



Supplementary information of the article

Oligonucleotide solid nucleolipid nanoparticles against antibiotic resistance of ESBL-producing bacteria

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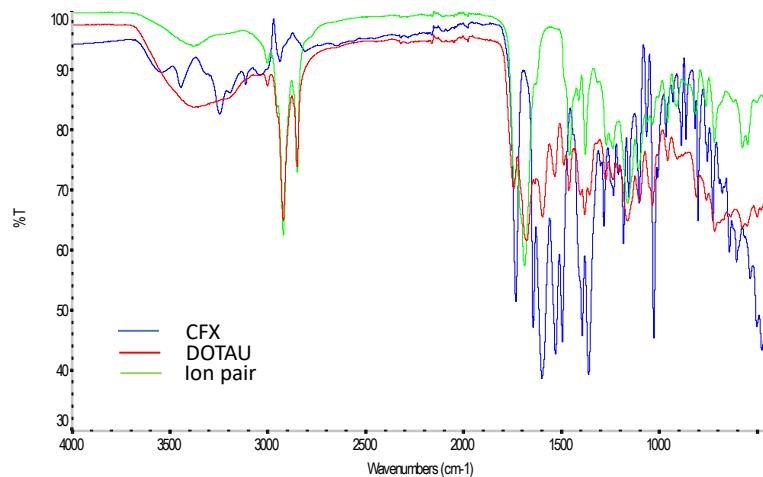


Figure S1. Infrared spectra of DOTAU, CFX and CFX–DOTAU ion pair.

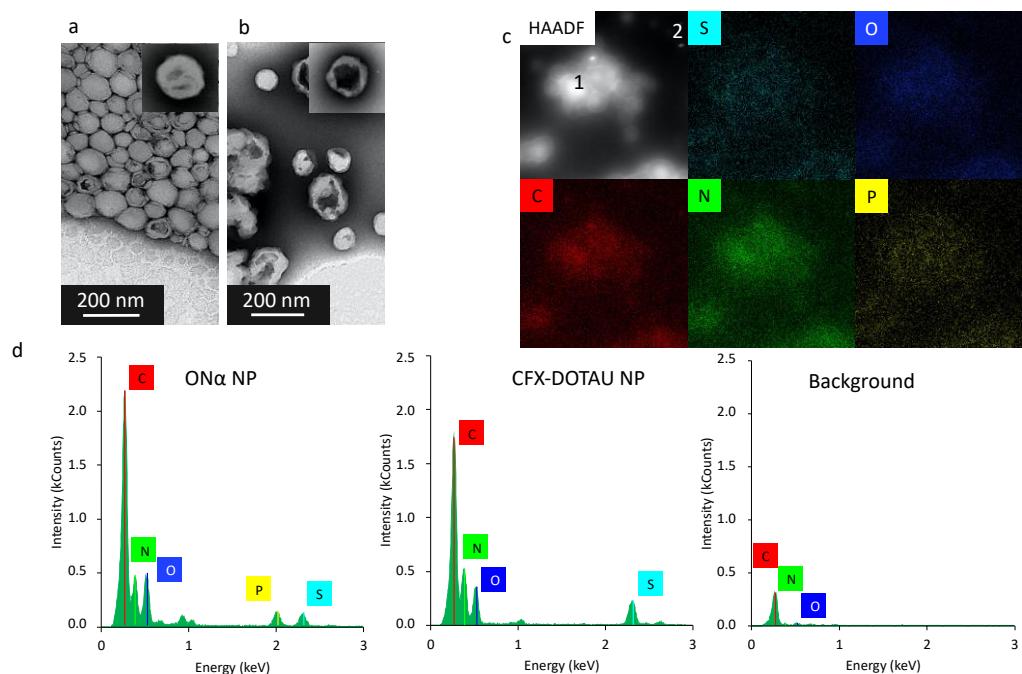


Figure S2. TEM images and zoom on a single particle of (a) ON α ₆₀₀ NP and (b) CFX–DOTAU NP; (c) STEM compositional mapping of ON α ₆₀₀ NP and (d) intensity counted by energy dispersive-X-ray spectroscopy for bands specific of C, N, O, P, S atoms for ON α ₆₀₀ NP (zone 1 on HAADF image), CFX–DOTAU NP and Background (zone 2 on HAADF image).

Table S1. NP size, PDI and zeta potential (mean \pm SD, n=6) upon sample dilution for CFX-DOTAU and ON α NP.

NP Formulation	Dilution	Size (nm)	PDI	Zeta (mV)
CFX-DOTAU NP	1/100	155.9 \pm 1.6	0.137 \pm 0.016	35.9 \pm 1.1
	1/200	157.1 \pm 2.1	0.146 \pm 0.016	39.2 \pm 2.6
	1/500	160.0 \pm 2.3	0.181 \pm 0.024	31.2 \pm 8.1
	1/1000	167.4 \pm 11.0	0.208 \pm 0.054	31.2 \pm 11.9
ON α NP	1/100	185.2 \pm 8.7	0.158 \pm 0.036	-55.2 \pm 0.9
	1/200	182.1 \pm 13.3	0.157 \pm 0.049	-53.4 \pm 4.8
	1/500	183.2 \pm 14.7	0.157 \pm 0.055	-48.9 \pm 5.7
	1/1000	180.0 \pm 7.2	0.164 \pm 0.029	-45.4 \pm 4.6