

# Supplementary materials: Synthesis, structural characterization, antimicrobial activity and in vitro biocompatibility of new unsaturated carboxylate complexes with 2,2'-bipyridine

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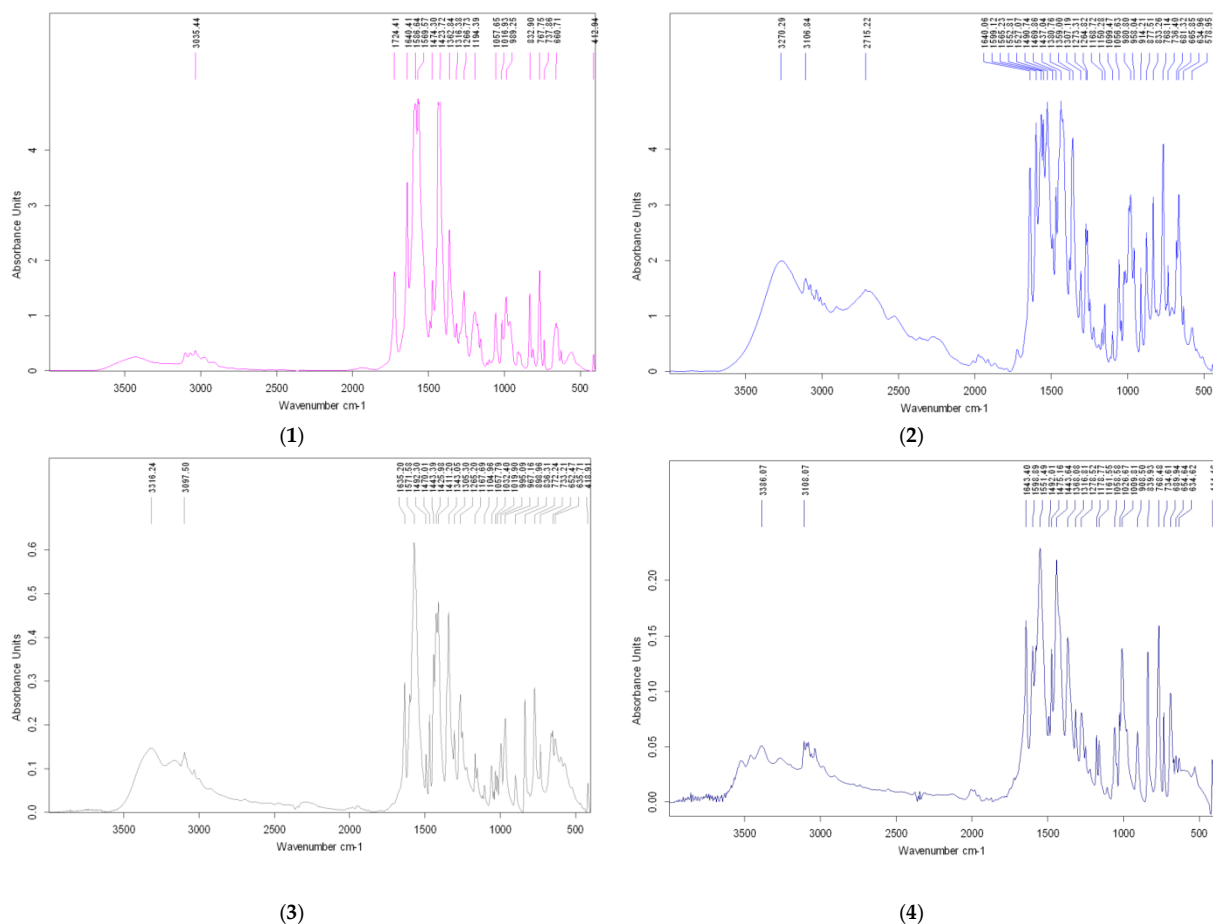
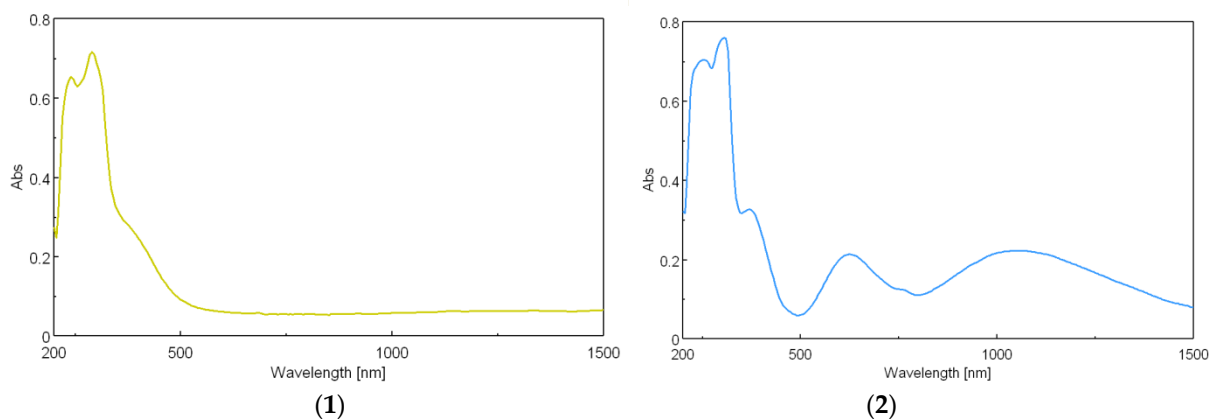
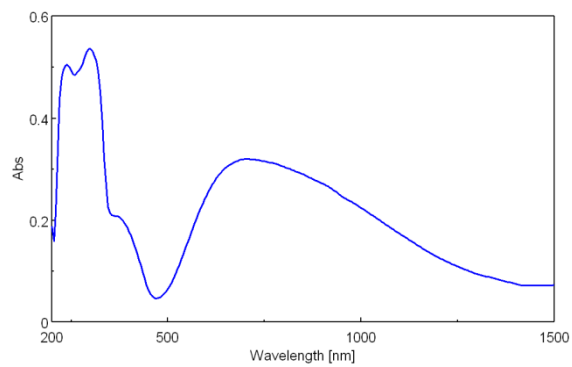


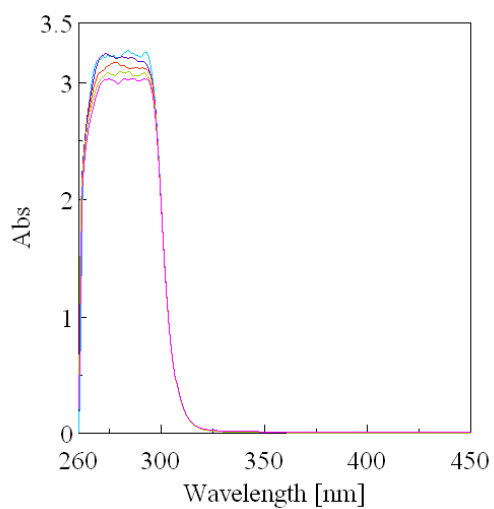
Figure S1. IR spectra of complexes (1)-(4).



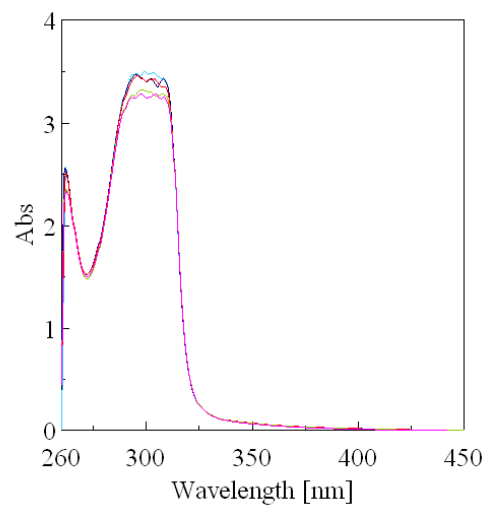


(3)

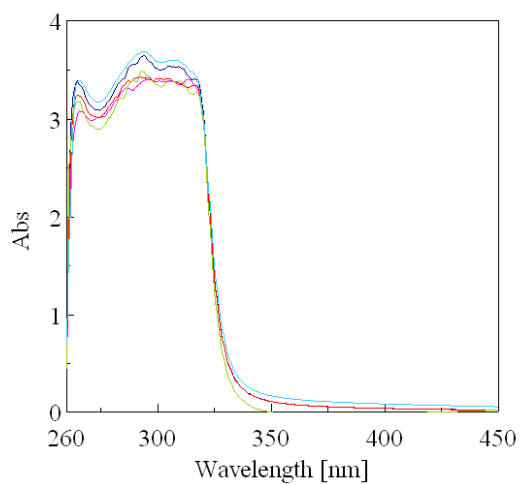
Figure S2. UV-Vis-NIR spectra of complexes (1)-(3).



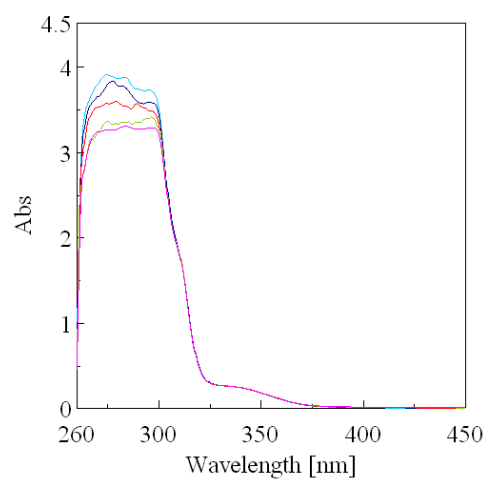
(1)



(2)

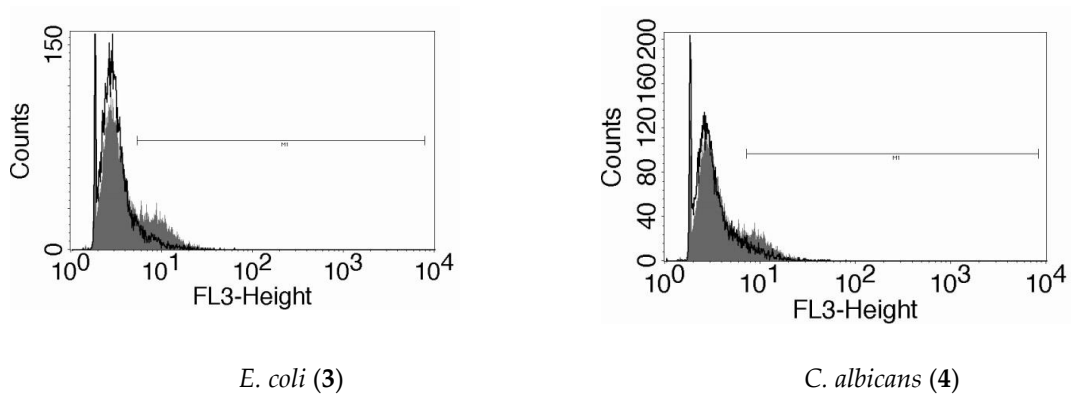


(3)

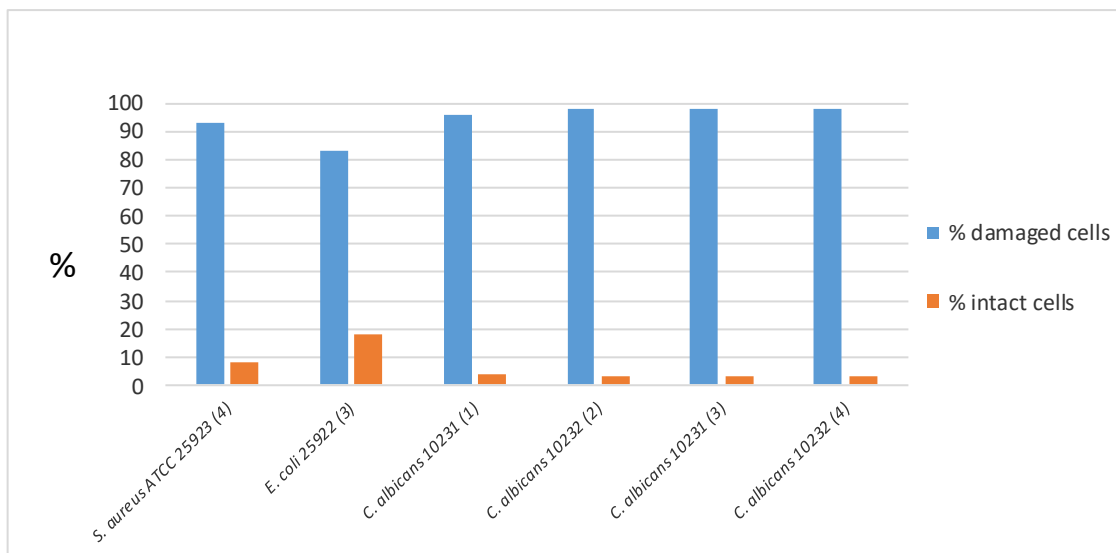


(4)

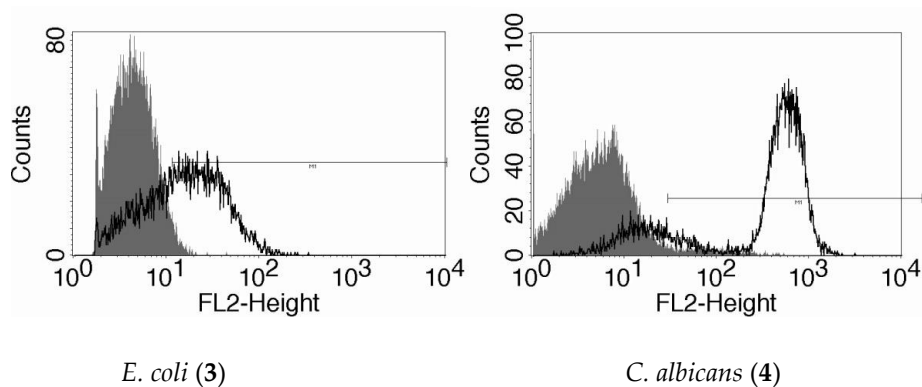
Figure S3. UV-Vis spectra in DMSO solution of complexes (1)-(4): (blue – 0 min, purple – 6 h, red – 12 h, green – 24 h, magenta -48h).



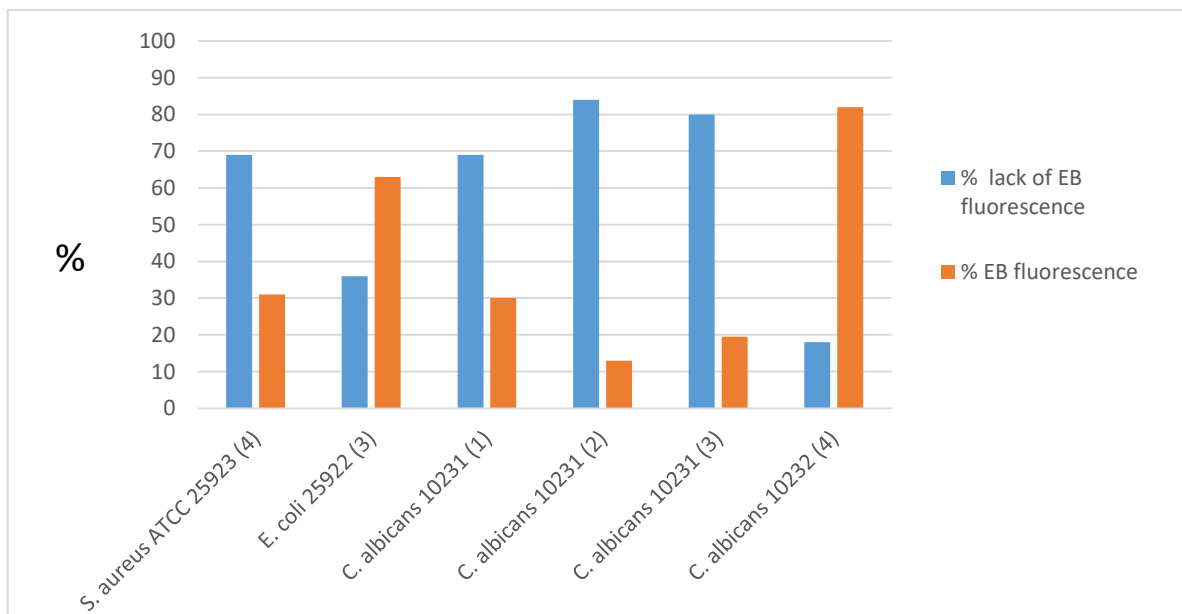
**Figure S4.** Typical fluorescence histograms indicating the negative PI fluorescence signal (left shifted) correlated with the viability of the microbial cells in the presence of the tested compounds.



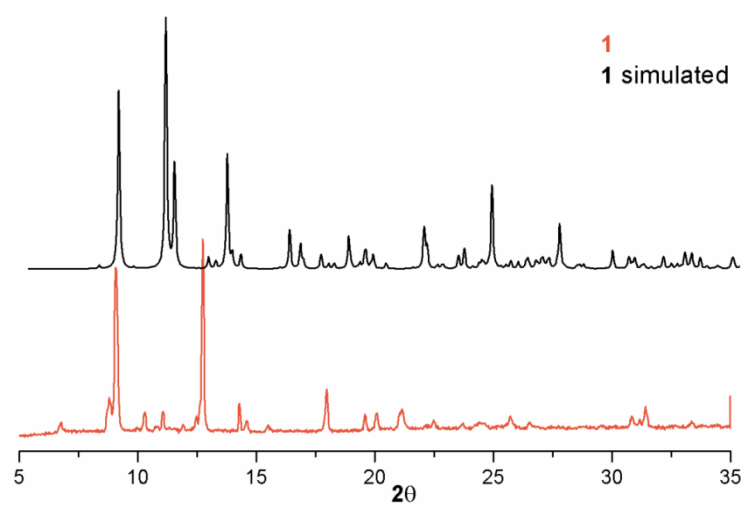
**Figure S5.** The effect of complexes (1)-(4) on cellular membrane permeability assessed by flow cytometry.



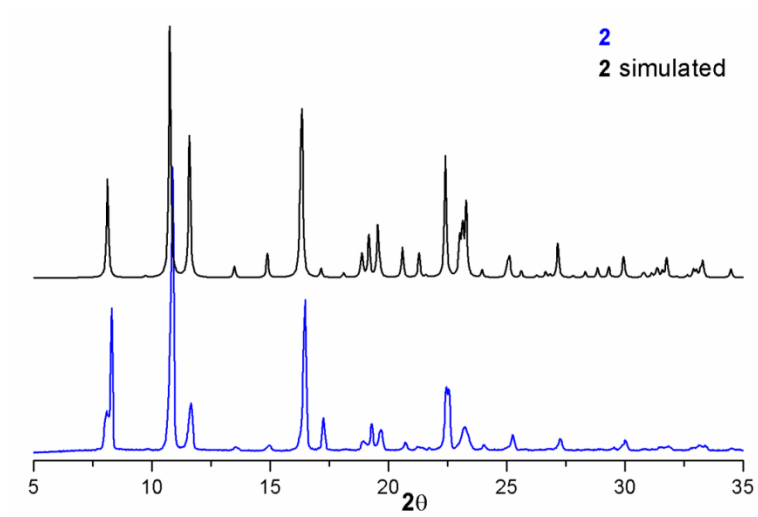
**Figure S6.** Typical fluorescence histograms indicating the positive EB fluorescence signal (right shifted) correlated with the efflux pumps inhibitory effect of the tested compounds.



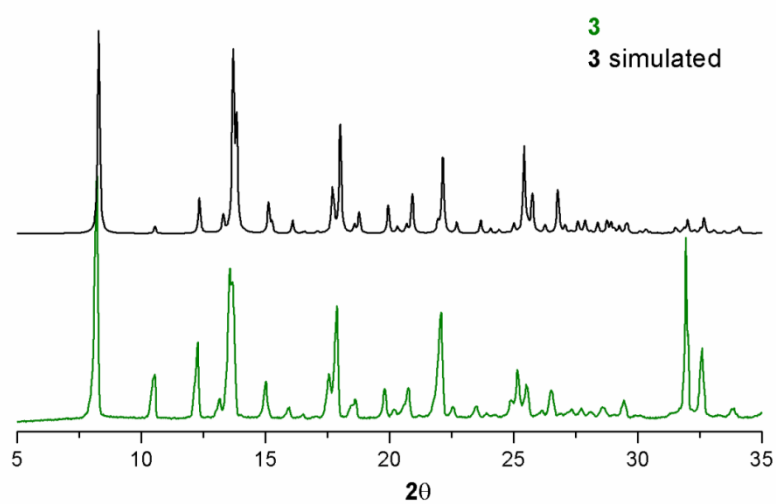
**Figure S7.** The effect of complexes (1)-(4) on the activity of efflux pumps assessed by flow cytometry.



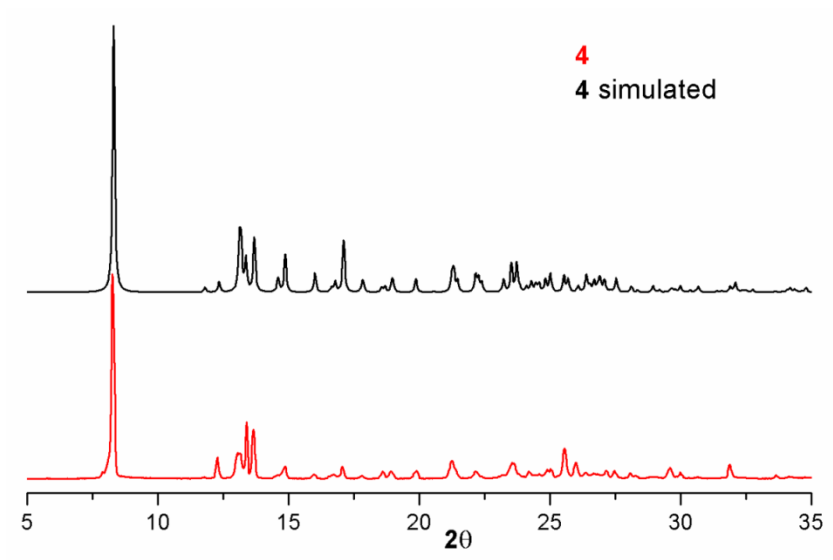
**Figure S8.** XRPD patterns for compound 1 (in orange) shown in comparison with the XRPD pattern of 1 simulated from SC-XRD data (in black)



**Figure S9.** XRPD patterns for compound **2** (in blue) shown in comparison with the XRPD pattern of **2** simulated from SC-XRD data (in black)



**Figure S10.** XRPD patterns for compound **3** (in green) shown in comparison with the XRPD pattern of **3** simulated from SC-XRD data (in black)



**Figure S11.** XRPD patterns for compound **4** (in red) shown in comparison with the XRPD pattern of **4** simulated from SC-XRD data (in black)