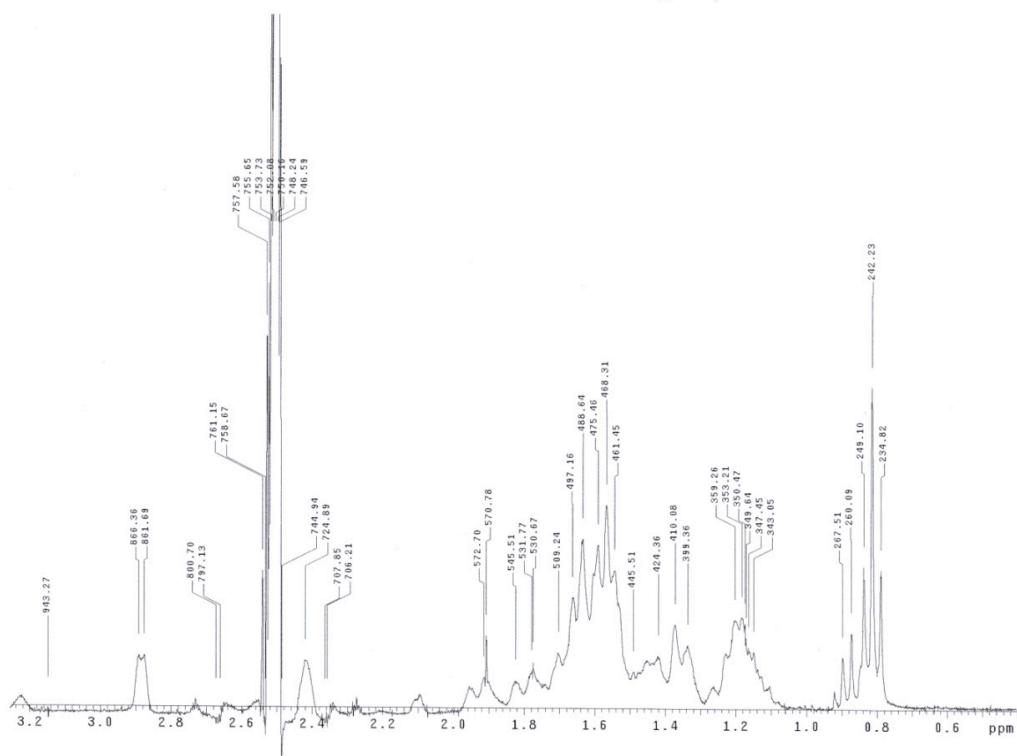


Figure S3. The mass spectrum of ligand HL.

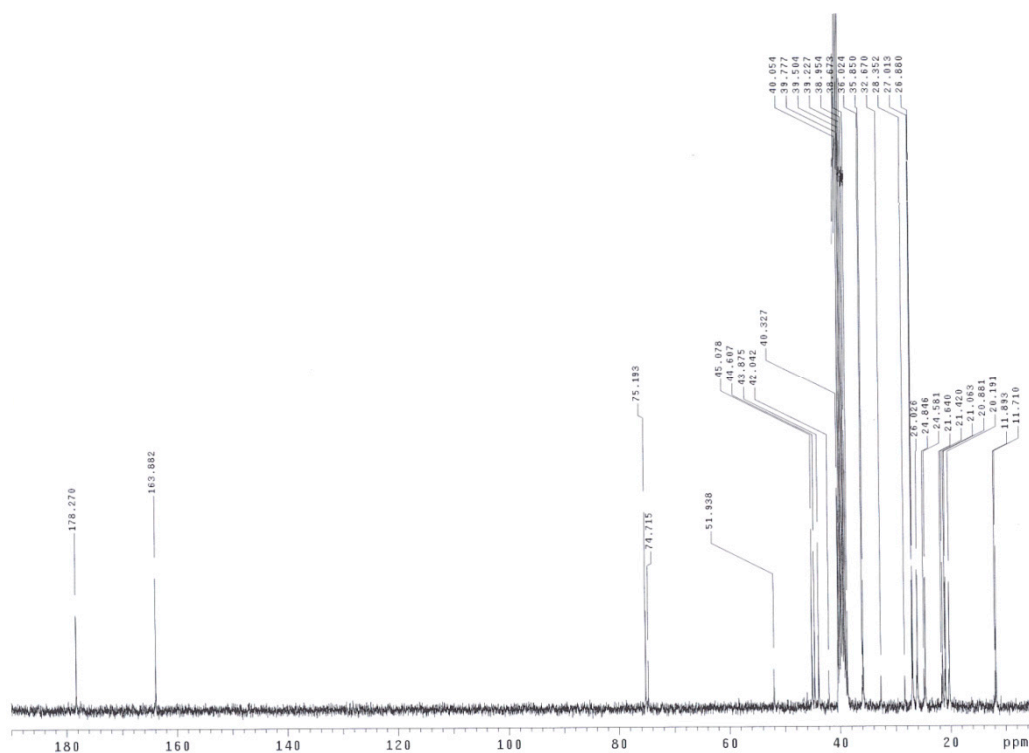


(a)

Figure S4. Cont.



(b)



(c)

Figure S4. The spectra ¹H-NMR (a,b) and ¹³C-NMR (c) of ligand (HL).

Table S1. FAB mass spectral data of complexes 1–7.

Molecular Formula	Mw (g/mol)	Molecular Ion Peak [M] ⁺	The Peaks Due to Complex Fragmentation			
(Cu(L)(H ₂ O) ₂ (OAc)) (1)	466.5	372.5	201.1	216.1	259.1	292.1
(Cu(HL)(H ₂ O) ₂ (SO ₄)) (2)	505.5	374.2	201.1	219.1	259.1	275.1
(Cu(L)(H ₂ O) ₂ (NO ₃)) (3)	469.5	371.5	188.1	219.1	254.2	292.2
(Cu(L)(H ₂ O) ₂ (ClO ₄)) (4)	507	372.5	202.3	217.0	253.2	293.1
(Cu(L) ₂ (H ₂ O) ₂) (5)	715.5	681.3	340.2	404.1	473.3	593.1
(Pd(L)(OAc))(H ₂ O) (6)	491.4	474.5	281.1	341.2	370.1	416.2
(Pt(L) ₂) (7)	811	794.1	501.1	587.1	616.2	705.1

Table S2. The numerical values of the Alamar blue analysis (with standard deviation).

Compound	HL	1	2	3	4	5	6	7
A375								
Viability %	99.819	81.482	35.676	47.108	69.523	76.913	89.080	96.075
*	2.315	2.350	11.009	3.001	7.861	2.260	5.913	4.492
MCF-7								
Viability %	71.421	17.292	10.025	12.847	12.698	36.891	74.421	69.267
*	5.553	0.270	0.141	0.515	1.604	0.425	3.421	1.063
SKBR-3								
Viability %	75.130	80.582	72.626	94.081	67.155	92.974	90.713	90.896
*	13.479	1.277	5.419	7.123	5.163	8.702	11.107	4.803
NCI-H1573								
Viability %	87.63	29.61	31.33	43.35	26.42	58.55	38.85	83.54
*	4.72	2.76	2.70	4.72	2.88	3.18	1.75	4.35

*standard deviation. The values are presented as percent of control (100% viability).