

Molecular targets of 14- α -lipoyl andrographolide on quorum sensing in
Pseudomonas aeruginosa

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Supplemental material

Table S1 Oligonucleotides used in this study

| Primers | Description and sequence | Length |
|---------|-------------------------------|--------|
| PA1430F | 5' -GTGGAAAATTGGAGTGGAGCG- 3' | 128 bp |
| PA1430R | 5' -GTAGTTGCCGACGATGAAGG- 3' | |
| PA1432F | 5' -AGGCGTGGAGAAGATGATG- 3' | 120 bp |
| PA1432R | 5' -ATCTGGGTCTTGGCATTGAG- 3' | |
| PA3477F | 5' -GGGTTGGACATCAGCATCGG- 3' | 146 bp |
| PA3477R | 5' -TTGCTCAGCGTGCTTTCCGT- 3' | |
| PA3476F | 5' -TGCAGCCATTCCGGGTGGTA- 3' | 139 bp |
| PA3476R | 5' -TCGTTCGCAACGGCGTGAT- 3' | |
| PA0996F | 5' -GCATGTCTTCGACCTCACC -3' | 138 bp |
| PA0996R | 5' -GACTCGCTGTCCACTTCCA- 3' | |
| PA0997F | 5' -ATGTCTTCGACCTCACCGAC- 3' | 131 bp |
| PA0997R | 5' -GCTGTCCACTTCCAATCCCT- 3' | |
| PA0998F | 5' -CGATTATTTCGTCTTCCACC- 3' | 102 bp |
| PA0998R | 5' -GTATCGCCATCGTCAGTT- 3' | |
| PA0999F | 5' -TCTGCCATCAACCGAACCT- 3' | 138 bp |
| PA0999R | 5' -AGAACATCTCCAGCGTGAC- 3' | |
| PA1000F | 5' -CGCTGGTTGAAGGAGGGTTC- 3' | 117 bp |
| PA1000R | 5' -GGTCGTAGTGCTTGTGGGTG- 3' | |
| PA0905F | 5' -ACCCTGATGGTAGGTGACGAC- 3' | 132 bp |
| PA0905R | 5' -CTCTTTCTGGATGCGCTGGT- 3' | |
| PA3841F | 5' -TTCGAGAAGAGCGGACAGG- 3' | 131 bp |
| PA3841R | 5' -GGGTCAGGGAGGTGGAGA- 3' | |
| PA0044F | 5' -CGCGAAATCGCCGTCCAAC- 3' | 131 bp |
| PA0044R | 5' -AGCCCGAAGTGCTCCACCAG- 3' | |
| PA2191F | 5' -TTGCGTATTTCCGCCGTGTC- 3' | 123 bp |
| PA2191R | 5' -TTTCCCGACCAAGGGCTTCT- 3' | |
| PA4268F | 5' -GTTGTGACCTTCACCACCGAT- 3' | 109 bp |
| PA4268R | 5' -ATACACCACCACGCCGAAA- 3' | |

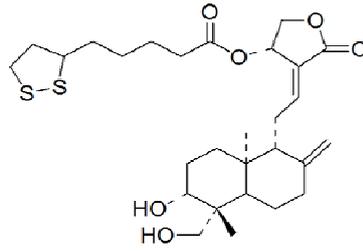


Fig.S1 Structure of 14-Alpha-lipoyl andrographolide (AL-1)

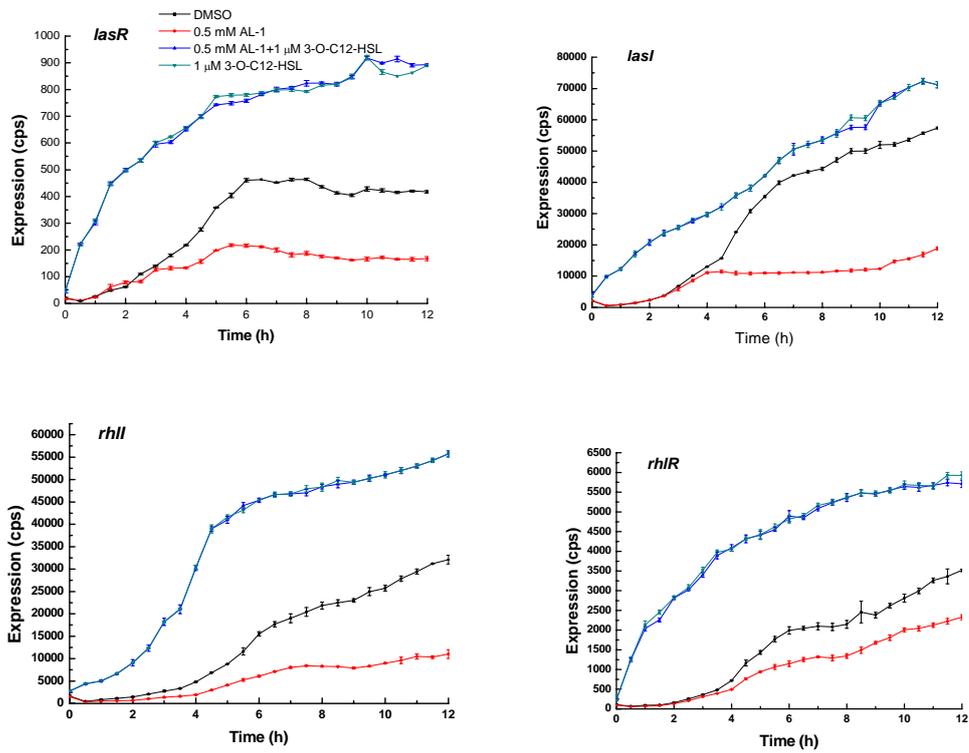


Fig.S2 Inhibition of QS-related genes in *P. aeruginosa* PAO1 by AL-1 and reversed by addition 3-oxo-C₁₂-HSL. Assays were independently repeated three times. Error bars indicate the standard deviation. Promoter activity is expressed as counts per second (cps).

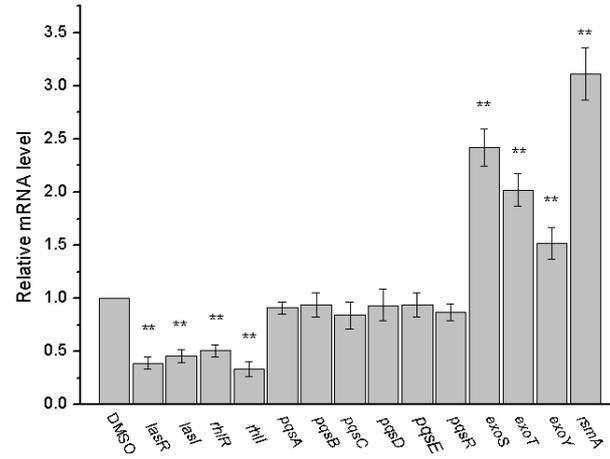


Fig.S3 mRNA level in the presence of 0.5 mM AL-1. DMSO was used as a control. Values reported are the mean of three replicates. Error bars indicate the standard deviation.

** $p < 0.01$ was taken to indicate statistical distinct significance.