
Supplementary Materials: Mono-Rhamnolipid Biosurfactants Synthesized by *Pseudomonas aeruginosa* Detrimentally Effect Colorectal Cancer Cells

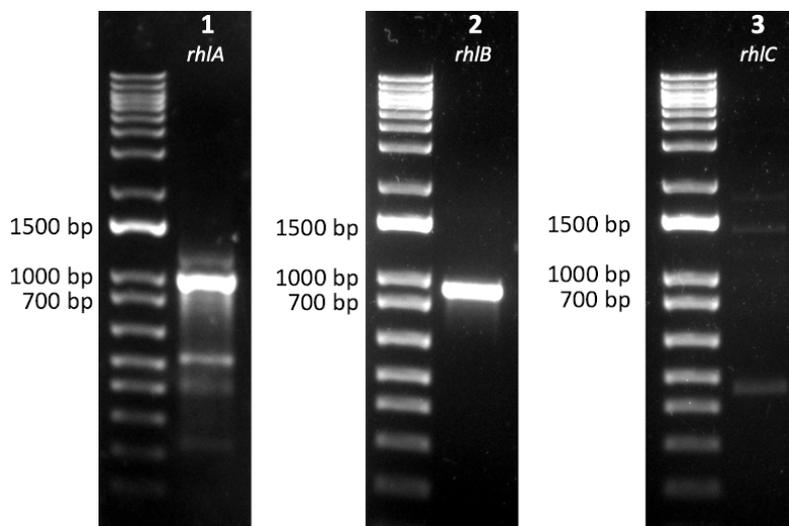


Figure S1. Amplified DNA fragments resulting from the PCR screening for RL biosynthesis genes *rhIA*, *rhIB* and *rhIC* in *P. aeruginosa* PAO1 $\Delta rhIC$. The lack of an amplification product at ≈ 800 bp for *rhIC* is confirmation of mutation of this gene within the strain.

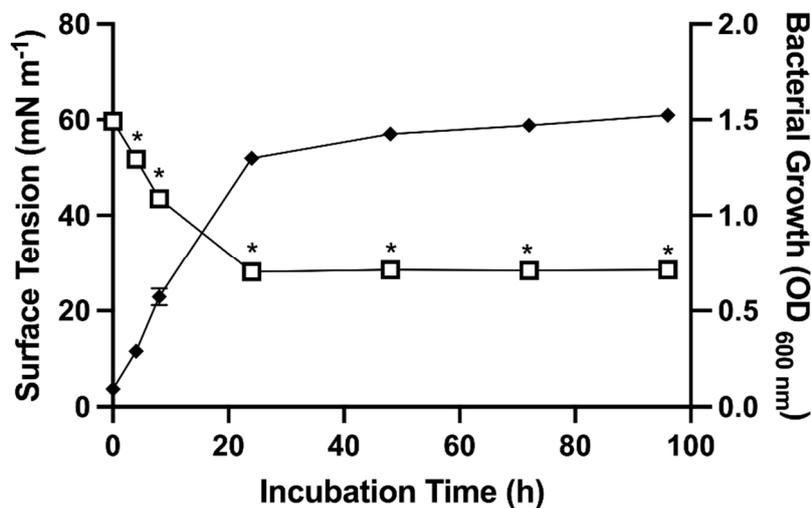


Figure S2. Growth and surface tension measurements of *P. aeruginosa* PAO1 $\Delta rhIC$ over 96 h. Bacterial growth of in NB supplemented with 1% (*v/v*) glycerol (◆). Surface tension measurement of cell-free supernatant samples obtained from cultures over time (□). Error bars represent standard deviation from the mean ($n = 3$). Analysis of surface tension measurements was by two-way ANOVA with post hoc. comparison to surface tension at $t = 0$ h ($* = p \leq 0.05$).

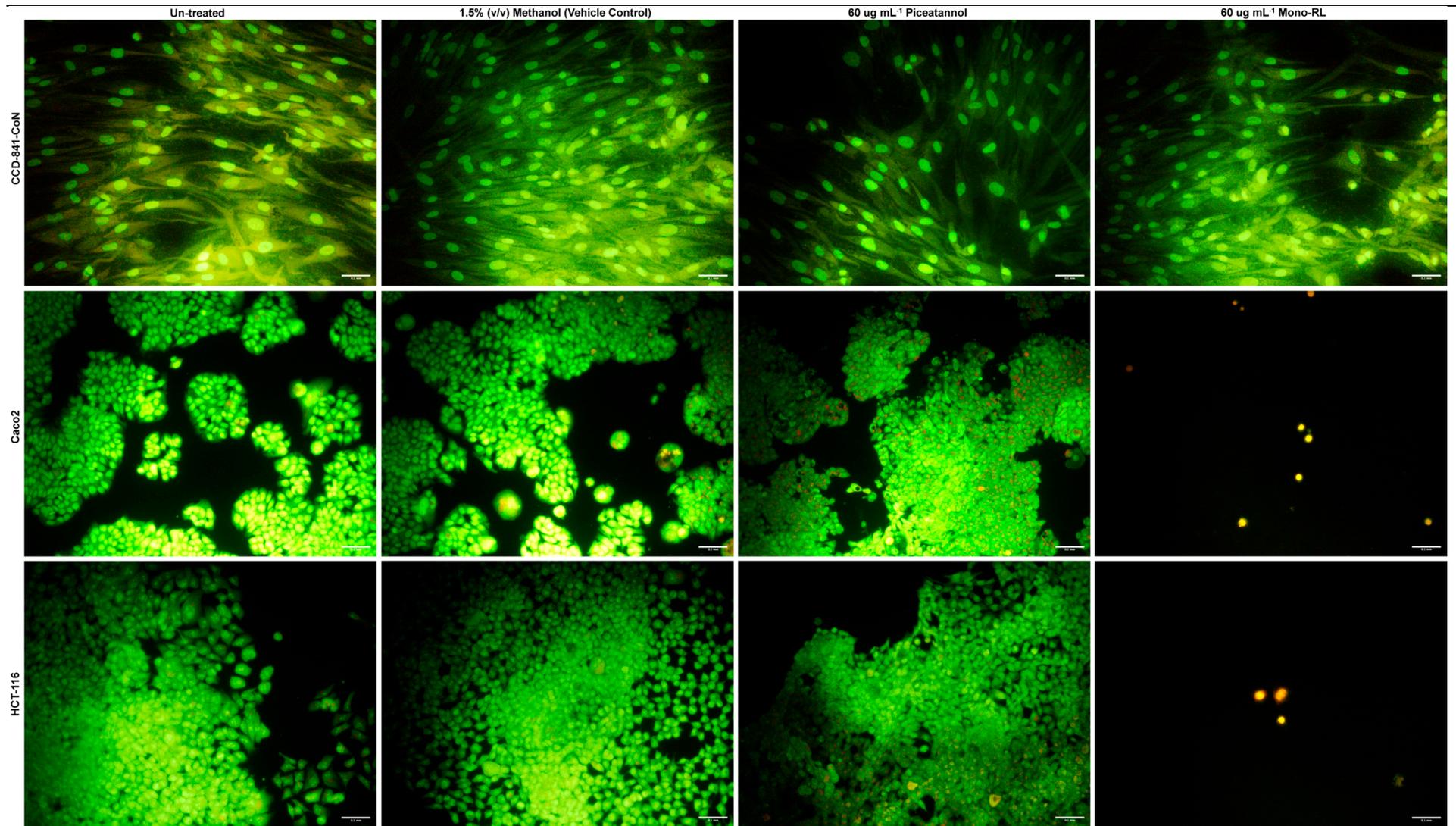


Figure S3. Images of AO/ PI-stained cell lines. CCD-841-CoN, Caco2 and HCT-116 either un-treated or following 24 h of treatment with 1.5% (*v/v*) methanol (vehicle control); 60 ug mL⁻¹ piceatannol; or 60 ug mL⁻¹ mono-RL. Cells were imaged at 200× magnification, scale bar = 100 μm.

Table S1. PCR primer pairs used in this study and their melting temperatures. Oligonucleotide primers were obtained in lyophilized form from *Eurofins Genomics*, Germany, reconstituted in nuclease free distilled H₂O at a concentration of 100 μM and utilized in each PCR at a working concentration of 0.5 μM.

Gene Amplified	Primer Pair	Sequence (5'-3')	Melting Temp. (°C)
16S rRNA	27-F	AGAGTTTGATCMTGGCTCAG	56.3
	1492-R	CGGTTACCTTGTTACGACTT	55.3
	907-R *	CCGTCAATTCMTTTRAGTTT	51.1
<i>rhlA</i>	<i>rhlA</i> -F	AGACGTACTCGTAGACCGGC	61.4
	<i>rhlA</i> -R	AAGGACGACGAGGTGGAAAT	57.3
<i>rhlB</i>	<i>rhlB</i> -F	CCCGTAGTTCTGCATCTGGT	59.3
	<i>rhlB</i> -R	AACTGCAACGCTTCTCGAT	55.3
<i>rhlC</i>	<i>rhlC</i> -F	GTCCACGTGGTCGATGAAC	58.8
	<i>rhlC</i> -R	CCTGGTCGACTCGTCATTCT	59.3

* Primer 907-R used as internal primer for 16S rRNA sequencing