Electronic Supplementary Information

Synthesis, characterisation and antibacterialactivity of [(*p*-cym)RuX(L)]$^{+/2+}$ (X= Cl, H_2O; L = bpmo, bpms) complexes

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Fig. S1 UV-Vis spectra of complexes [**1**](ClO_4) – [**4**]($(PF_6)_2$ recorded in CH_3CN at room temperature.

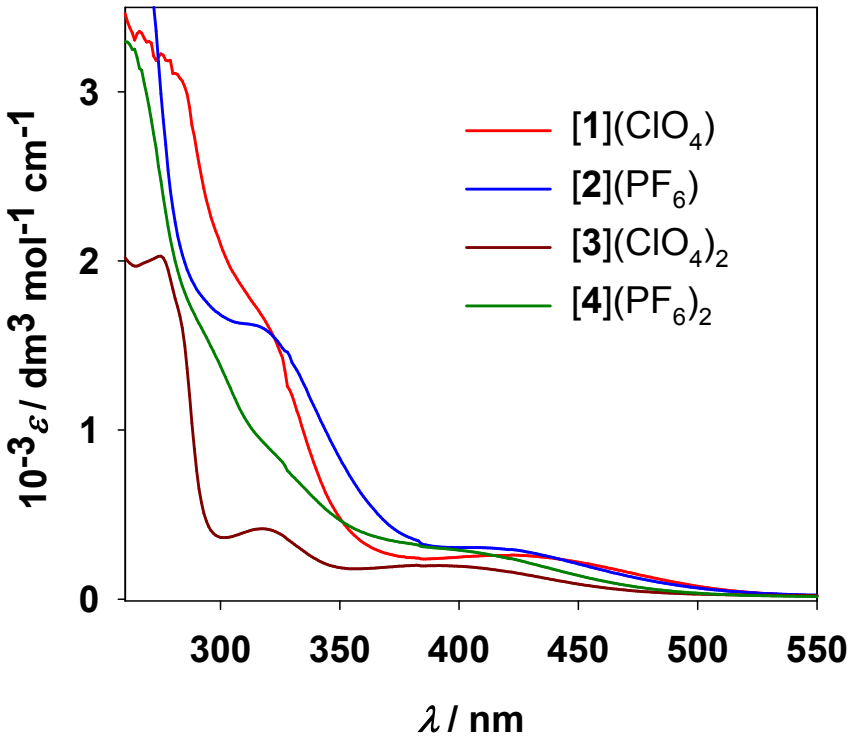


Fig. S2 Cyclic voltammograms of [**1**]ClO_4 and [**2**]PF_6 recorded in CH_3CN/0.1mol dm^{-3}

Et_4NClO_4 *versus* Hg/Hg_2Cl_2 (scan rate 50 mV s^{-1}).

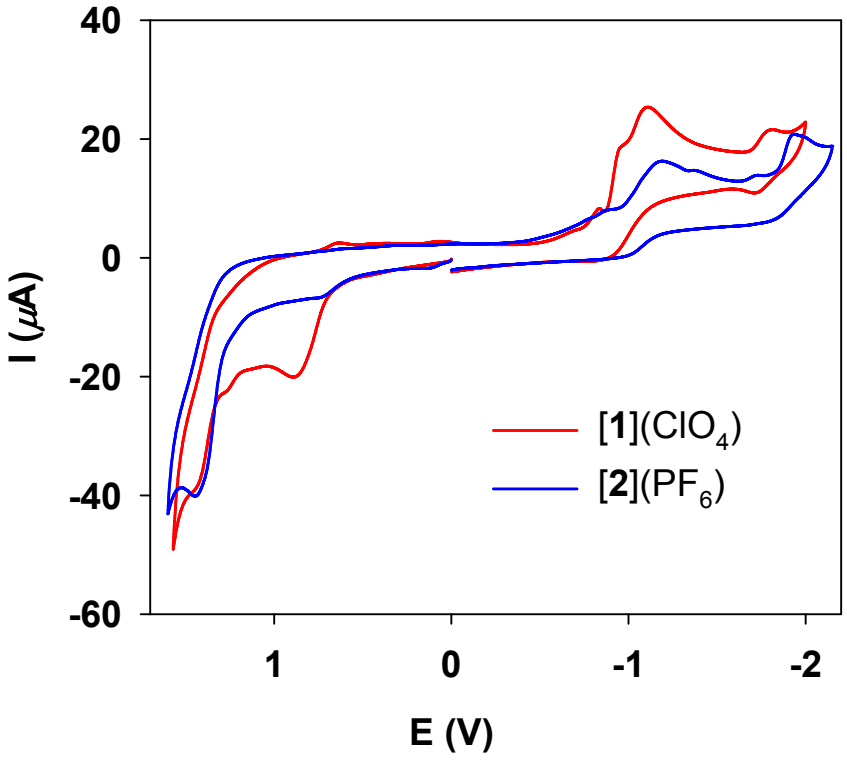


Fig. S3 Emission spectra of the ethidium bromide (EB) bound CT DNA in aqueous buffer

solution in the absence and presence of increasing amount of complexes. λ_{ex} 520 nm, [EB] = 0.33 µM, [DNA] = 10 µM, [complexes] (µM) 0 – 120 for [**1**](ClO_4), 0 – 100 for [**2**](PF_6), 0 – 80 for [**3**](ClO_4)$_2$, and 0- 60 for [**4**](PF_6)$_2$. T = 298 K. Inset : Stern-Volmer plot.

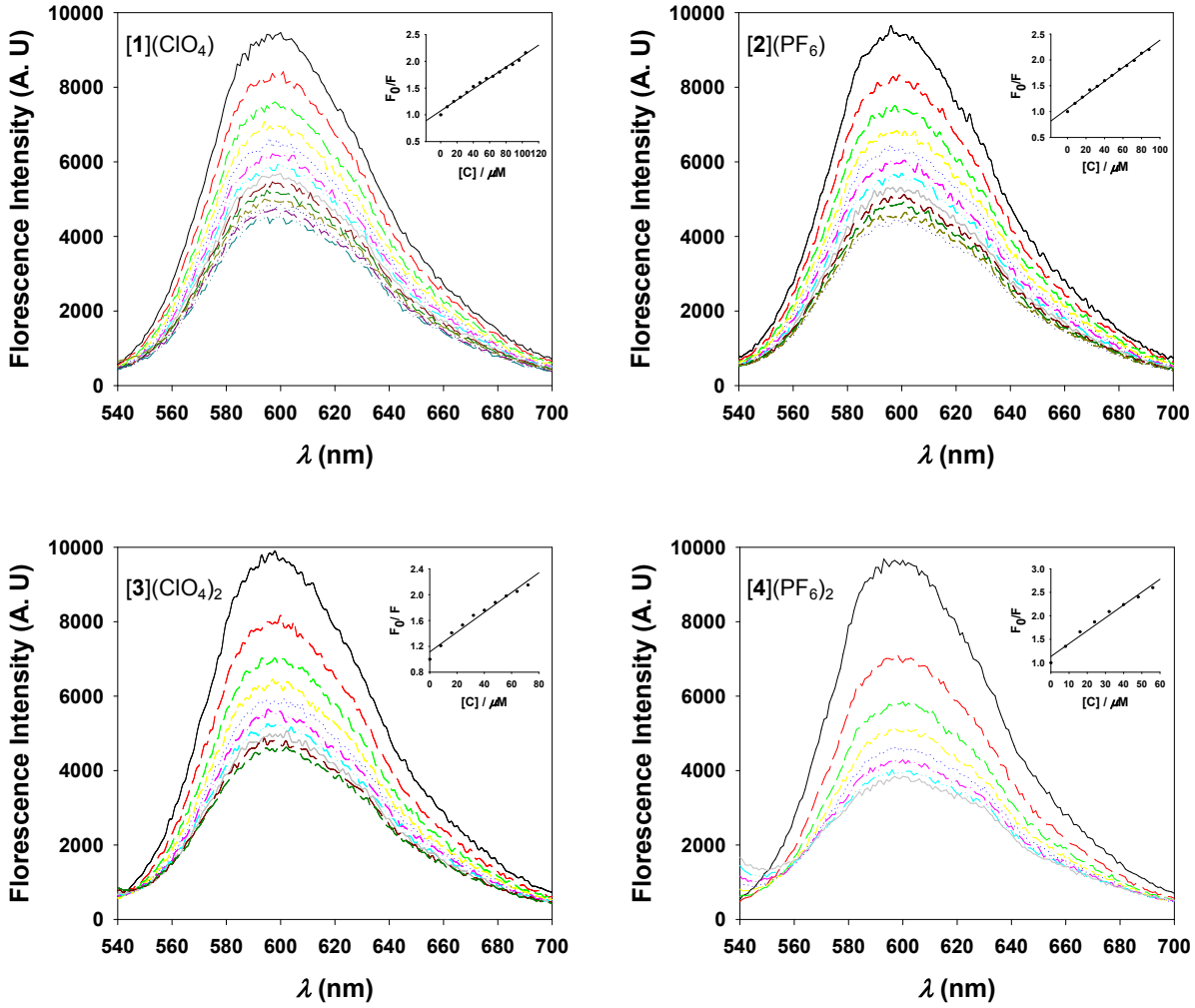


Fig. S4 (a) Effect of increasing amount of complexes on the relative viscosities of CT DNA at 300 K in tris-HCl buffer solution (pH 7.4) Conditions: CT DNA 200 µM, [complexes]

(μM) 0 – 60 for [**1**](ClO_4), 0 – 80 for [**2**](PF_6), 0 – 70 for [**3**]($ClO_4)_2$, and 0- 60 for [**4**]($PF_6)_2$.

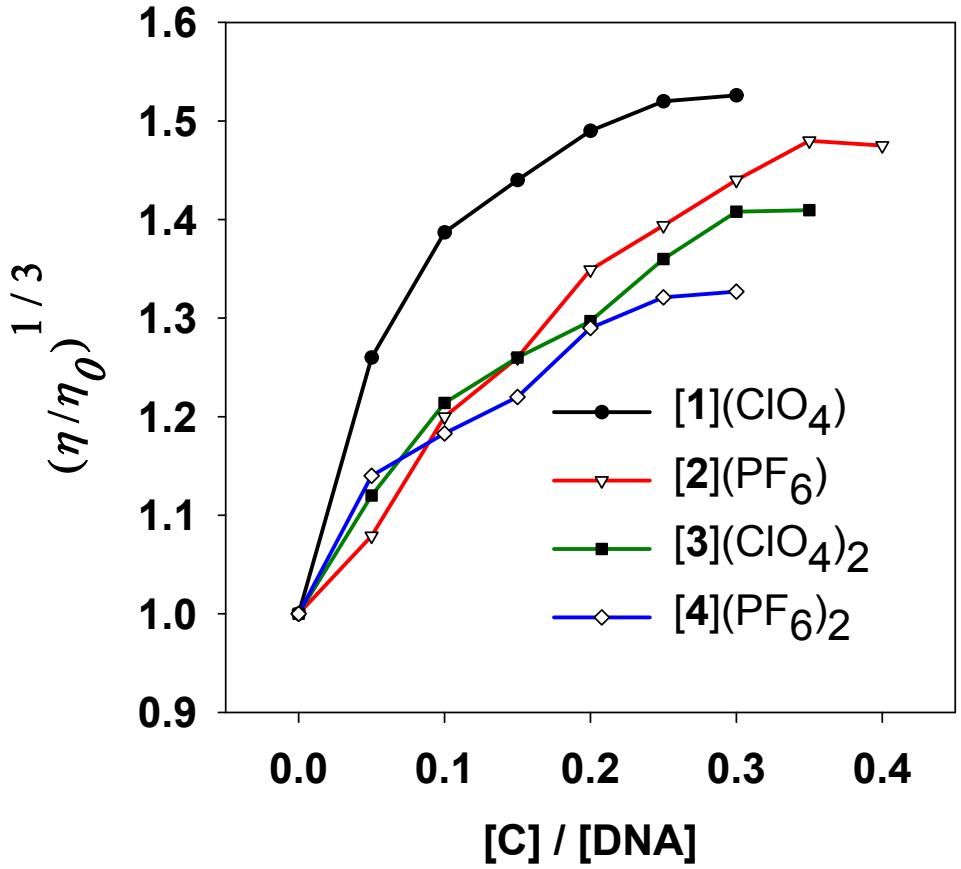
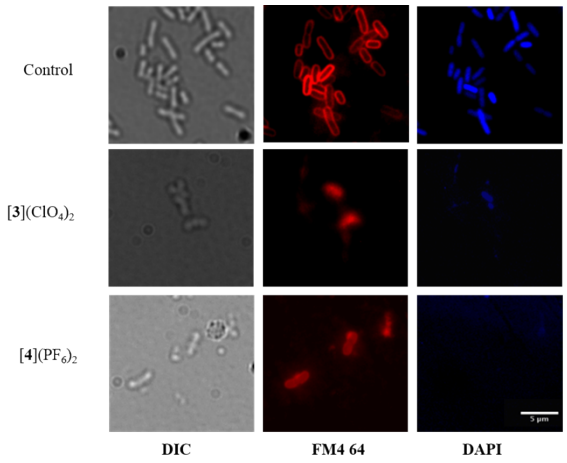
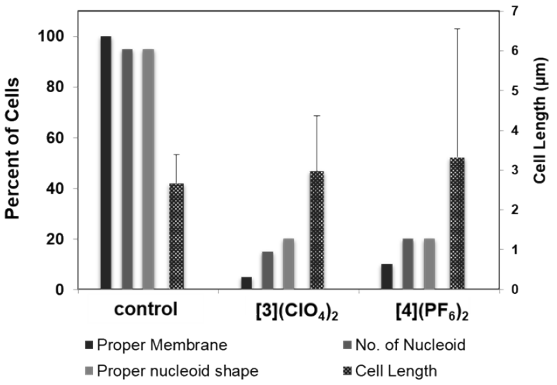


Fig. S5 (a) DIC and light microscopic images (stained with FM-4-64 and DAPI dye) and (b) changes in cellular morphology of control and [**3**]($ClO_4)_2$ and [**4**]($PF_6)_2$ treated *B. subtilis*

strains.


Control
[3](ClO4)2
[4](PF6)2
DIC
FM4 64
DAPI


Percent of Cells
Cell Length (µm)
control
[3](ClO4)2
[4](PF6)2
Proper Membrane
No. of Nucleoid
Proper nucleoid shape
Cell Length