

Supporting Information (SI)

MALDI-MS-based quantitative analysis for ketone containing homoserine lactones in *Pseudomonas aeruginosa*

Yoon-Woo Kim^{†,+}, Chang-Min Sung^{‡,+}, Seulee Lee[†], Kyoung-Jin Kim[†], Yung-Hun Yang[§],

Byung-Gee Kim[‡], Yoo Kyung Lee[#], Hee Wook Ryu^{†,*}, Yun-Gon Kim^{†,*}

[†]Department of Chemical Engineering, Soongsil University, Seoul 156-743, Korea

*[‡]School of Chemical and Biological Engineering, Seoul National University, Seoul 151-742,
Korea*

*[§]Department of Microbial Engineering, College of Engineering, Konkuk University, Seoul
143-701, Korea*

[#]Arctic Research Center, Korea Polar Research Institute, Incheon 406-840, Korea

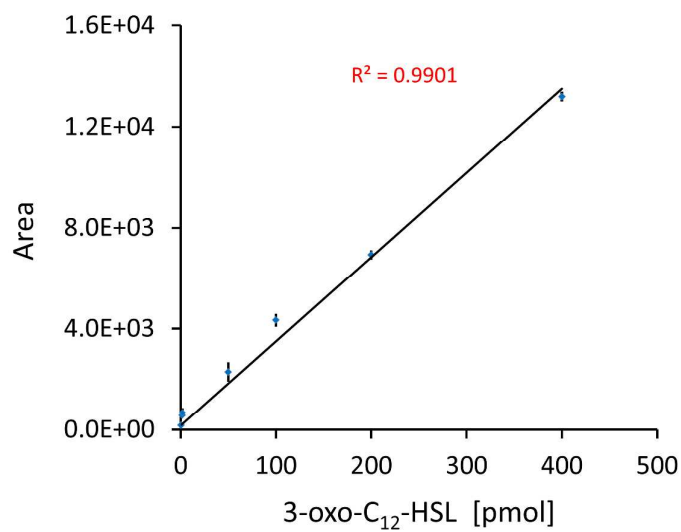


Figure S1. Calibration curve of GT derivatized 3-oxo-C₁₂-HSL using MALDI-TOF MS, (0.5, 1.5, 2, 50, 100, 200, and 400 pmol). The data were from triplicate samples.

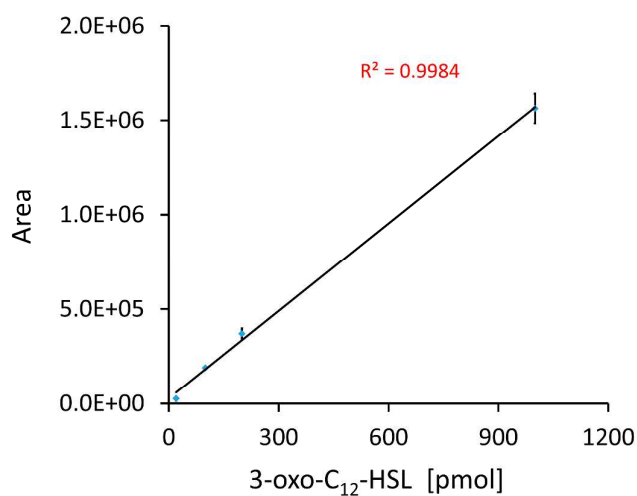


Figure S2. Quantitative curve of 3-oxo-C₁₂-HSL from *Pseudomonas aureginosa* PA01 using LC-MS/MS, (20, 100, 200, and 1000 pmol). The data were from triplicate samples.

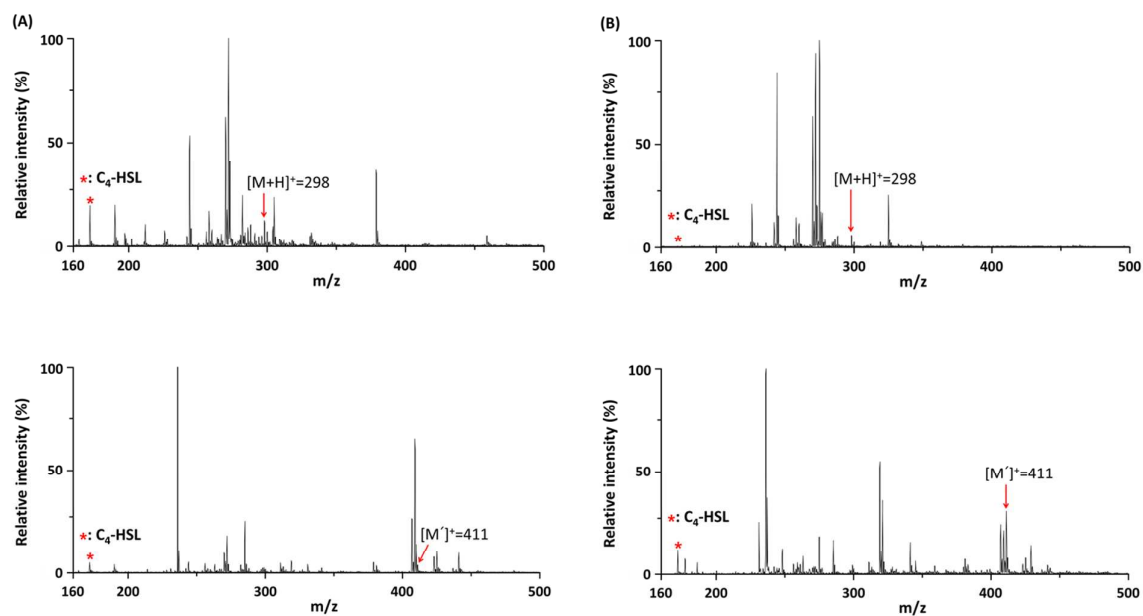


Figure S3. MALDI spectra of 3-oxo-C₁₂-HSL (natural and GT-derivatized) from *Pseudomonas aureginosa* PA01; (A) 30 mL cultured; (B) 300 mL cultured; *, C₄-HSL; M, 3-oxo-C₁₂-HSL; M', GT derivatized 3-oxo-C₁₂-HSL.

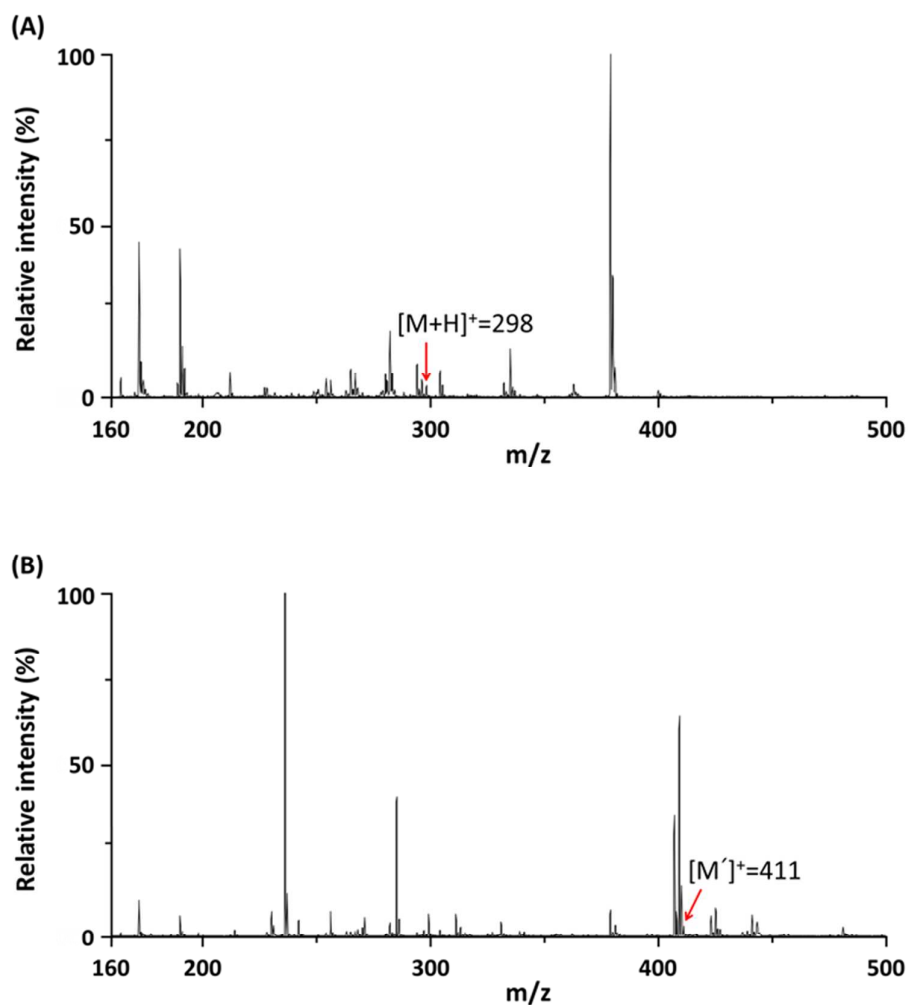


Figure S4. MALDI spectra of 3-oxo-C₁₂-HSL for LOD analysis; (A) 3-oxo-C₁₂-HSL (30 pmol); (B) GT-derivatized 3-oxo-C₁₂-HSL (0.5 fmol); M, 3-oxo-C₁₂-HSL; M', GT derivatized 3-oxo-C₁₂-HSL.