

Supporting Information

Labile ruthenium(II) complexes with extended phenyl-substituted terpyridyl ligands: synthesis, aquation and anticancer evaluation

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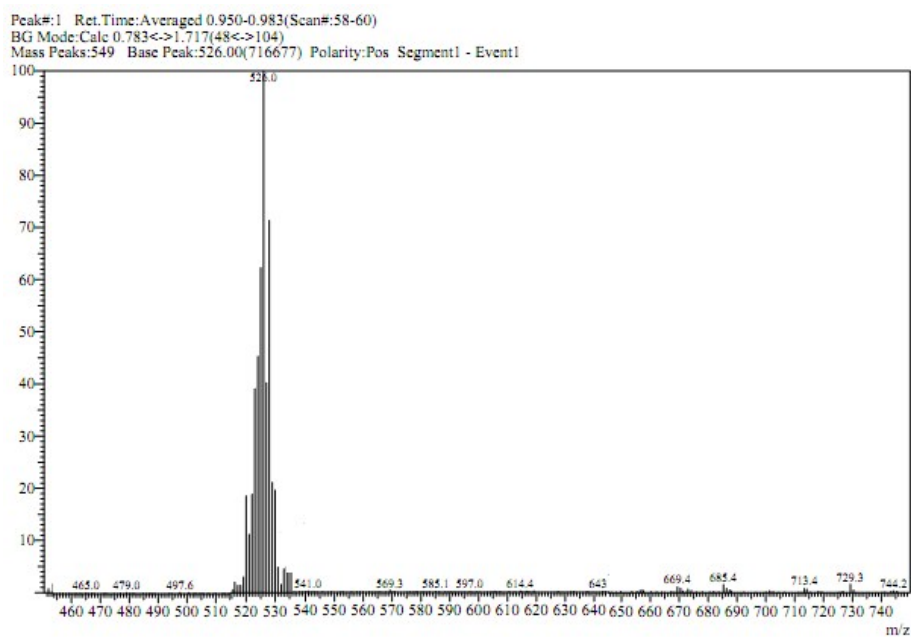


Fig. S1 ES-MS (CH₃OH) spectrum of **Ru1**.

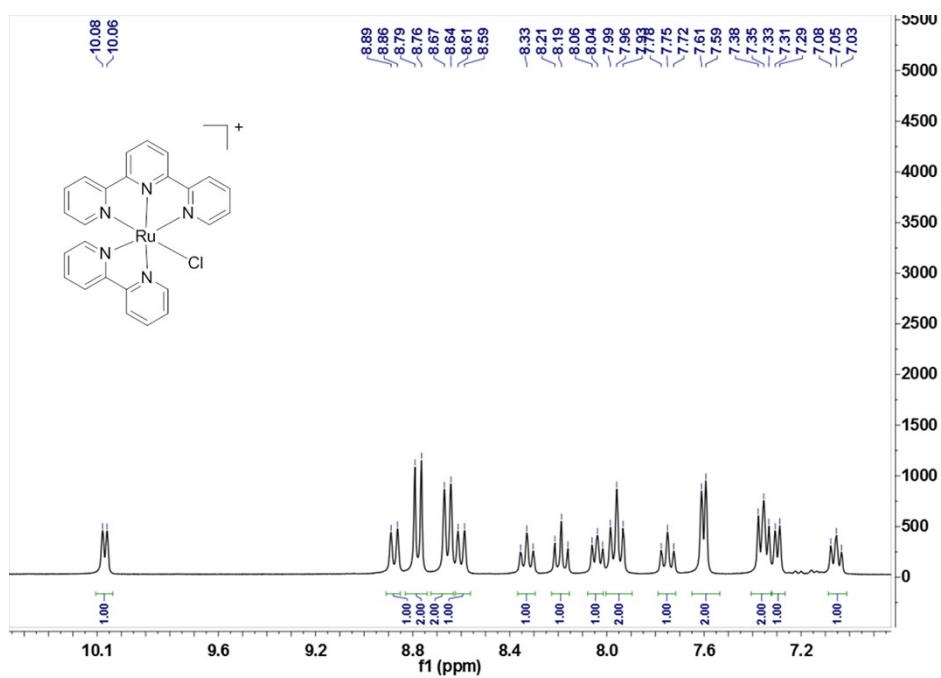


Fig. S2 ¹H NMR spectrum (300 MHz, DMSO-*d*₆) of **Ru1**.

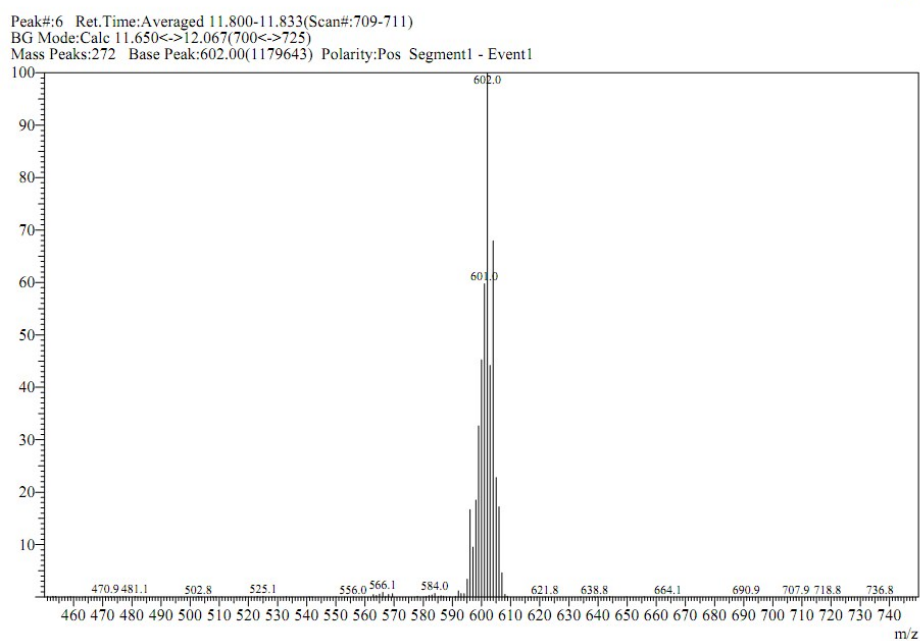


Fig. S3 ES-MS (CH₃OH) spectrum of **Ru2**.

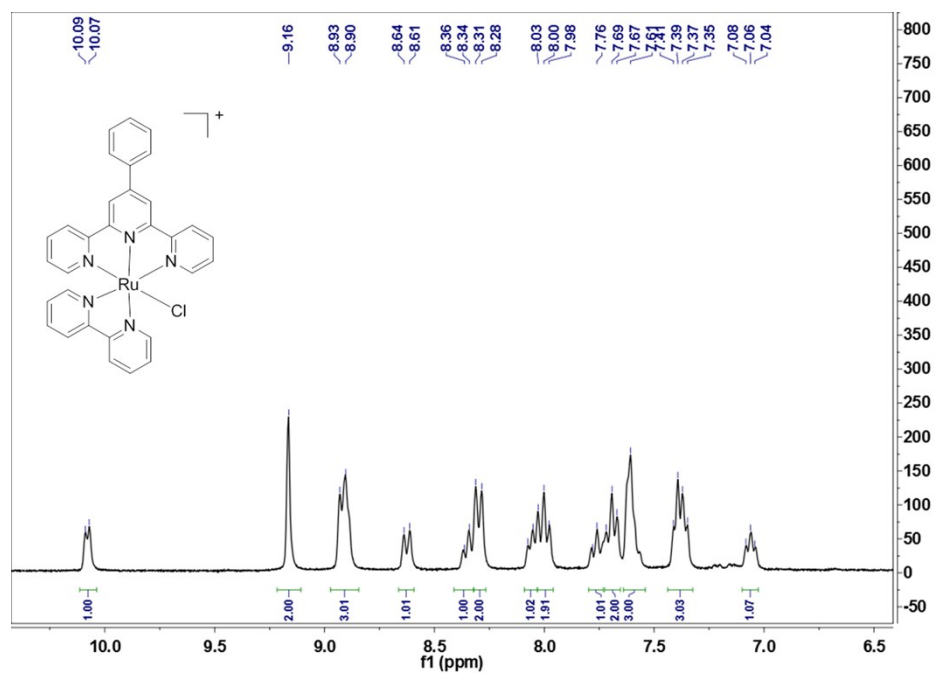


Fig. S4 ¹H NMR spectrum (300 MHz, DMSO-*d*₆) of **Ru2**.

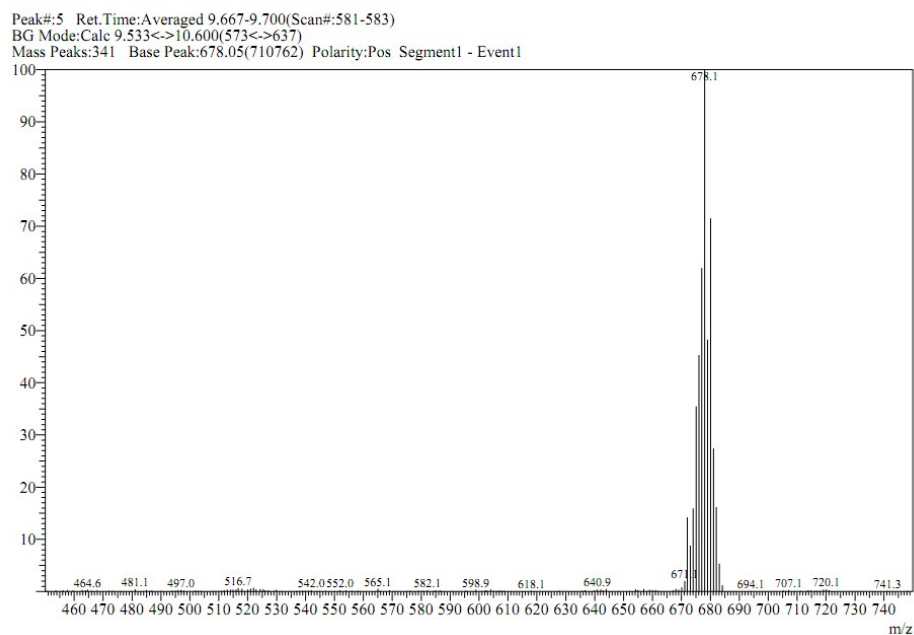


Fig. S5 ES-MS (CH₃OH) spectrum of **Ru3**.

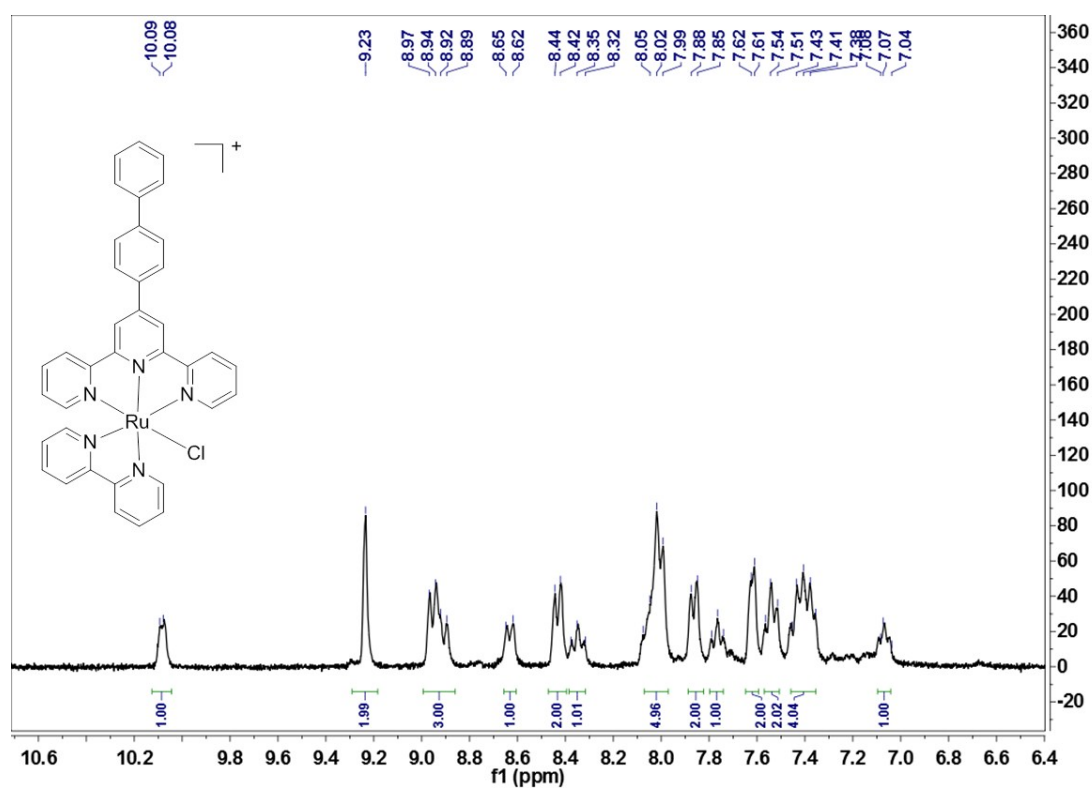


Fig. S6 ¹H NMR spectrum (300 MHz, DMSO-*d*₆) of **Ru3**.

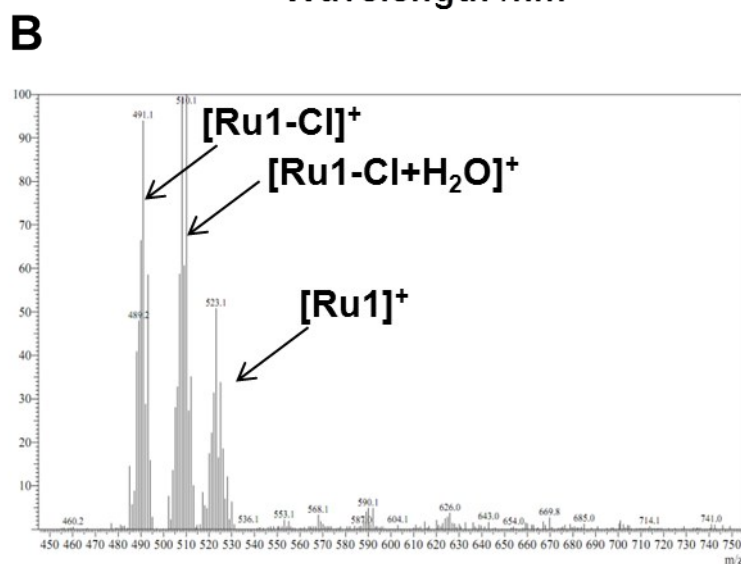
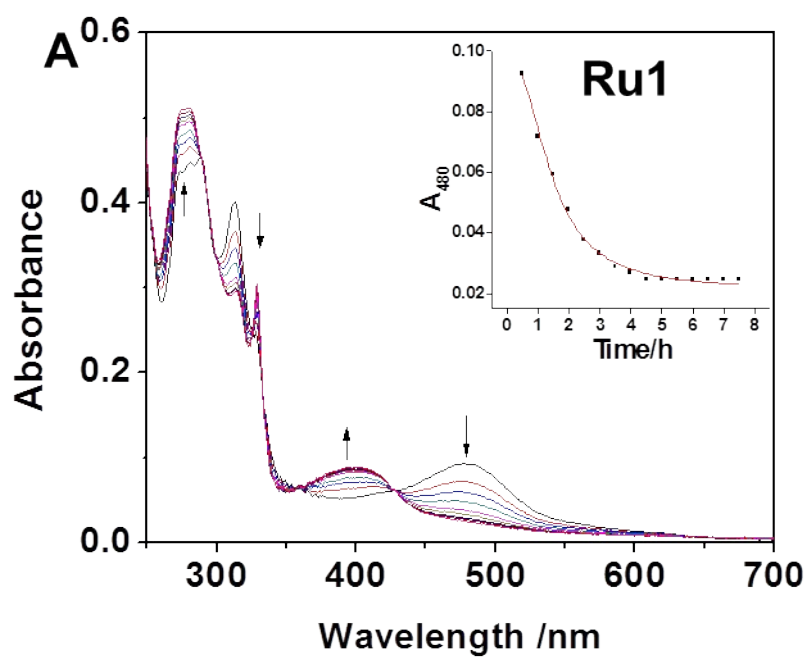


Fig. S7 (A) Aquation of **Ru1** in PBS buffer solution (pH = 7.4) tracking by UV-vis spectra. (B) LC-MS spectra of the aquated **Ru1**.

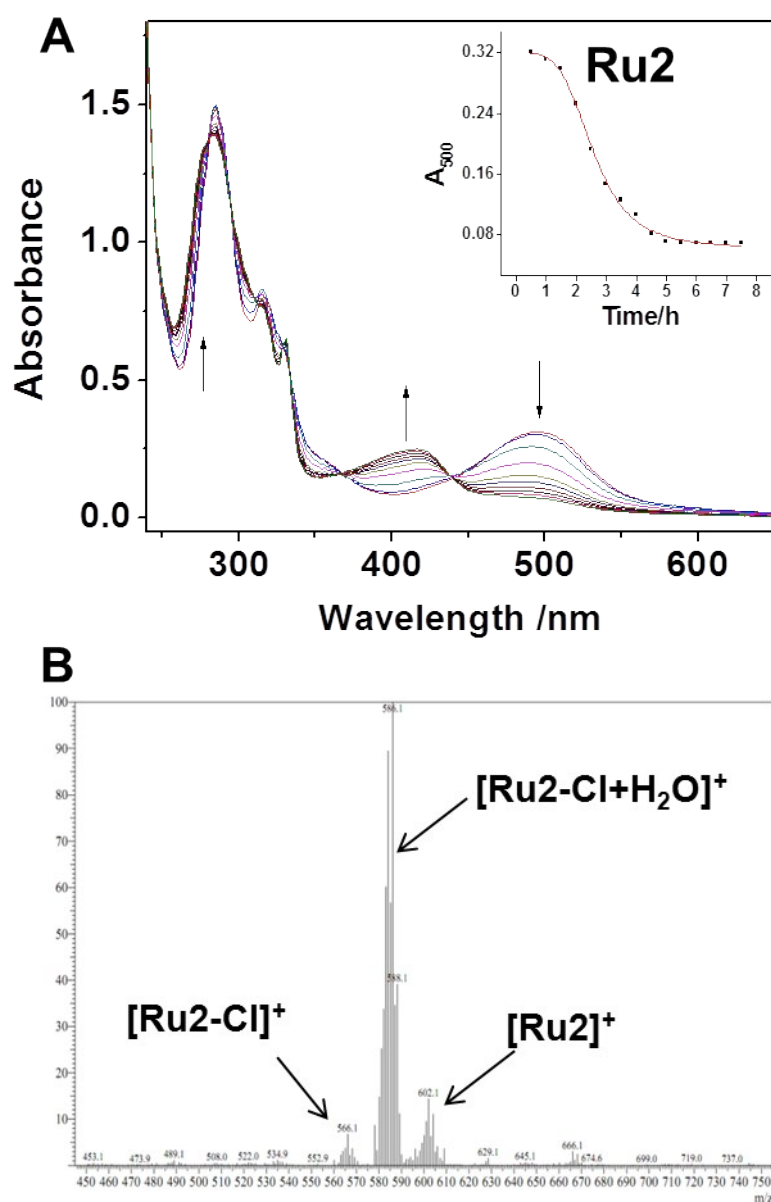
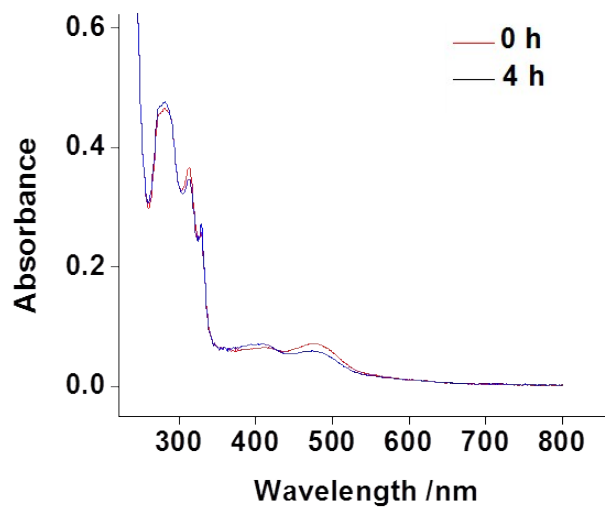


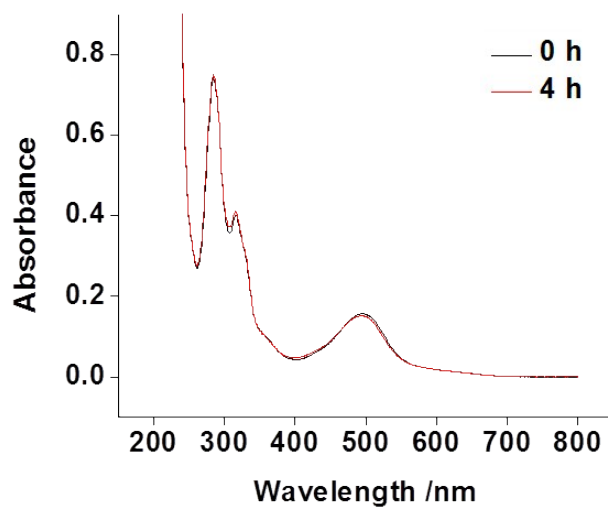
Fig. S8 (A) Aquation of **Ru2** in PBS buffer solution (pH = 7.4) tracking by UV-vis spectra. (B) LC-MS spectra of the aquated **Ru2**.

100 mM NaCl

Ru1



Ru2



Ru3

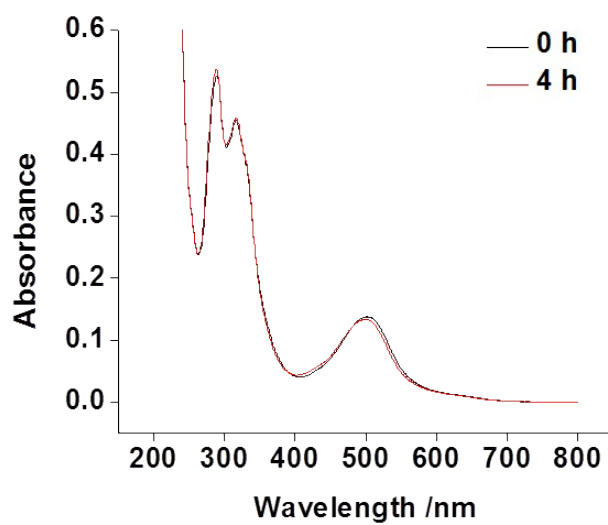
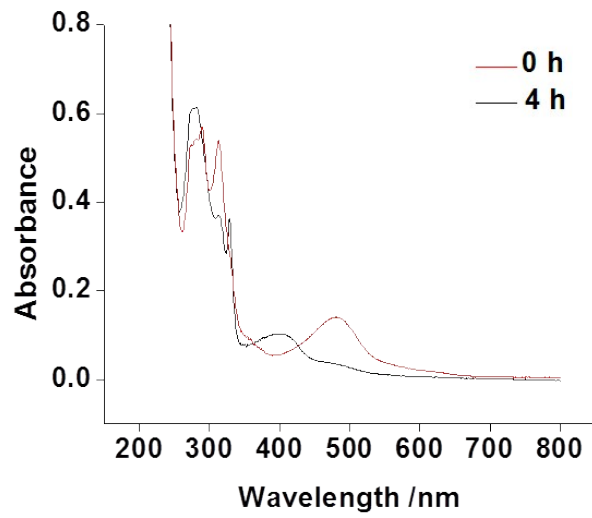


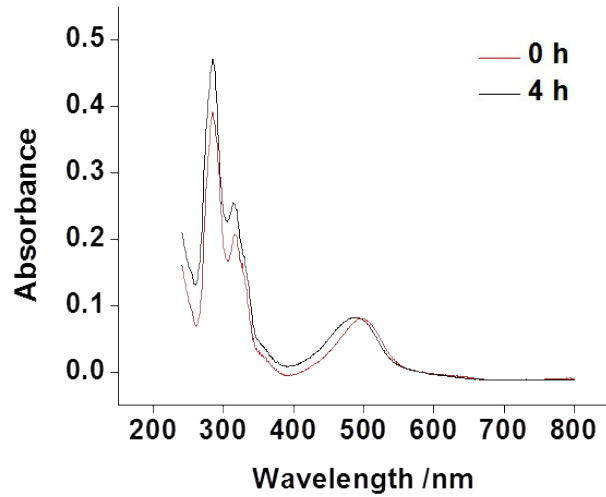
Fig. S9 Aquation of Ru1-Ru3 in present of 100 mM NaCl concentration by UV-vis spectra.

23 mM NaCl

Ru1



Ru2



Ru3

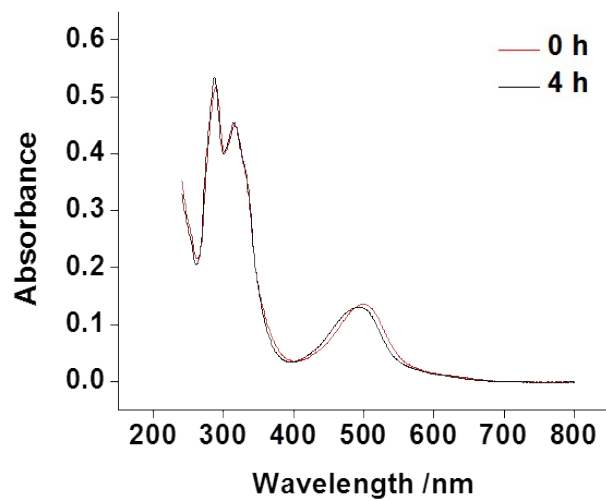
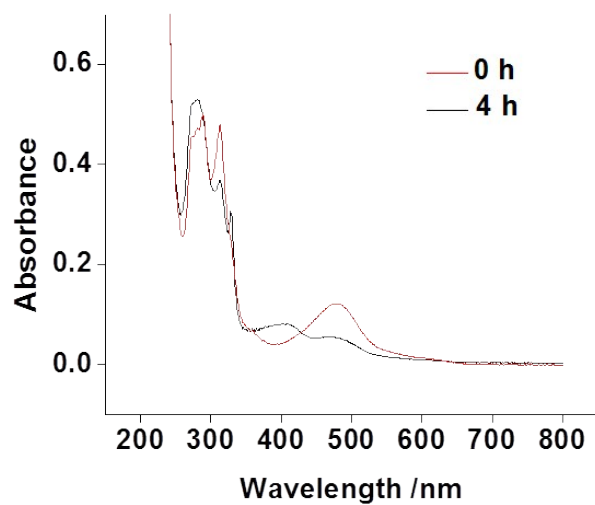


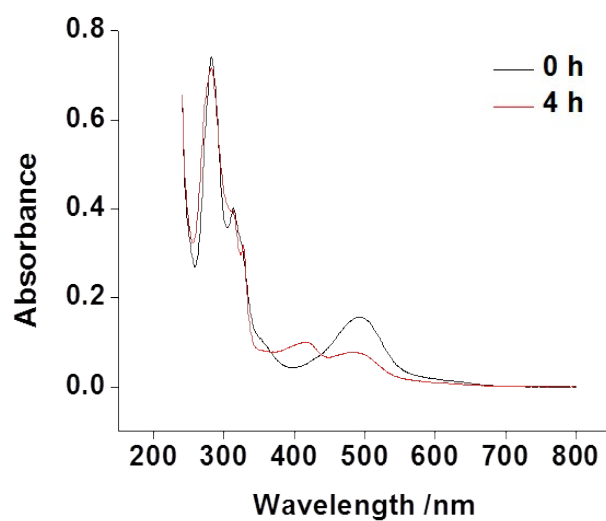
Fig. S10 Aquation of Ru1-Ru3 in present of 23 mM NaCl concentration by UV-vis spectra.

4 mM NaCl

Ru1



Ru2



Ru3

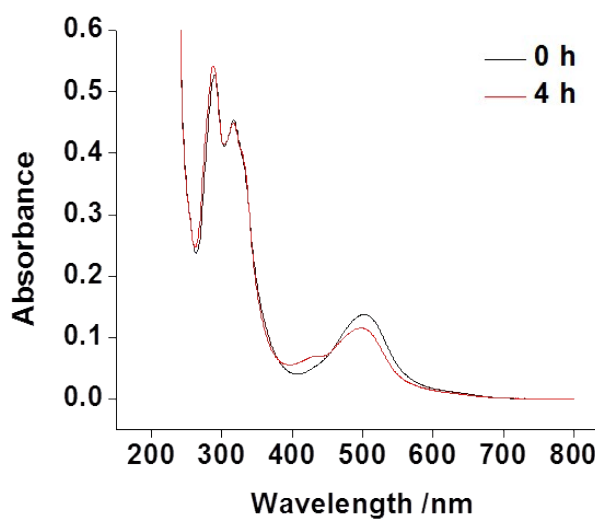


Fig. S11 Aquation of Ru1-Ru3 in present of 4 mM NaCl concentration by UV-vis spectra.

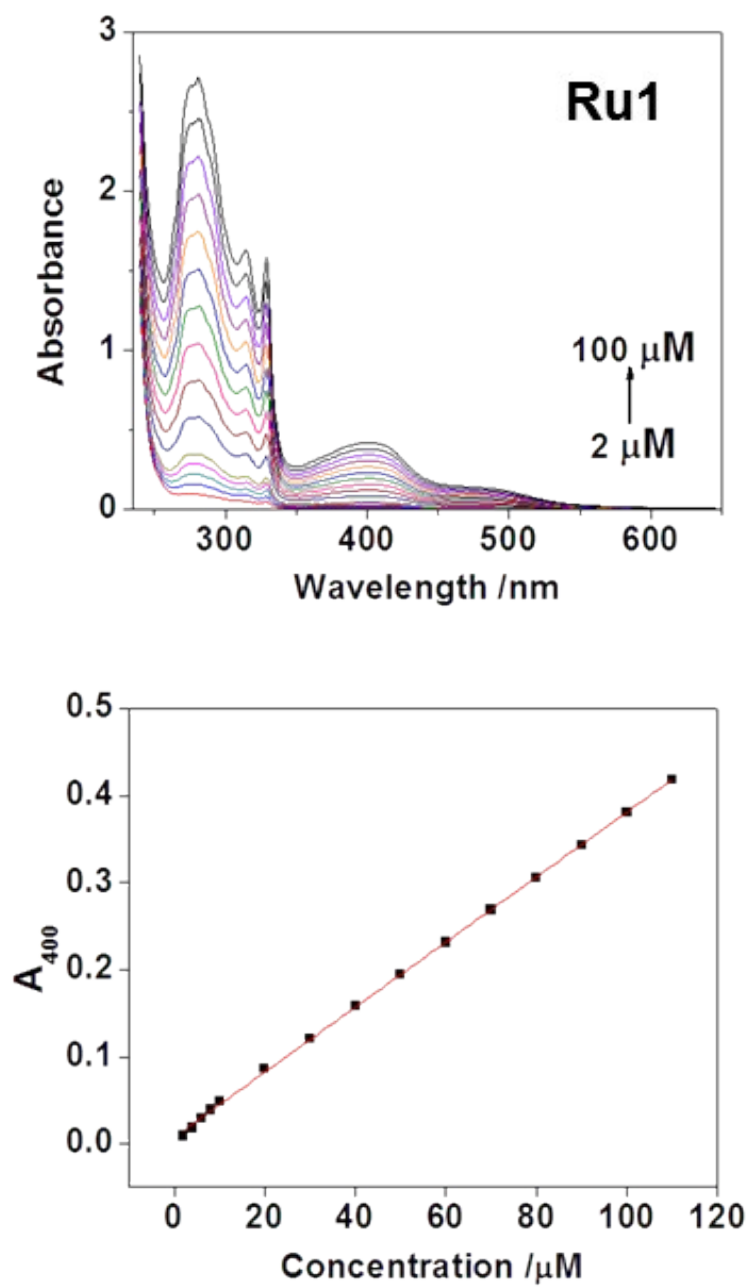


Fig. S12 UV-vis spectrum of **Ru1** with increasing concentration in PBS buffer solution in present of 100 mM NaCl.

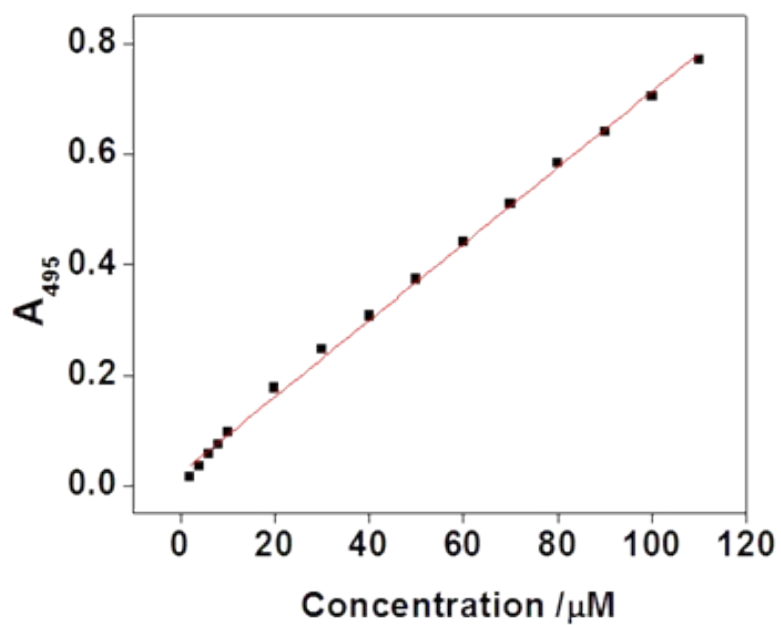
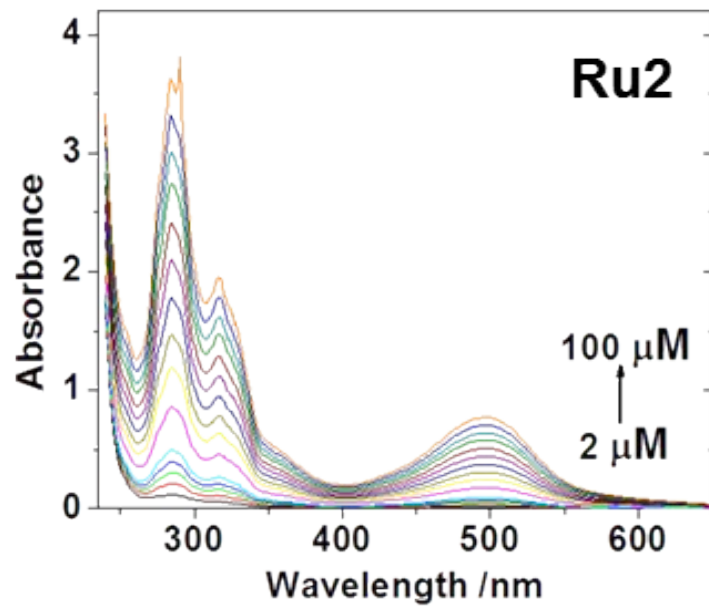


Fig. S13 UV-vis spectrum of **Ru2** with increasing concentration in PBS buffer solution in present of 100 mM NaCl.

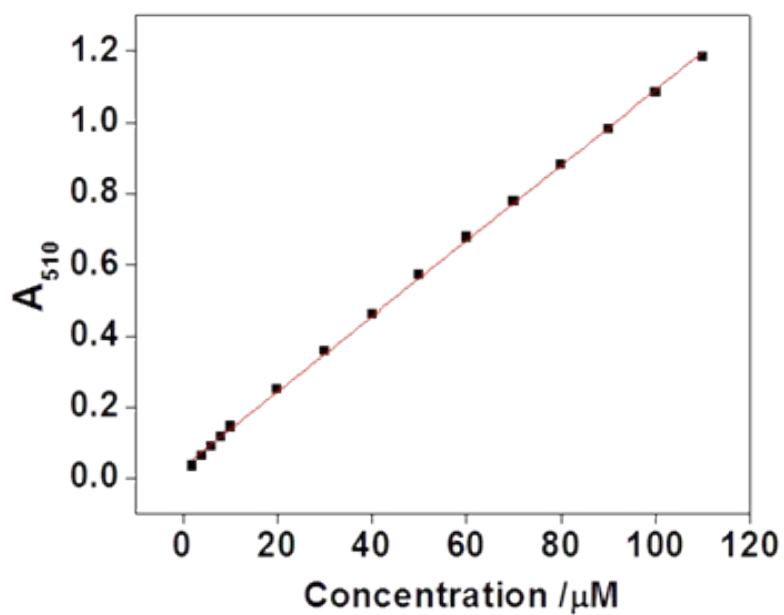
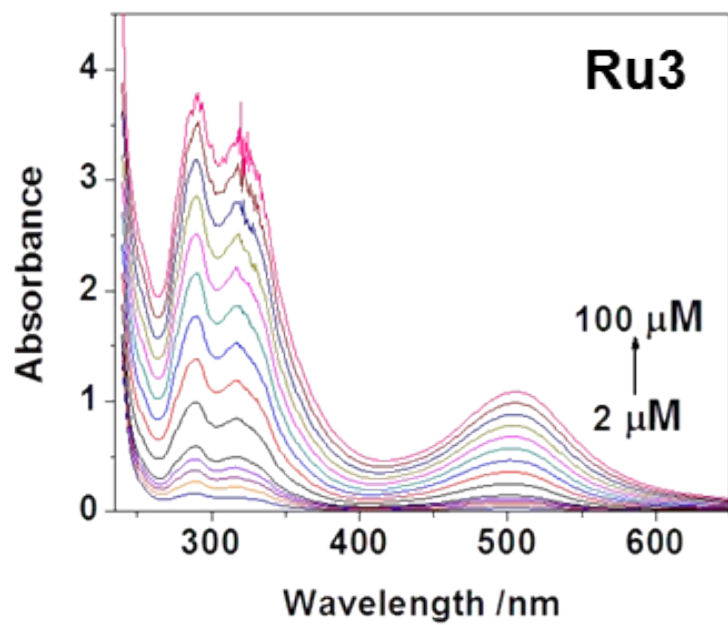


Fig. S14 UV-vis spectrum of **Ru₃** with increasing concentration in PBS buffer solution in present of 100 mM NaCl.

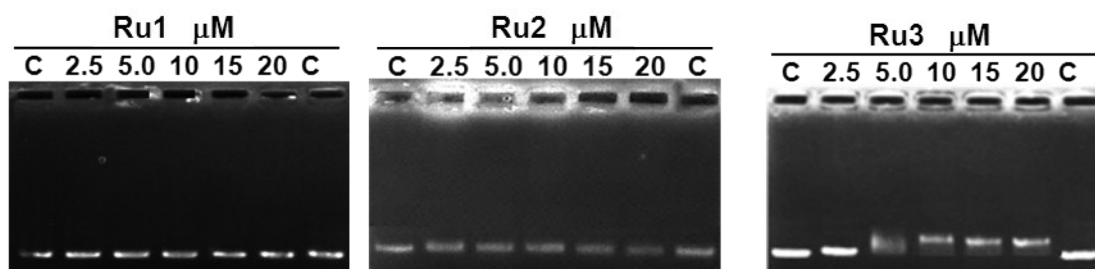


Fig. S15 Ethidium bromide stained agarose gels of pUC19 plasmid DNA (10 mM phosphate, pH = 7.5) in the presence of **Ru1-Ru3**.

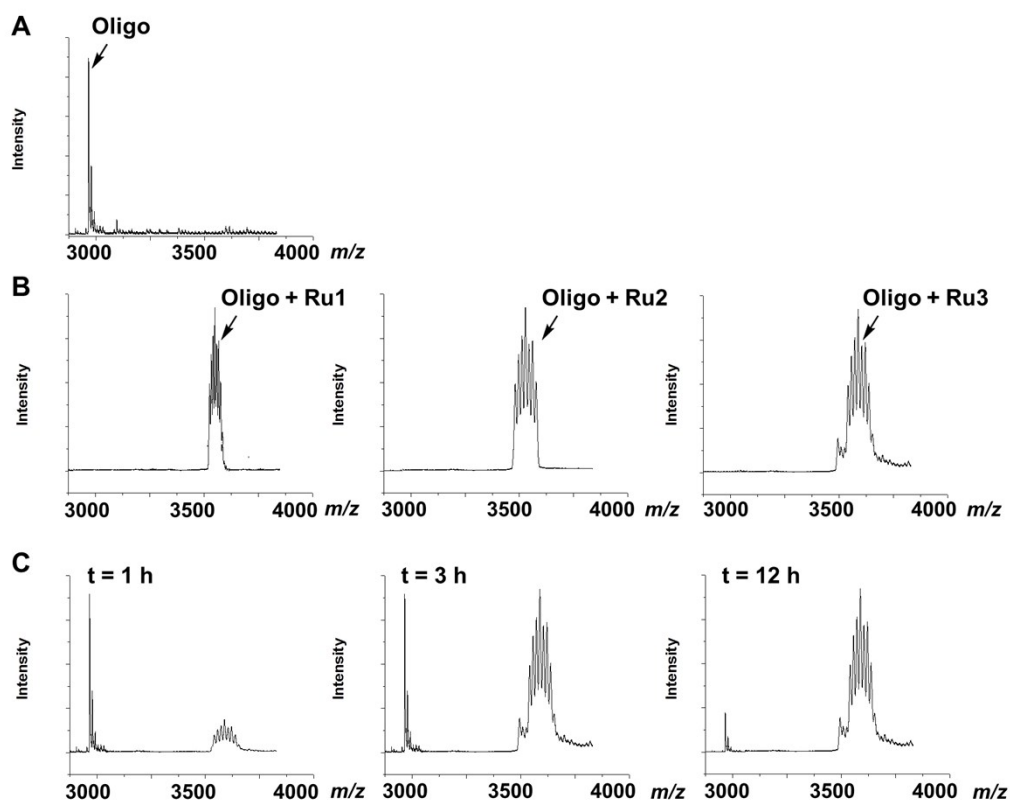


Fig. S16 (A) MALDI-TOF mass spectra of free oligonucleotides OD1 and OD2. (B) Spectra of adducts of **Ru1-Ru3** with oligonucleotide after reaction for 12 h. (C) Spectra of adducts of adduct of **Ru3** with oligonucleotide with extending incubation time.