

Supporting Information

Fluorescent active Ruthenium(II) Complex units containing bpy or phen or dmp ligands anchored on branched poly(ethyleneimine): DNA binding and invitro biological assessment†

Ilayaperumal Pradeep,^a Balagurusamy Balajothi,^a Sankaralingam Arunachalam,^{*ad} Rajakumar Dhivya,^b Annadurai Vinothkanna,^c and Mohammad Abdulkadher Akbarsha,^b Soundarapandian Sekar,^c

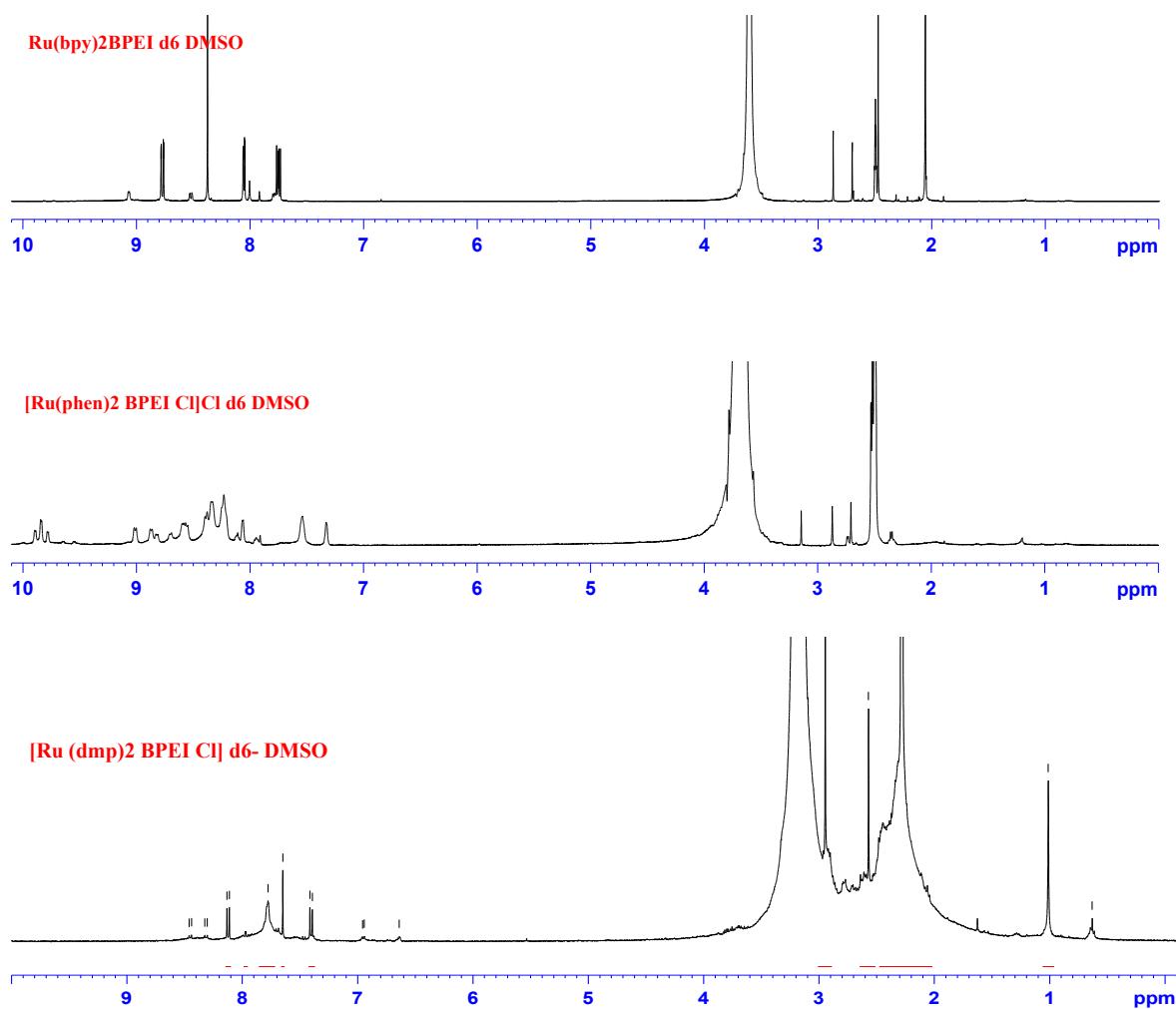
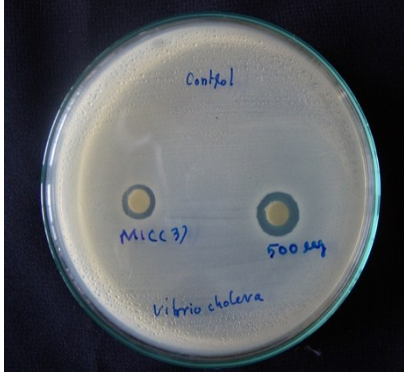
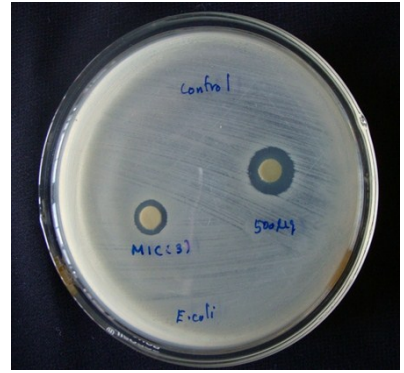


Fig. S1. ¹H-NMR spectra of the RuL-BPEI complexes.



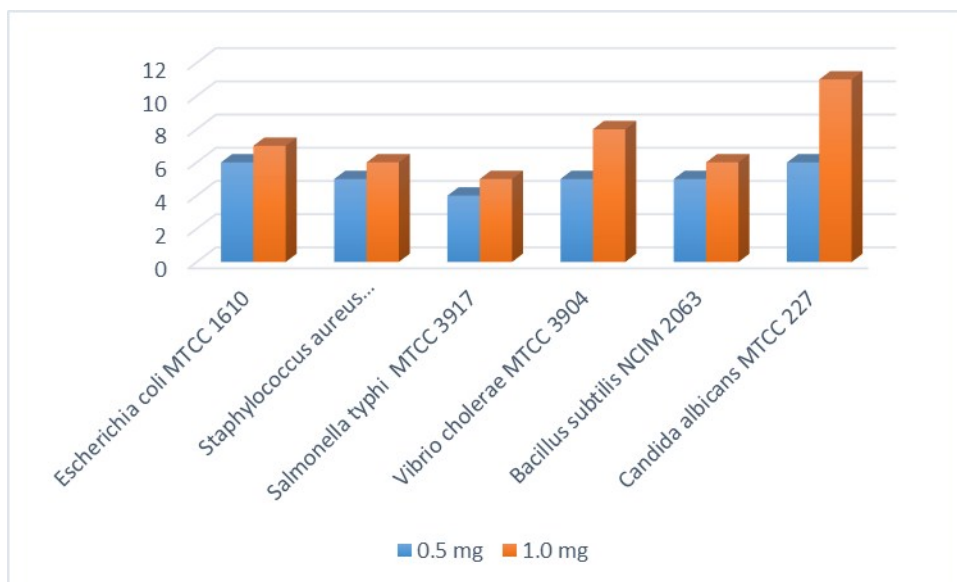


Fig. S2. Top: Antimicrobial studies plate images treated by the RuL-BPEI complexes (1,2 and 3 are represents as RuB-BPEI, RuP-BPEI and RuD-BPEI. Bottom: BPEI as a control in disk diffusion experiments carried out by the x axis 0.5 mg/ml and 1 mg/ml of the BPEI with pathogens and the y axis is zone of inhibition mm units.

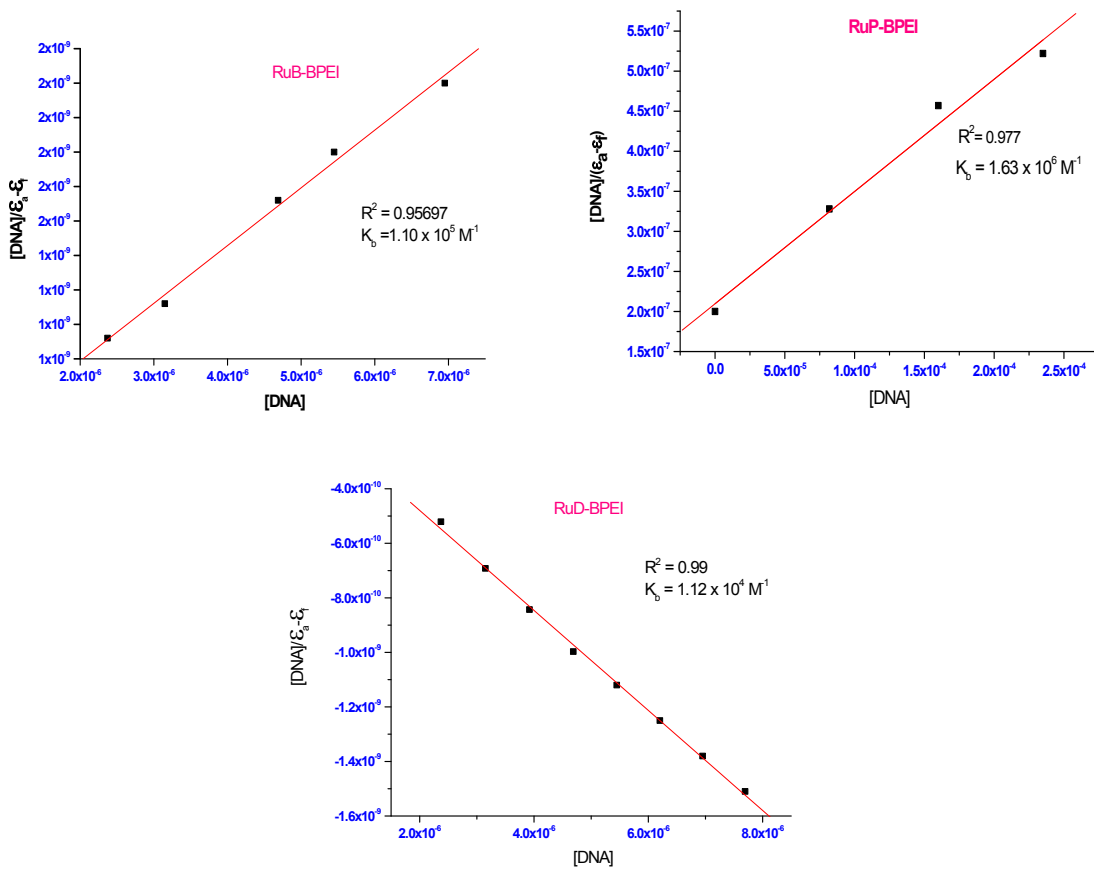


Fig. S3. Plot of [DNA] against $[DNA]/\epsilon_a - \epsilon_f$ using UV spectroscopy for the binding constant of the RuB-BPEI and RuP-BPEI with CT-DNA.

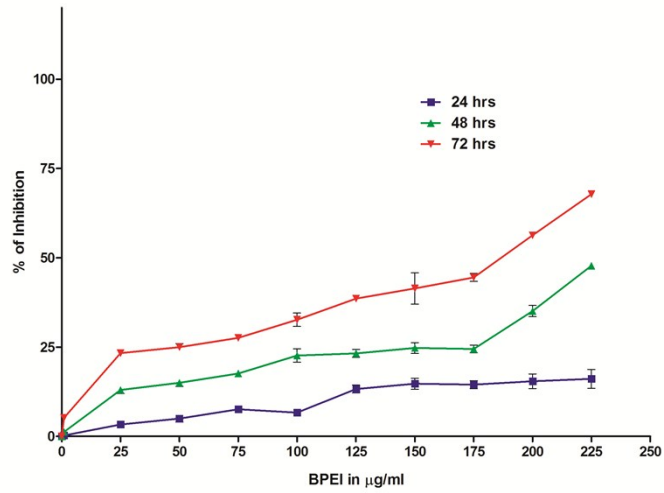


Fig. S4. The cytotoxicity assay of BPEI on MCF-7 cells at three different time points 24, 48 and 72 h.