

NMR spectra

N-isobutyl-1-octyl-5-phenyl-1H-imidazol-2-amine (**8a**). Obtained from the general procedure as an orange oil, yield 57%. ^1H NMR (300 MHz, Chloroform-d) δ 7.52 – 7.20 (m, 5H), 6.71 (s, 1H), 3.71 (t, J = 7.5 Hz, 3H), 3.23 (t, J = 6.4 Hz, 2H), 1.96 (dp, J = 13.4, 6.7 Hz, 1H), 1.80 – 1.45 (m, 2H), 1.18 (s, 10H), 1.00 (d, J = 6.6 Hz, 6H), 0.86 (t, J = 6.8 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 150.75, 131.13, 129.25, 128.67, 128.60, 128.23, 128.16, 127.05, 123.00, 51.56, 42.64, 31.67, 29.42, 29.02, 28.98, 28.94, 28.42, 26.51, 22.58, 20.32, 14.06.

5-(4-chlorophenyl)-N-isobutyl-1-octyl-1H-imidazol-2-amine (**8b**). Obtained from the general procedure as an orange oil, yield 46%. ^1H NMR (300 MHz, Chloroform-d) δ 7.37 (d, J = 8.1 Hz, 2H), 7.17 (d, J = 8.2 Hz, 2H), 6.69 (s, 1H), 3.79 (t, J = 7.5 Hz, 2H), 3.16 (d, J = 6.9 Hz, 2H), 1.98 – 1.81 (m, 1H), 1.48 (t, J = 7.5 Hz, 2H), 1.32 – 1.03 (m, 10H), 0.95 (d, J = 6.6 Hz, 6H), 0.85 (t, J = 6.9 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 148.89, 134.47, 129.77, 129.11, 127.79, 127.32, 115.99, 51.07, 43.09, 31.61, 28.93, 28.84, 28.80, 28.50, 28.27, 26.15, 22.54, 22.52, 19.99, 14.02.

5-(4-bromophenyl)-N-isobutyl-1-octyl-1H-imidazol-2-amine (**8c**). Obtained from the general procedure as a yellow oil, yield 52%. ^1H NMR (300 MHz, Chloroform-d) δ 7.62 – 7.45 (m, 2H), 7.25 – 7.10 (m, 2H), 6.72 (s, 1H), 3.79 – 3.57 (m, 3H), 3.23 (t, J = 6.3 Hz, 2H), 1.95 (dt, J = 13.4, 6.7 Hz, 1H), 1.57 (t, J = 7.5 Hz, 2H), 1.32 – 1.11 (m, 10H), 1.00 (d, J = 6.6 Hz, 6H), 0.87 (t, J = 6.8 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 151.09, 131.78, 130.10, 129.54, 128.01, 123.68, 120.94, 51.50, 42.68, 31.68, 29.44, 29.03, 28.95, 28.41, 26.50, 22.60, 20.30, 14.07.

5-(3,4-dichlorophenyl)-N-isobutyl-1-octyl-1H-imidazol-2-amine (**8d**). Obtained from the general procedure as an orange oil, yield 41%. ^1H NMR (300 MHz, Chloroform-d) δ 7.43 – 7.28 (m, 2H), 7.06 (dt, J = 8.3, 1.9 Hz, 1H), 6.56 (d, J = 29.1 Hz, 1H), 4.12 – 3.53 (m, 3H),

3.54 – 2.88 (m, 1H), 1.78 – 1.47 (m, 2H), 1.29 – 0.96 (m, 12H), 0.96 – 0.86 (m, 4H), 0.86 – 0.64 (m, 4H). ^{13}C NMR (75 MHz, CDCl_3) δ 151.41, 131.54, 130.64, 129.64, 129.11, 125.61, 124.79, 122.55, 41.74, 39.10, 30.63, 28.52, 28.12, 26.49, 25.61, 25.50, 22.86, 22.66, 21.56, 19.94, 16.61, 13.02.

N-cyclopentyl-1-octyl-5-phenyl-1H-imidazol-2-amine (**8e**). Obtained from the general procedure as an orange oil, yield 67%. ^1H NMR (300 MHz, Chloroform-d) δ 7.32 (tt, J = 12.4, 7.3 Hz, 5H), 6.73 (s, 1H), 4.20 (q, J = 6.3 Hz, 1H), 3.69 (t, J = 7.6 Hz, 2H), 3.53 (d, J = 6.1 Hz, 1H), 2.10 (tt, J = 12.2, 5.0 Hz, 2H), 1.91 – 1.61 (m, 3H), 1.53 (dq, J = 12.1, 6.3, 5.7 Hz, 4H), 1.39 – 1.05 (m, 10H), 0.86 (t, J = 6.8 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 150.40, 131.21, 129.06, 128.52, 128.08, 128.06, 126.90, 126.88, 123.28, 55.21, 42.51, 35.46, 33.71, 33.69, 31.63, 29.32, 28.96, 28.86, 26.37, 26.35, 23.73, 23.32, 22.55.

5-(4-chlorophenyl)-N-cyclopentyl-1-octyl-1H-imidazol-2-amine (**8f**). Obtained from the general procedure as an orange oil, yield 41%. ^1H NMR (300 MHz, Chloroform-d) δ 7.49 – 7.30 (m, 2H), 7.26 (d, J = 3.9 Hz, 2H), 6.73 (s, 1H), 4.19 (q, J = 6.2 Hz, 1H), 3.66 (t, J = 7.6 Hz, 2H), 3.44 (d, J = 6.2 Hz, 1H), 2.26 – 2.00 (m, 2H), 1.79 – 1.61 (m, 2H), 1.52 (ddd, J = 12.6, 7.9, 5.4 Hz, 4H), 1.34 – 1.07 (m, 12H), 0.87 (t, J = 6.8 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 129.46, 128.93, 127.98, 55.40, 42.80, 33.72, 31.68, 29.25, 29.02, 28.90, 26.40, 23.76, 22.60, 14.07.

5-(4-bromoophenyl)-N-cyclopentyl-1-octyl-1H-imidazol-2-amine (**8g**). Obtained from the general procedure as an orange oil, yield 52%. ^1H NMR (300 MHz, Chloroform-d) δ 7.52 (dd, J = 8.5, 2.0 Hz, 2H), 7.20 (dd, J = 8.4, 2.0 Hz, 2H), 6.75 (d, J = 2.1 Hz, 1H), 4.20 (q, J = 6.3 Hz, 1H), 3.67 (t, J = 7.5 Hz, 2H), 3.44 (d, J = 6.2 Hz, 1H), 2.27 – 1.98 (m, 2H), 1.94 – 1.62 (m, 4H), 1.53 (dq, J = 11.6, 5.7 Hz, 4H), 1.19 (s, 10H), 0.88 (t, J = 6.5 Hz, 3H). ^{13}C NMR (75 MHz, CDCl_3) δ 131.79, 130.13, 129.56, 127.96, 123.82, 120.96, 55.29, 42.66, 33.81, 31.69, 29.42, 29.03, 28.92, 26.46, 23.75, 22.61, 14.08.

5-(3,4-dichlorophenyl)-N-cyclopentyl-1-octyl-1H-imidazol-2-amine (**8h**). Obtained from the general procedure as a yellow oil, yield 49%. ¹H NMR (300 MHz, Chloroform-d) δ 7.49 – 7.36 (m, 2H), 7.14 (dd, *J* = 8.3, 2.1 Hz, 1H), 6.76 (s, 1H), 4.19 (q, *J* = 6.3 Hz, 1H), 3.80 – 3.57 (m, 2H), 3.50 (d, *J* = 6.2 Hz, 1H), 2.22 – 1.98 (m, 2H), 1.80 – 1.61 (m, 4H), 1.60 – 1.43 (m, 4H), 1.19 (d, *J* = 3.1 Hz, 10H), 0.87 (t, *J* = 6.8 Hz, 3H). ¹³C NMR (75 MHz, CDCl₃) δ 151.06, 132.70, 131.31, 130.75, 130.58, 129.29, 126.93, 126.78, 124.82, 55.27, 42.74, 33.79, 31.68, 29.42, 29.04, 28.91, 26.43, 23.74, 22.60, 14.07.

TABLE S1 Effect of literature compounds on a panel of monospecies biofilms

<i>S. aureus</i> ATCC6538								<i>S. aureus</i> SH1000								<i>S. epidermidis</i>								<i>E. coli</i> TG1								<i>P. aeruginosa</i> PA14							
compd	37 °C				25 °C																																		
	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀															
baicalein	> 400.0	> 400.0		77.5	64.1 - 93.6	> 400.0			> 400.0	> 400.0			1.2	1.0 - 1.4	~ 23.5		> 400.0	> 400.0																					
nifuroxazide	65.5	51.5 - 83.3	125.4	112.3 - 140.0	> 400.0	> 400.0			46.9	29.7 - 74.2	~ 43.4 ^c		12.2	9.7 - 15.5	> 400.0		> 400.0	> 400.0																					
tannic acid	~ 300.0	> 400.0		115.3	97.1 - 137.0	> 400.0			> 400.0	> 400.0			~ 195.0		> 400.0		27.7	17.8 - 43.1	> 400.0																				
<i>S. Typhimurium</i> ATCC14028								<i>S. liquefaciens</i> MG44								<i>B. cepacia</i> LMG1222T								<i>C. albicans</i> SC5314															
compd	25 °C				25 °C				25 °C				37 °C				25 °C				25 °C				37 °C														
	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀															
baicalein	> 400.0	> 400.0			> 400.0	> 400.0			48.9	31.2 - 76.7	> 400.0		272.9	243.9 - 305.4																									
nifuroxazide	> 400.0	> 400.0			> 400.0	> 400.0			> 400.0	> 400.0			> 400.0	> 400.0																									
tannic acid	18.8	12.2 - 29.0	> 400.0		> 400.0	> 400.0			1.9	1.1 - 3.2	> 400.0		> 400.0	> 400.0																									

^a BIC₅₀: concentration of compound needed to inhibit biofilm formation by 50%. ^b IC₅₀: concentration of compound needed to inhibit planktonic growth by 50%. ^c ~: The B(IC)₅₀ values could not be accurately calculated due to the steepness of the curve. Compounds that have a biofilm-specific activity (2 x BIC₅₀ < IC₅₀) are marked in grey.

TABLE S2 Effect of 5-Ar-2AIs on a panel of monospecies bacterial and fungal biofilms

S. aureus ATCC6538								S. aureus SH1000								S. epidermidis								P. gingivalis ATCC33277								E. coli TG1							
compd	37 °C				37 °C				37 °C				37 °C				37 °C				37 °C				37 °C														
	BIC ₅₀ ^a (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ ^b (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀											
1	59.3	25.1 - 140.3	231.3	220.0 - 243.2	162.7	112.1 - 236.0 > 400.0				~ 201.7 ^d		~ 329.0		13.2	9.0 - 19.2	32.1	12.3 - 83.2	~ 47.8		34.1	29.4 - 39.6																		
2	2.8	1.9 - 4.0	7.8	3.8 - 16.0	3.4	2.1 - 5.4	8.3	6.2 - 11.1	~ 5.6		~ 11.1		3.9	3.2 - 4.6	6.0	2.3 - 15.3	~ 6.5		7.7	5.7 - 10.4																			
3	95.3	41.4 - 219.5	~ 96.1		~ 200.3		~ 175.4		> 400.0		86.2	63.1 - 117.8	5.3	2.5 - 11.3	5.1	3.1 - 8.4	110.2	73.8 - 164.6	30.0	24.3 - 37.0																			
4	~ 12.3		60.1	50.0 - 72.3	66.5	49.1 - 90.0	89.4	75.5 - 105.8	> 400.0		54.4	38.0 - 77.7	3.7	2.0 - 6.8	8.2	5.4 - 12.3	84.7	45.7 - 157.0	23.0	15.7 - 33.7																			
5	34.4	22.2 - 53.3	62.3	52.1 - 74.6	70.6	51.3 - 97.1	71.5	51.8 - 98.7	> 400.0		39.5	25.4 - 61.5	5.7	2.6 - 12.6	4.0	1.4 - 11.7	~ 45.7		17.1	14.3 - 20.5																			
6	75.2	41.4 - 136.6	> 400.0		> 400.0		> 400.0		> 400.0				18.1	7.7 - 42.5	19.5	7.7 - 49.2	~ 192.5		182.8	108.1 - 309.3																			

P. aeruginosa PA14								S. Typhimurium ATCC14028								S. liquefaciens MG44								B. cepacia LMG1222T								C. albicans SC5314							
compd	25 °C ^c				37 °C ^c				25 °C				25 °C				25 °C				37 °C																		
	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀											
1	2.1	1.2 - 3.7	♦		104.4	55.8 - 195.3	45.2	36.3 - 56.1	48.4	37.5 - 62.4	♦		167.9	115.1 - 244.8	177.0	127.3 - 246.2	~ 356.3		> 400.0		145.4	130.8 - 161.6																	
2	4.0	3.0 - 5.2	♦		118.4	57.8 - 242.5	10.0	8.0 - 12.6	~ 5.9		♦		18.8	14.2 - 24.9	38.0	26.8 - 54.0	145.4	9.5 - 400.0	> 400.0		6.2	5.1 - 7.4																	
3	0.9	0.5 - 1.8	♦		> 400.0		> 400.0		2.0	1.6 - 2.5	♦		10.4	8.7 - 12.6	154.0	116.4 - 203.8	88.1	21.5 - 360.9	> 400.0		93.9	80.1 - 110.2																	
4	9.8	6.8 - 14.1	♦		> 400.0		> 400.0		7.1	3.7 - 13.9	♦		4.4	3.7 - 5.3	118.4	88.0 - 159.3	189.0	56.6 - 400.0	> 400.0		66.7	56.0 - 79.4																	
5	13.5	9.0 - 20.5	♦		> 400.0		> 400.0		4.4	4.0 - 4.8	♦		8.8	6.7 - 11.7	125.4	92.8 - 169.3	331.0	84.4 - 400.0	> 400.0		64.0	57.2 - 71.8																	
6	71.6	21.8 - 234.8	> 400.0		> 400.0		> 400.0		2.0	1.4 - 2.9	2.4	0.9 - 6.3	63.3	16.2 - 246.9	> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 400.0												

^a BIC₅₀: concentration of compound needed to inhibit biofilm formation by 50%. ^b IC₅₀: concentration of compound needed to inhibit planktonic growth by 50%. ^c Biofilm formation was studied at 25 °C and 37 °C to simulate environmental and in vivo conditions, respectively. ^d ~: The B(IC)₅₀ values could not be accurately calculated due to the steepness of the curve. ♦ The effect on the planktonic growth has previously been determined by growth curve analysis (1-3). Compounds that have a biofilm-specific activity ($2 \times \text{BIC}_{50} < \text{IC}_{50}$) are marked in grey.

TABLE S3 Effect of 5-Ar-2AIs on a panel of mixed *E. coli/P. aeruginosa* and *S. aureus/S. epidermidis* biofilms

compd	<i>E. coli</i> TG1 + <i>P. aeruginosa</i> PA14				<i>S. aureus</i> ATCC6538 + <i>S. epidermidis</i>			
	37 °C				37 °C			
	BIC ₅₀ ^a (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ ^b (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀
1	74.3	33.0 – 167.7	60.7	42.4 – 87.1	44.2	18.4 – 119.0	~ 356.5 ^c	
2	36.8	16.2 – 85.0	19.9	14.6 – 26.9	~ 7.2		~ 9.9	
3	7.4	3.8 – 21.5	> 400.0		~ 26.3		~ 140.5	
4	17.8	12.7 – 58.2	> 400.0		6.8	1.7 – 36.3	~ 117.7	
5	0.5	0.2 – 1.5	> 400.0		~ 66.6		~ 91.7	
6	34.6	17.9 – 68.5	> 400.0		33.9	17.1 – 67.5	~ 391.6	

^a BIC₅₀: concentration of inhibitor needed to inhibit biofilm formation by 50%. ^b IC₅₀: concentration of inhibitor needed to inhibit planktonic growth by 50%. ^c ~: The B(IC)₅₀ values could not be accurately calculated due to the steepness of the curve. Compounds that have a biofilm-specific activity ($2 \times \text{BIC}_{50} < \text{IC}_{50}$) are marked in grey.

TABLE S4 Effect of novel 5-Ar-2AIs on a panel of monospecies biofilms of bacteria and fungi.

<i>S. aureus</i> ATCC6538				<i>P. aeruginosa</i> PA14						<i>E. coli</i> TG1						<i>C. albicans</i> SC5314							
compd	37 °C			25 °C			37 °C			25 °C			37 °C			37 °C							
	BIC ₅₀ ^a (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ ^b (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀	IC ₅₀ (μM)	95% confidence interval for IC ₅₀	BIC ₅₀ (μM)	95% confidence interval for BIC ₅₀					
8a	~ 22.9 ^c		17.9	15.3 – 21.0	> 400.0		75.3	46.9 - 121.1	> 400.0		66.0	46.9 - 92.8	~ 47.2		51.2	29.1 - 90.2	41.2	25.3 – 67.0	10.2	4.4 – 23.9	9.3	7.5 – 11.7	
8b	5.8	2.5 – 13.5	9.3	8.3 - 10.3	> 400.0		222.5	143.6 - 344.8	> 400.0		115.1	89.0 - 149.0	29.5	15.7 - 55.4	91.9	33.5 - 252.1	329.9	161.9 – 400.0	6.1	3.5 - 10.8	11.0	8.2 – 14.7	
8c	41.0	2.1 – 400.0	172.7	151.1 - 197.3	> 400.0		> 400.0		> 400.0		344.7	282.2 – 400.0	> 400.0		150.0	84.8 - 265.2	> 400.0		74.1	21.8 - 252.4	> 100.0		
8d	116.0	21.6 – 400.0	> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		29.1	18.1 - 46.9	> 400.0		255.2	194.1 - 335.5	> 400.0		46.3	25.8 - 83.2	> 100.0
8e	1.0	0.5 - 1.7	46.5	24.1 – 89.8	> 400.0		62.9	47.9 – 82.5	> 400.0		167.3	110.8 - 252.6	~ 26.7		188.9	105.7 - 337.5	~ 27.6		10.5	6.2 - 17.7	~ 11.9		
8f	6.7	3.2 - 13.8	~ 24.1		> 400.0		> 400.0		> 400.0		> 400.0		29.1	18.1 - 46.9	> 400.0		305.9	94.2 – 400.0	370.2	39.2 – 400.0	8.9	7.1 – 11.2	
8g	8.5	3.3 – 22.0	19.1	16.1 - 22.6	> 400.0		> 400.0		> 400.0		> 400.0		43.0	10.8 - 170.7	> 400.0		> 400.0		236.6	108.4 – 400.0	21.1	16.2 – 27.4	
8h	3.8	1.5 - 9.8	19.5	14.4 - 26.6	> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 400.0		> 100.0		

^a BIC₅₀: concentration of inhibitor needed to inhibit biofilm formation by 50%. ^b IC₅₀: concentration of inhibitor needed to inhibit planktonic growth by 50%. ^c ~: The B(IC)₅₀ values could not be accurately calculated due to the steepness of the curve. Compounds that have a biofilm-specific activity (2 x BIC₅₀ < IC₅₀) are marked in grey.

TABLE S5 Effect of novel 5-Ar-2AIs on a panel of mixed species biofilms

<i>C. albicans</i> SC5314 + <i>S. epidermidis</i>				<i>S. aureus</i> ATCC6538 + <i>S. epidermidis</i>				<i>E. coli</i> TG1 + <i>P. aeruginosa</i> PA14				
CFUs % survival				37 °C				37 °C				
compd	25 µM		100 µM		BIC ₅₀ ^a (µM)	95% confidence interval for BIC ₅₀	IC ₅₀ ^b (µM)	95% confidence interval for IC ₅₀	BIC ₅₀ (µM)	95% confidence interval for BIC ₅₀	IC ₅₀ (µM)	95% confidence interval for IC ₅₀
	<i>C.a.</i>	<i>S.e.</i>	<i>C.a.</i>	<i>S.e.</i>								
8a	62.4	1541.7	1.0	1.0	0.0	0.0 – 0.3	~ 26.1 ^c		6.6	2.3 – 19.2	> 400.0	
8b	2.0	6.1	18.2	0.7	1.1	0.7 – 1.7	~ 22.2		> 400.0		> 400.0	
8c	3.2	637.0	8.4	965.7	5.0	2.9 – 8.5	> 400.0		> 400.0		> 400.0	
8d	2.5	1763.9	1.4	1277.8	> 400.0		> 400.0		> 400.0		> 400.0	
8e	10.0	93.1	2.5	0.0	~ 3.0		~ 23.6		100.7	7.5 – 400.0	> 400.0	
8f	2.9	2.5	7.2	0.3	2.0	1.1 – 3.5	~ 22.5		399.6	26.9 – 400.0	> 400.0	
8g	3.3	0.0	5.9	0.0	~ 5.6		15.5	9.9 – 24.4	> 400.0		> 400.0	
8h	6.7	2.0	3.5	2.2	4.9	2.9 – 8.2	~ 25.1		> 400.0		> 400.0	

C.a. : *Candida albicans*; *S.e.* : *Staphylococcus epidermidis*. ^a BIC₅₀: concentration of inhibitor needed to inhibit biofilm formation by 50%. ^b IC₅₀: concentration of inhibitor needed to inhibit planktonic growth by 50%. ^c ~: The B(IC)₅₀ values could not be accurately calculated due to the steepness of the curve. Compounds that have a biofilm-specific activity (2 x BIC₅₀ < IC₅₀) are marked in grey and compounds with < 75 % CFU survival are marked in dark grey.

REFERENCES

1. Steenackers HP, Ermolat'ev DS, Savaliya B, De Weerdt A, De Coster D, Shah A, Van der Eycken EV, De Vos DE, Vanderleyden J, De Keersmaecker SC. 2011. Structure-activity relationship of 4(5)-aryl-2-amino-1H-imidazoles, N1-substituted 2-aminoimidazoles and imidazo[1,2-a]pyrimidinium salts as inhibitors of biofilm formation by *Salmonella* Typhimurium and *Pseudomonas aeruginosa*. *J Med Chem* **54**:472-484.
2. Steenackers HP, Ermolat'ev DS, Savaliya B, Weerdt AD, Coster DD, Shah A, Van der Eycken EV, De Vos DE, Vanderleyden J, De Keersmaecker SC. 2011. Structure-activity relationship of 2-hydroxy-2-aryl-2,3-dihydro-imidazo[1,2-a]pyrimidinium salts and 2N-substituted 4(5)-aryl-2-amino-1H-imidazoles as inhibitors of biofilm formation by *Salmonella* Typhimurium and *Pseudomonas aeruginosa*. *Bioorg Med Chem* **19**:3462-3473.
3. Steenackers H, Ermolat'ev D, Trang TT, Savalia B, Sharma UK, De Weerdt A, Shah A, Vanderleyden J, Van der Eycken EV. 2014. Microwave-assisted one-pot synthesis and anti-biofilm activity of 2-amino-1H-imidazole/triazole conjugates. *Org Biomol Chem* **12**:3671-3678.