

Supplementary Information

Synthesis and characterisation of novel tetradentate Schiff base complexes: Biological evaluation exploring anticancer activity towards MCF 7 cell breast cancer lines with *in vitro* docking studies

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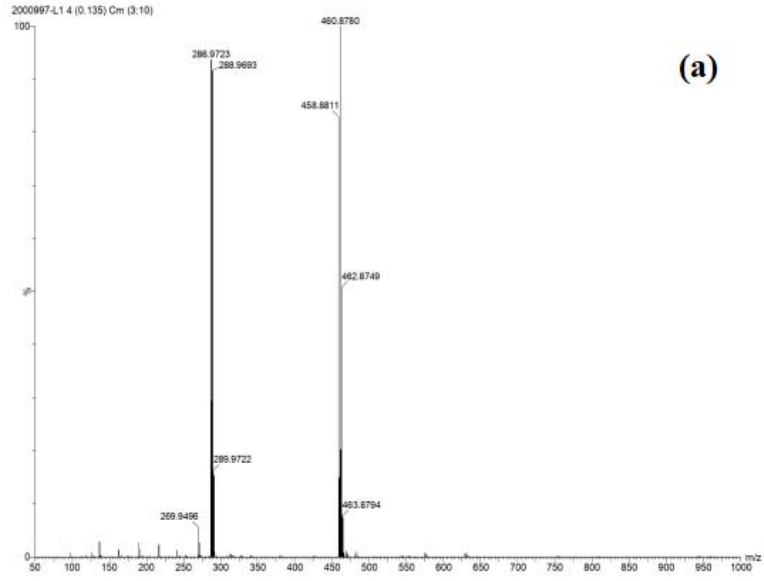
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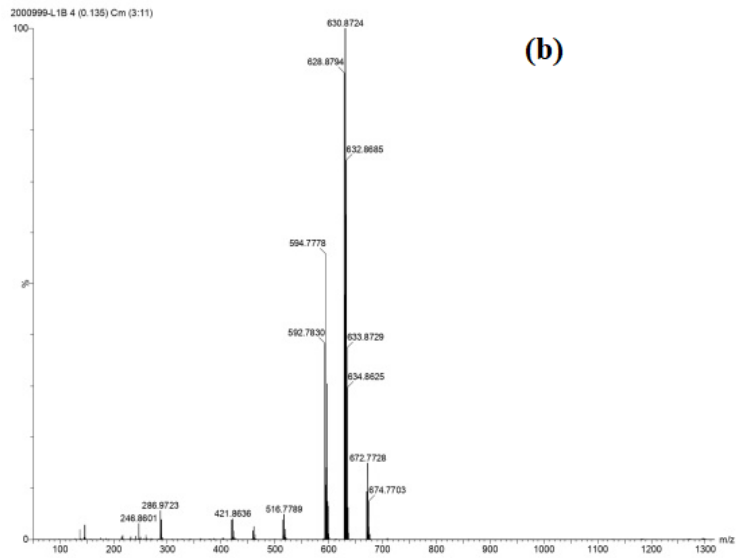
S. No.	Contents	Pg. No.
1	Table S1 — Antibacterial results of complexes 1-4	2
2	Table S2 — IC50 values of DPPH scavenging activity of L and its complexes (1-4)	2
3	Fig. S1 — ESI-mass spectra for (a) L, (b-e) Co(II), Cu(II), Fe(II) and Zn(II), respectively	3
4	Fig. S2 — Antibacterial activity of complex (1-4) towards a) <i>Staphylococcus aureus</i> b) <i>Escherichia coli</i>	4
5	Fig. S3 — Cytotoxic assay of CuL ₂ complex at different concertation against MCF-7 cell line using MTT assay	5
6	Fig. S4— Cytotoxicity of copper complex CuL ₂	5

Table S1 — Antibacterial results of complexes 1-4				
Zone inhibition in mm				
Compound	<i>E.coli</i>	<i>S.aureus</i>	<i>A.niger</i>	<i>Penicillium sp.</i>
Copper complex	29	25	17	26
Cobalt complex	24	22	15	24
Iron complex	18	19	12	14
Zinc complex	13	18	9	14

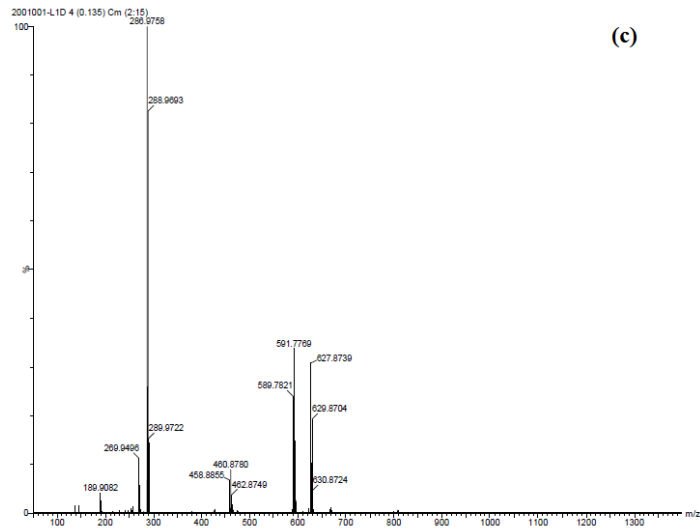
Table S2 —IC ₅₀ values of DPPH scavenging activity of L and its complexes (1-4)	
Compound	IC ₅₀ (mg/mL)
L	0.398
2	0.180
3	0.196
4	0.253



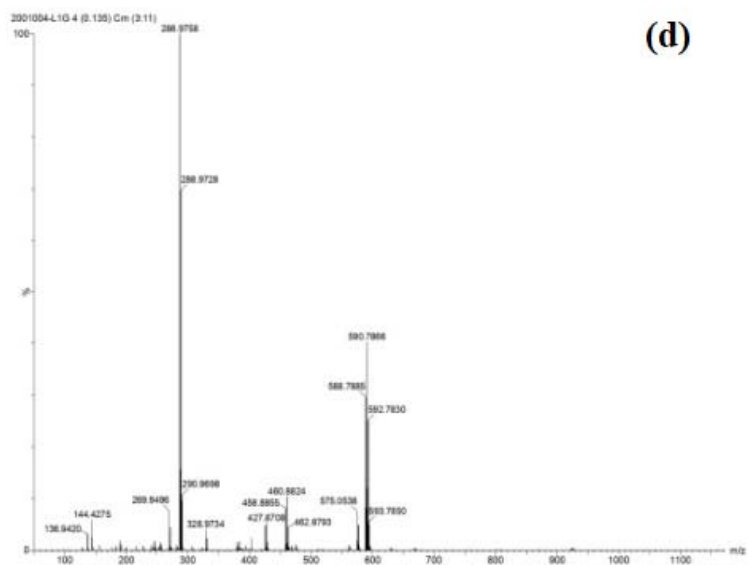
(a)



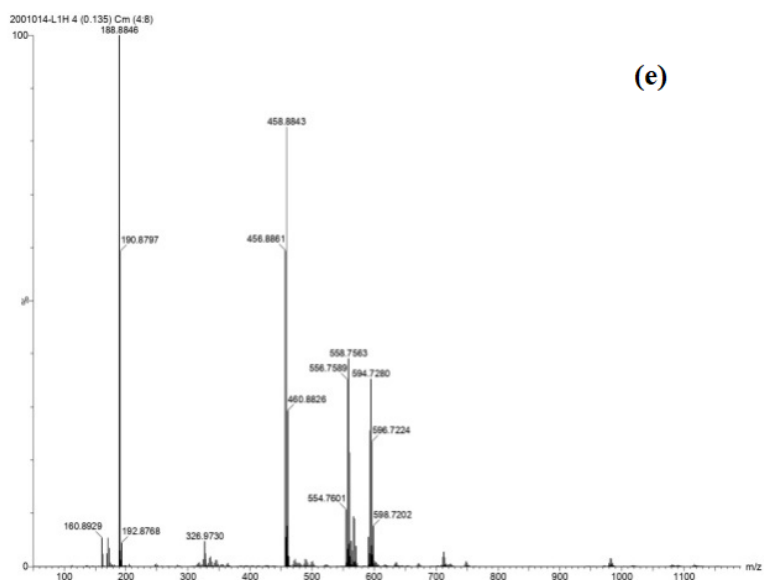
(b)



(c)



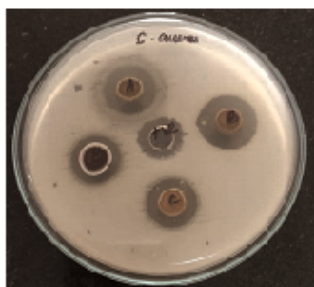
(d)



(e)

Fig. S1 — ESI-mass spectra for (a) L, (b-e) Co(II), Cu(II), Fe(II) and Zn(II), respectively

a)



b)

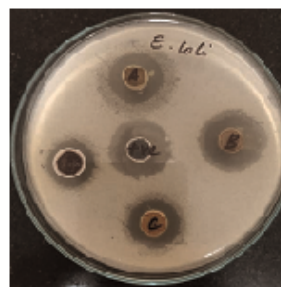


Fig. S2 — Antibacterial activity of complex (1-4) towards a) *Staphylococcus aureus* b) *Escherichia coli*

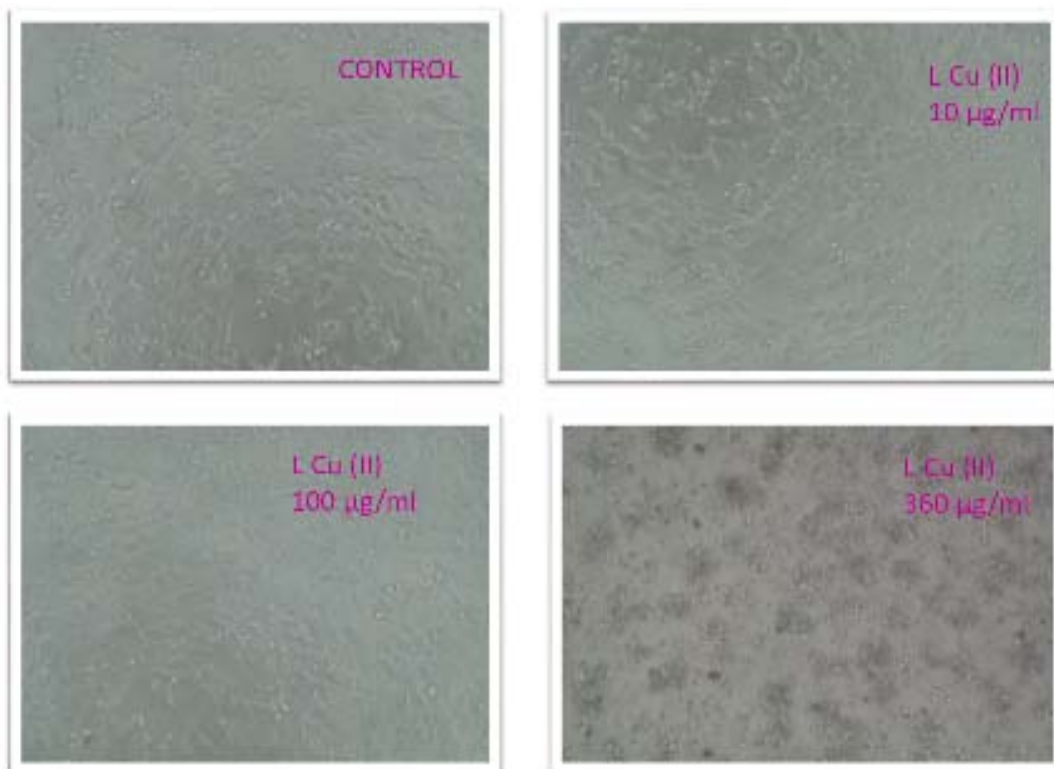


Fig. S3 — Cytotoxic assay of L₂Cu complex at different concentration against MCF-7 cell line using MTT assay

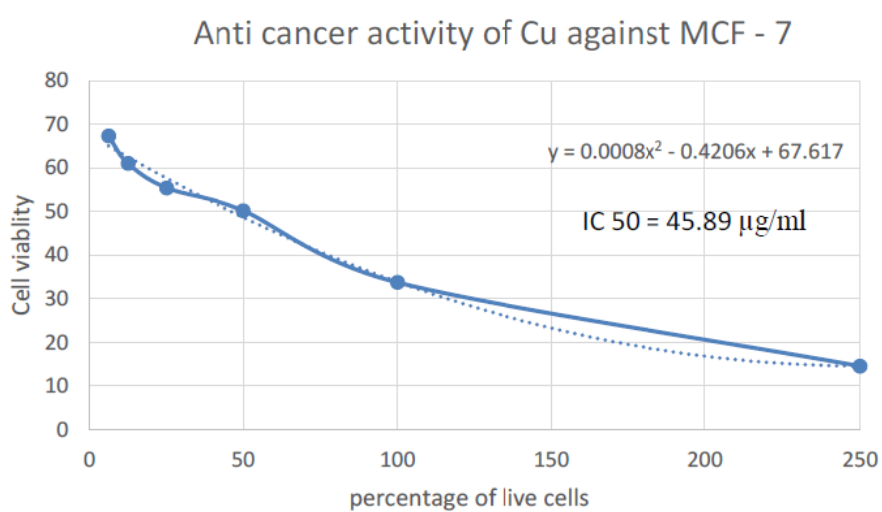


Fig. S4 —Cytotoxicity of copper complex CuL₂