

Supplementary Materials

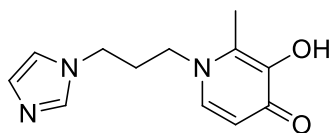
Table S1. Bacterial strains

Name	Relevant genotype	Source or Ref
<i>Salmonella enterica</i> ser. Typhimurium		
ATCC® 14028™	wild type	Lab collection
SA330	<i>fepA/entF::kan</i>	[25]
SA213	<i>iroB</i> -3Xflag (kan) <i>ilvI::Tn10dTac-cat::3Xflag</i>	[26]
MC120	<i>sodB</i> -3Xflag (kan)	[25]
<i>Pseudomonas aeruginosa</i>		
PAO1	wild type	Lab collection
<i>pchDpvdA</i>	<i>pchD pvdA</i>	[15]
<i>Escherichia coli</i>		
DH5α	Prom- <i>pchR</i> pMP220	Lab collection
DH5α	Prom- <i>pvdS</i> pMP220	Lab collection
DH5α	Prom- <i>feoA</i> pMP220	Lab collection
HB101	pRK2013	Lab collection

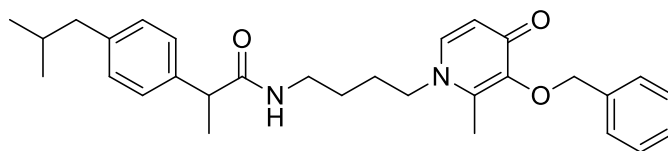
**Table S2. Structures of DFP - derivative compounds**

Name	Structure
1	
2a	
2b	
3a	
3b	
4a	
4b	
5a	

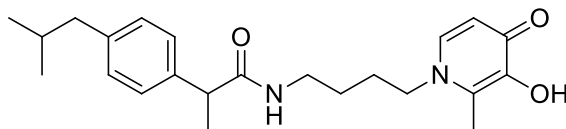
5b



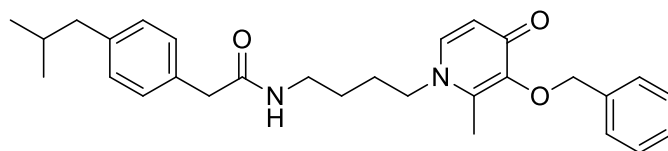
6a



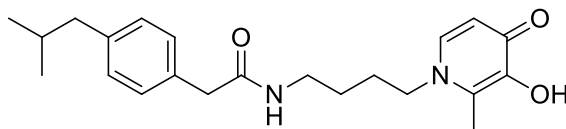
6b



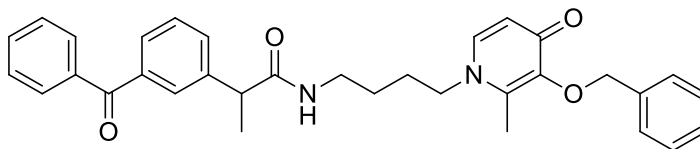
7a



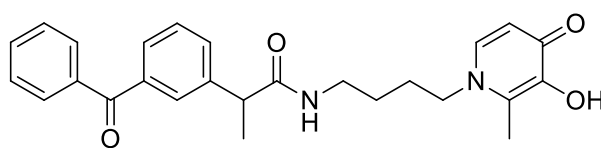
7b



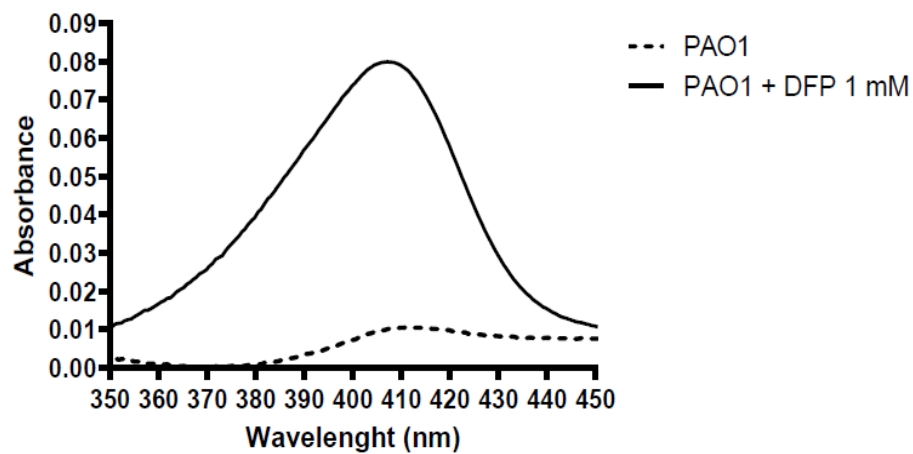
8a



8b



	$A_{407/600}$
PAO1	$0.0030 \pm 0.0003$
PAO1 + DFP 1 mM	$0.0385 \pm 0.0032$



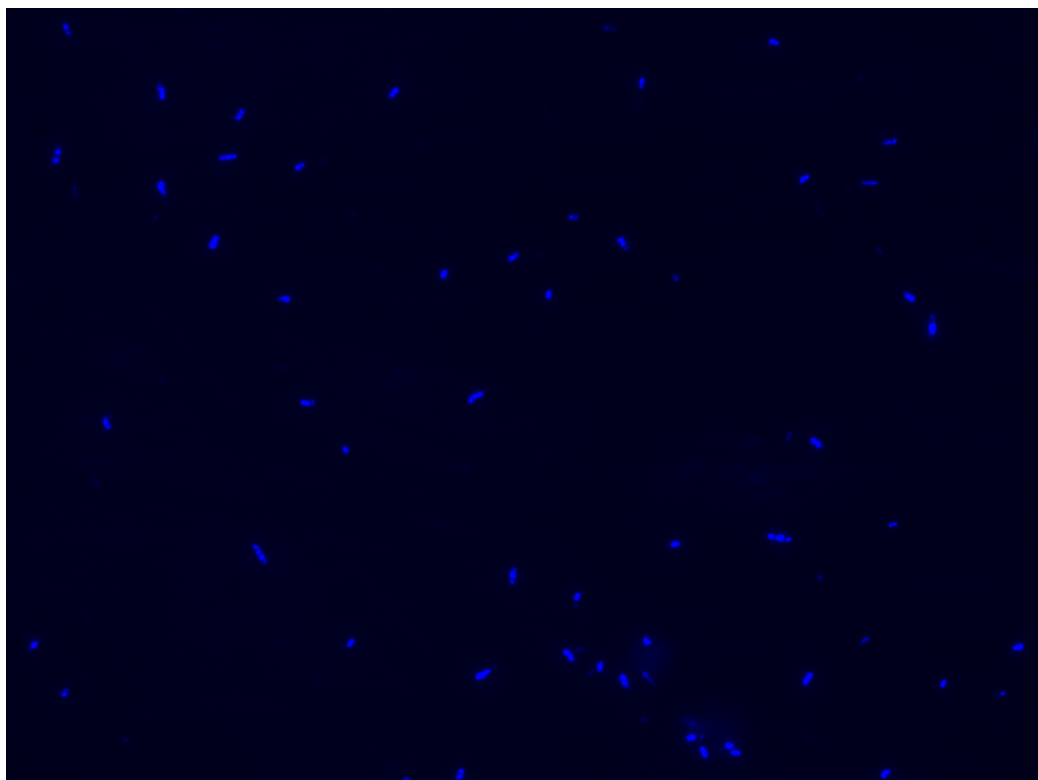
**Figure S1: DFP induces pyoverdine production in *P. aeruginosa* cultivated in LB.** PAO1 Was grown for 24 h at 37°C in LB in the absence of DFP or in presence of 1 mM DFP. Bacteria were harvested by centrifugation and the supernatant was analyzed to detect the presence of pyoverdine. Both the  $A_{407}/A_{600}$  ratio and the spectra of the supernatants indicate the accumulation of a species with and absorption peak centered close to 407 nm (pyoverdine) in bacteria grown in presence of DFP.



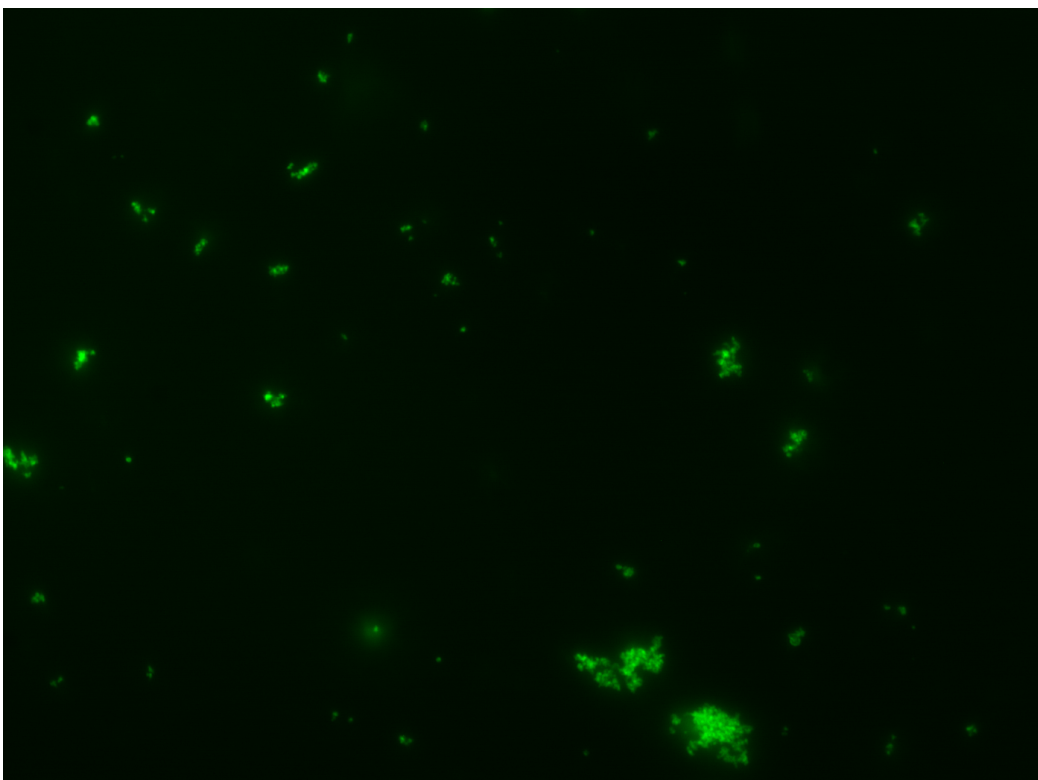
A

# STM

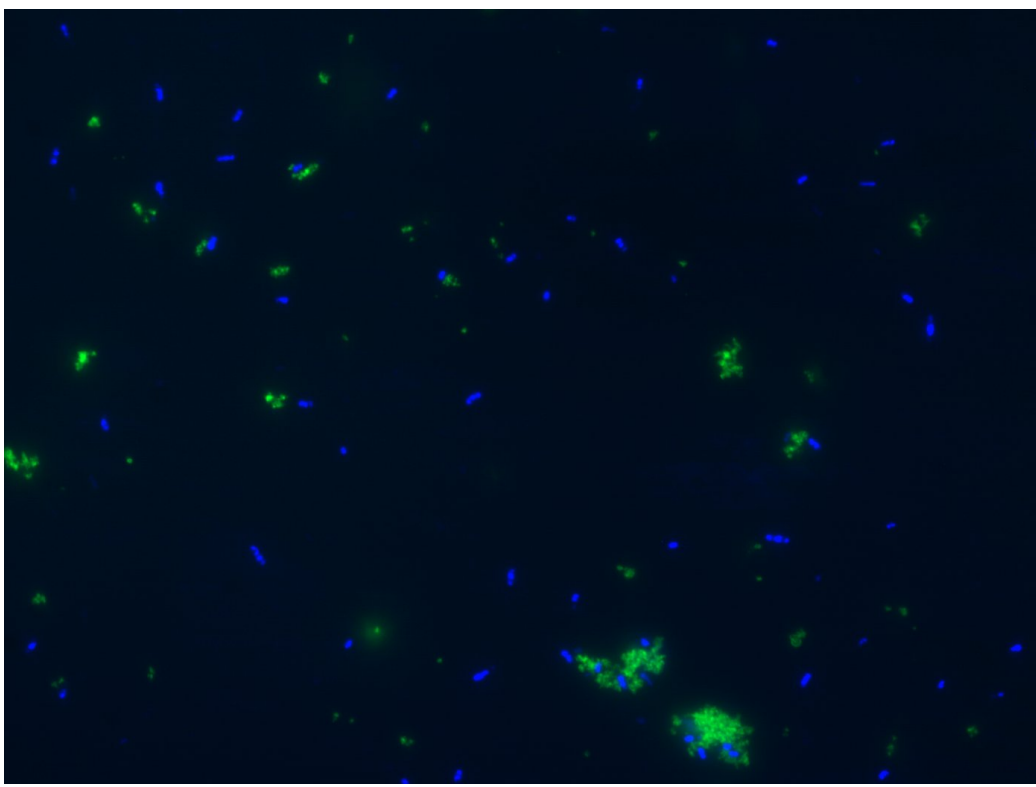
Hoechst



compound 1



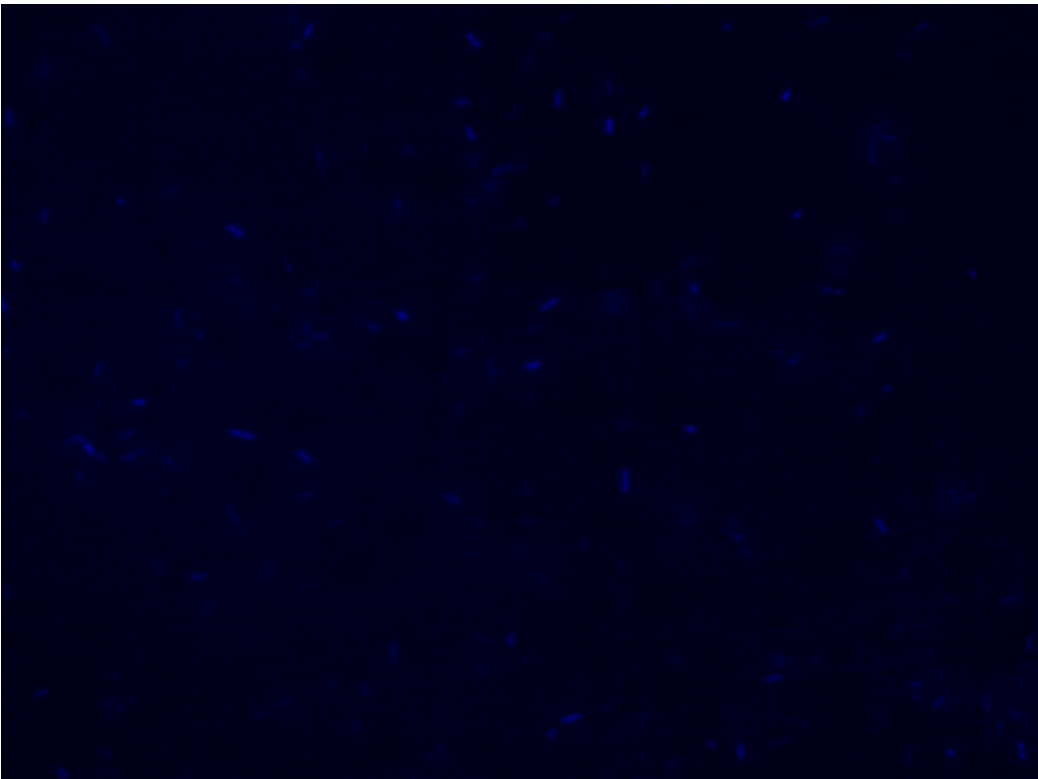
merge



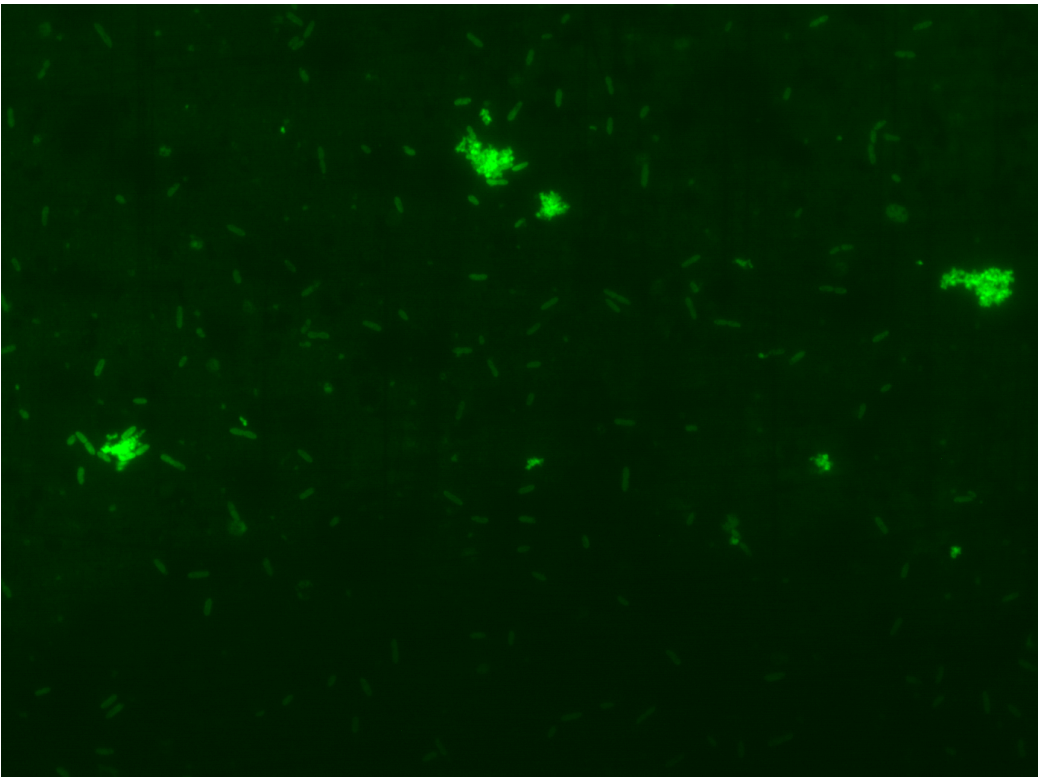
**B**

**PAO1**

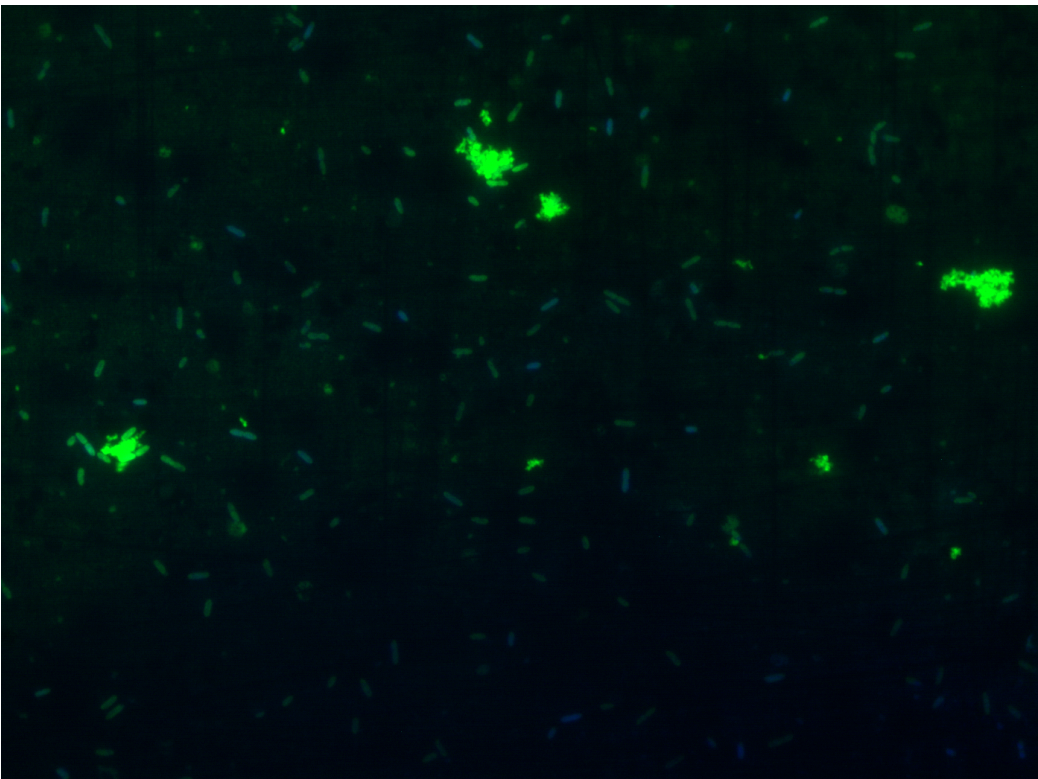
Hoechst



compound 1



merge

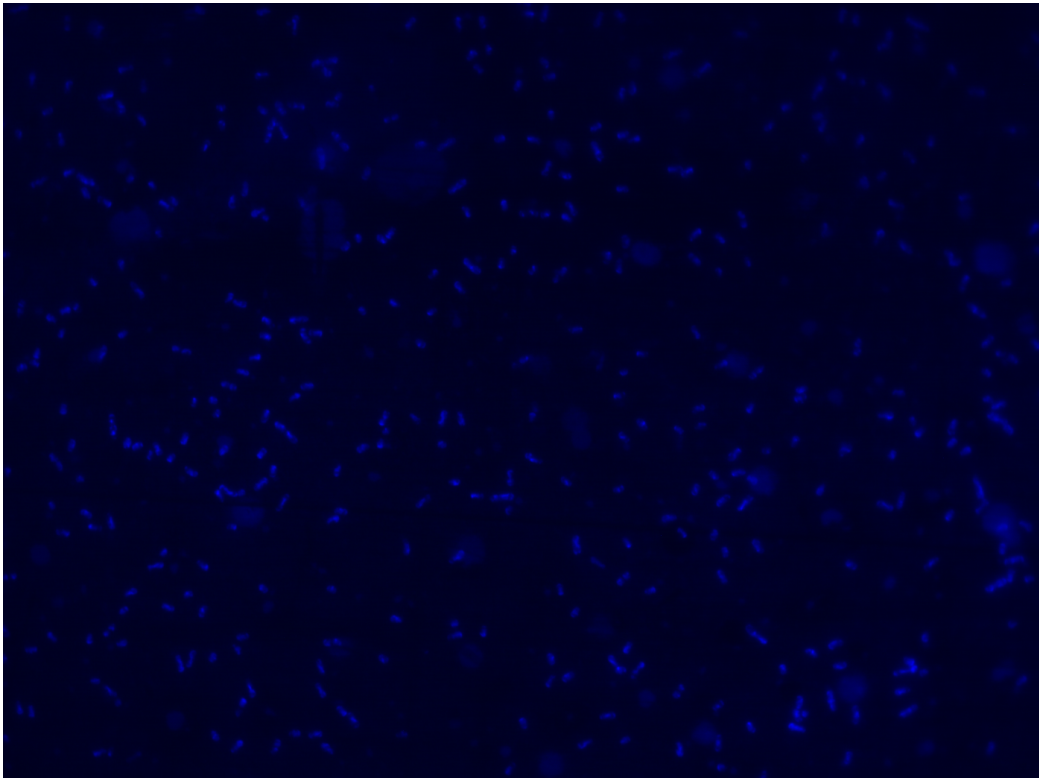




c

STM

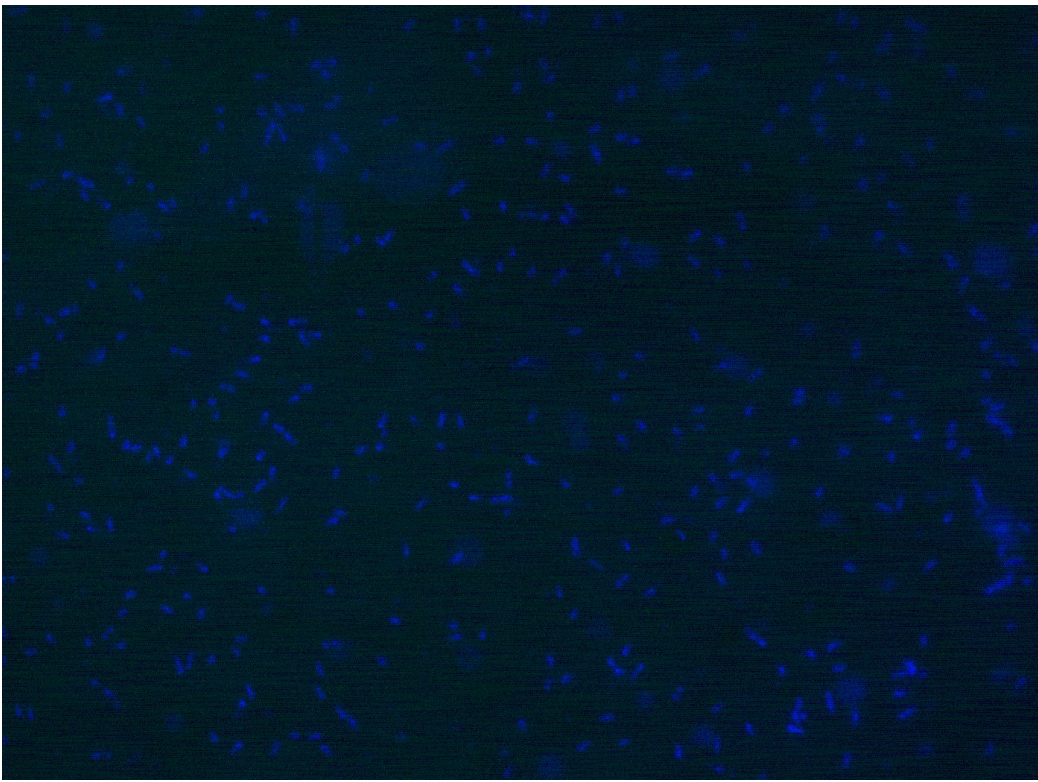
Hoechst



fluo probe



merge

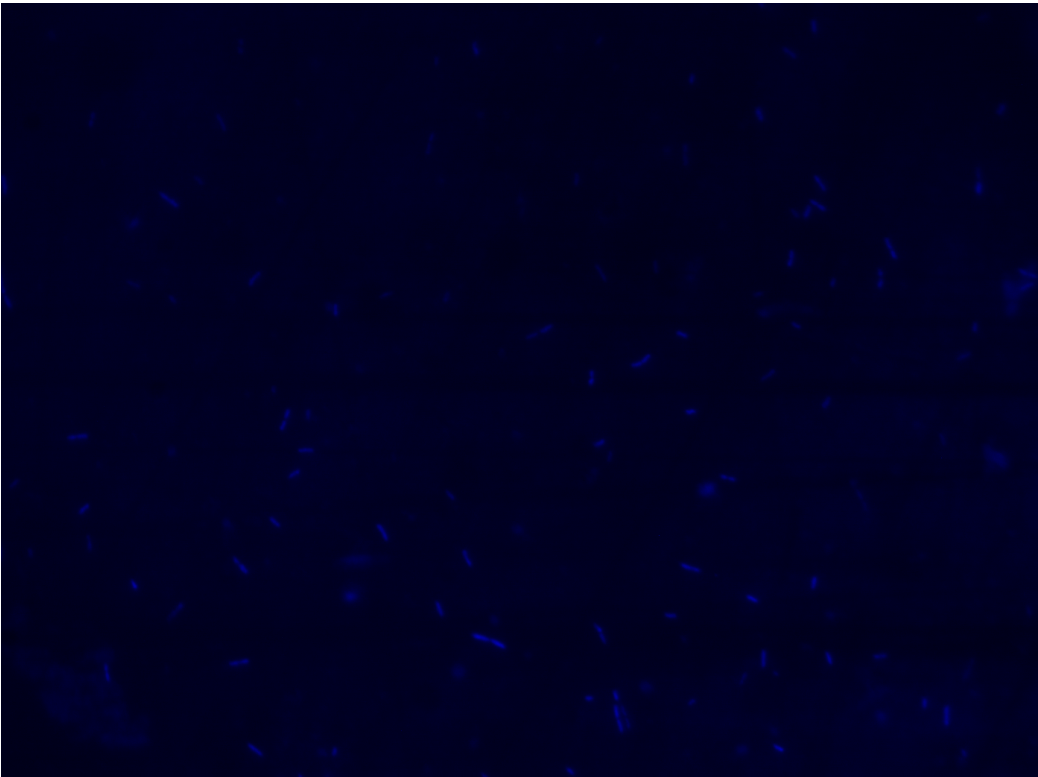




D

PAO1

Hoechst



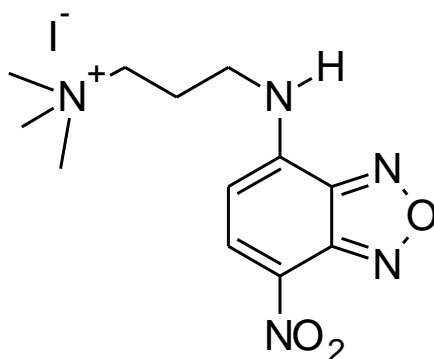
fluo probe



merge



**E**



**Supplementary Figure S2.** Full images of fluorescence microscopy of STM and PAO1 cells after treatment with compound **1** (**panels A and B**) or with the fluorescent probe not conjugated to DFP (**panels C and D**). As shown in the merge panels, the fluorescent signal from compound **1** does not overlap with any of the STM cells while it merges with PAO1 cells, showing a kind of peripheral distribution in some of them. No signal was detected after incubation of both STM and PAO1 with the fluorescent probe (fluo probe) that lacks the DFP moiety, indicating that the interaction of compound **1** with PAO1 cells is due to DFP. **Panel E:** molecular structure of the fluorescent probe.