

Supplementary Data:

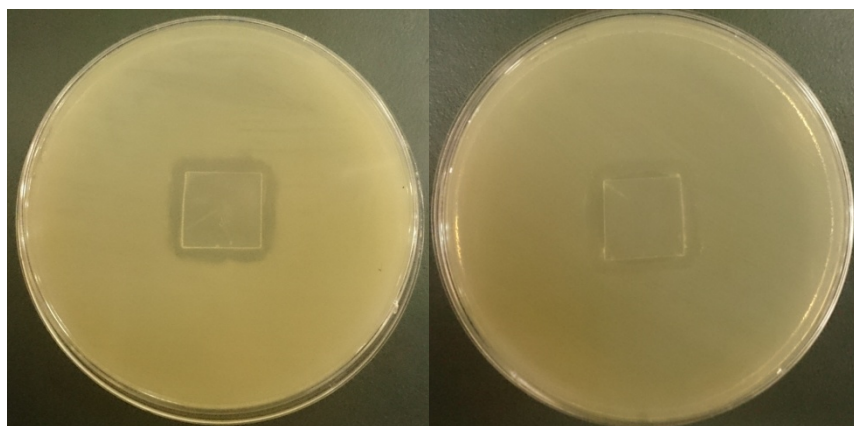


Fig S1. An example of Agar disk diffusion assay for PP-O2-25 on *B. subtilis* (left)
and *S. aureus* (right)

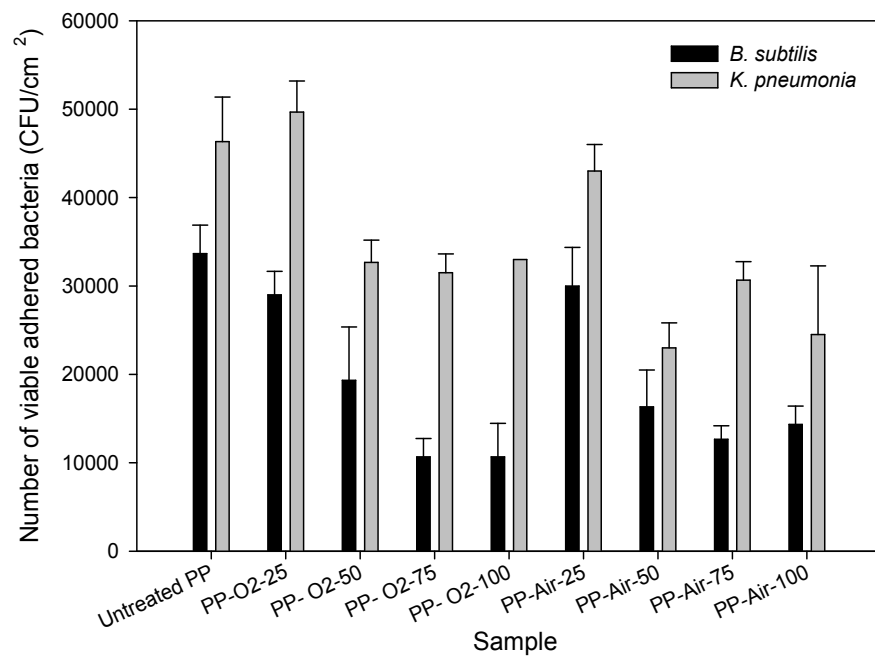


Fig. S2. Histograms of bacterial adhesion degree for samples after 18 h incubation against two microorganisms (the error bars depict standard deviations). The p -value for all experiments were less than 0.05.

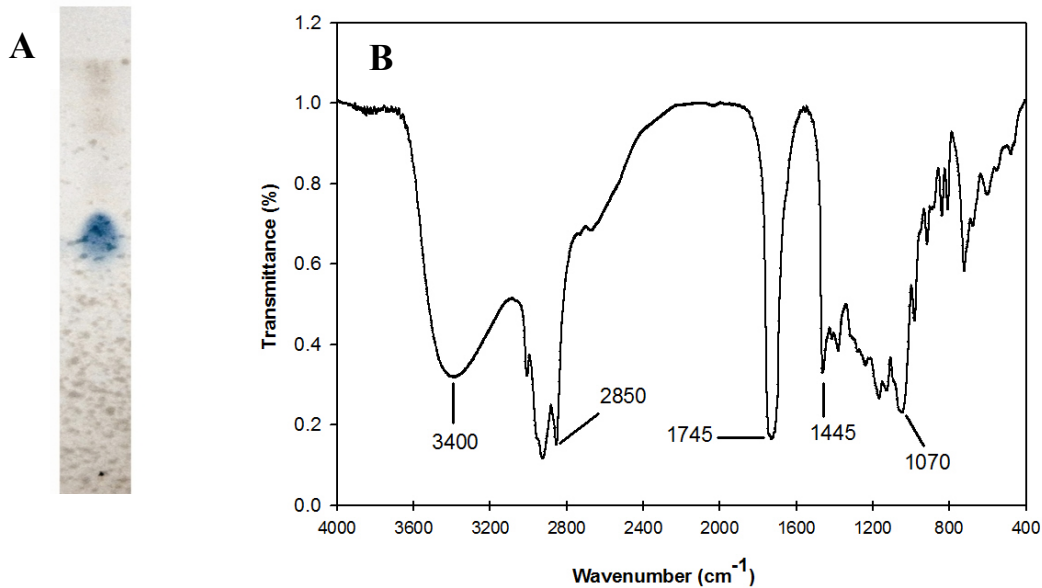
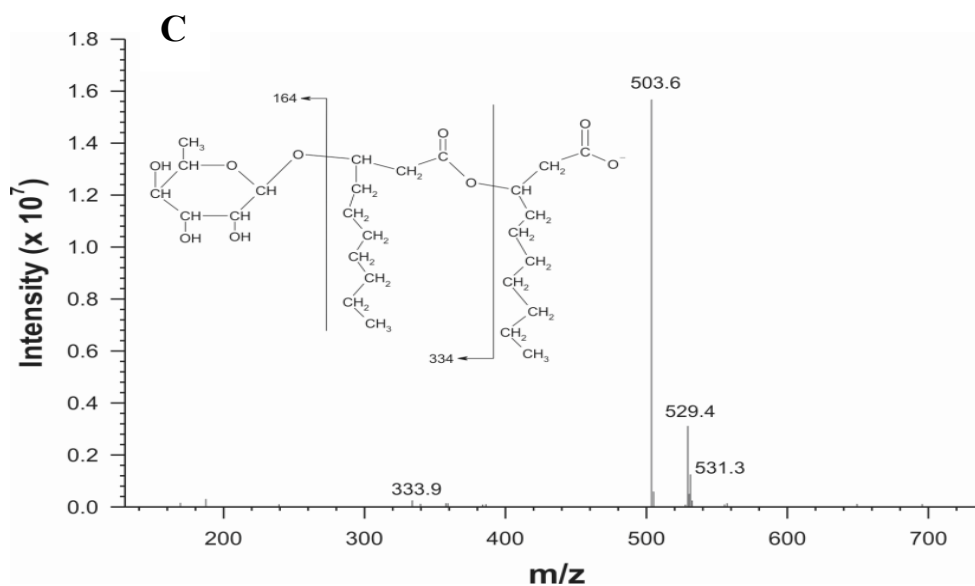


Fig
Thin



S3. A)
layer

chromatography B) FTIR and C) ES-MS spectra results of pure monorhamnolipid as described in our previous work [11]. These analyses confirmed the structure and purity of the monorhamnolipid.

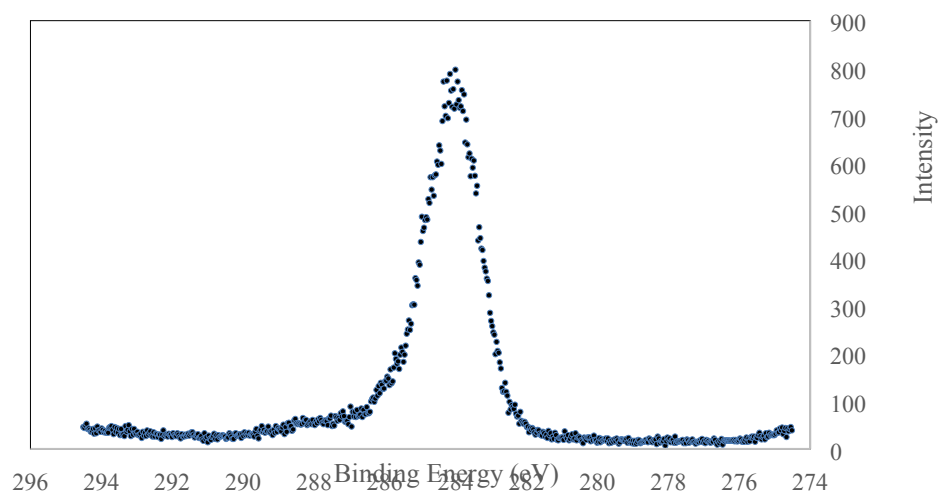


Fig S4. Carbon C1s peak of control Sample (untreated PP).

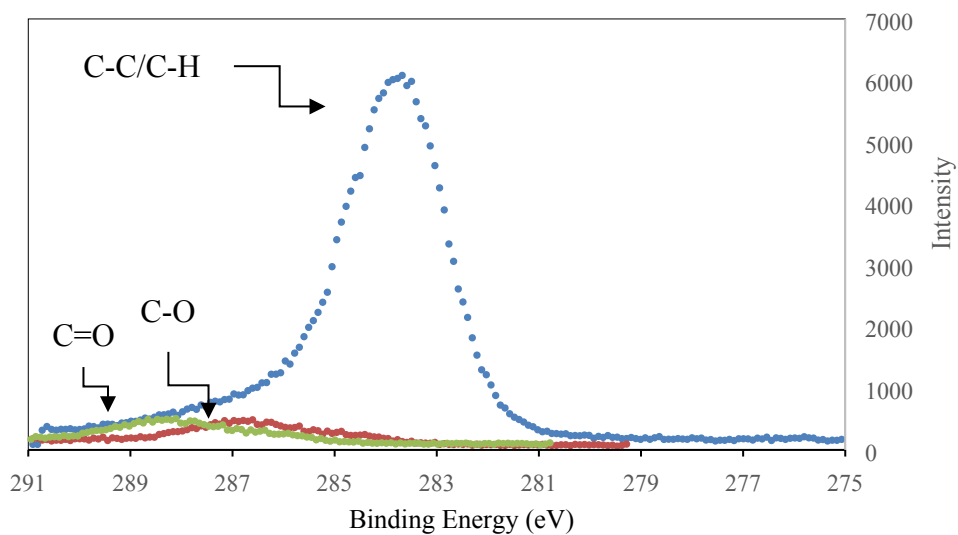


Fig. S5. Carbon C1s peaks of Sample PP-O2-75.

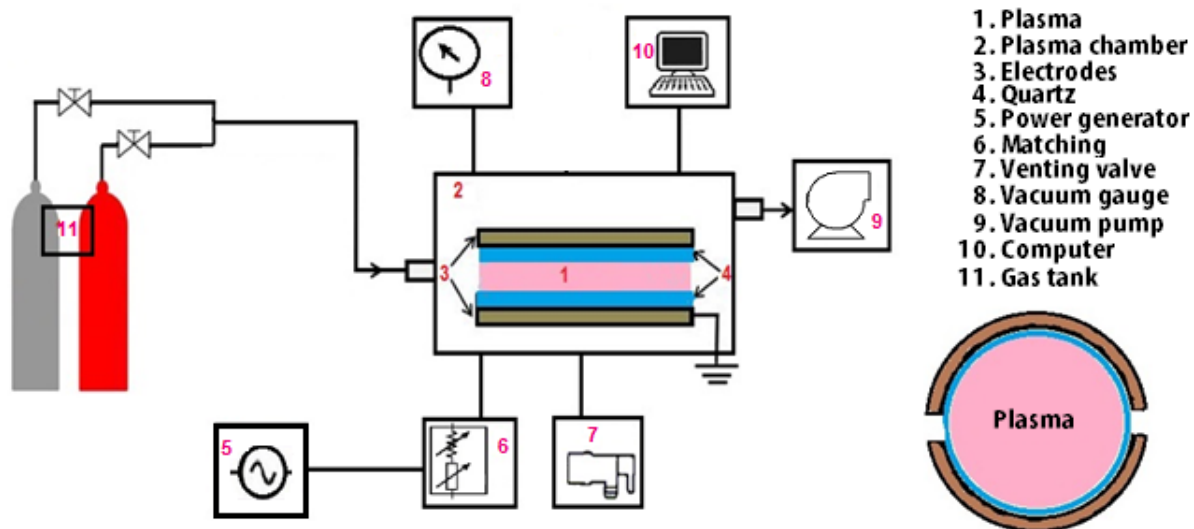


Fig S6. A schematic diagram of the plasma system.

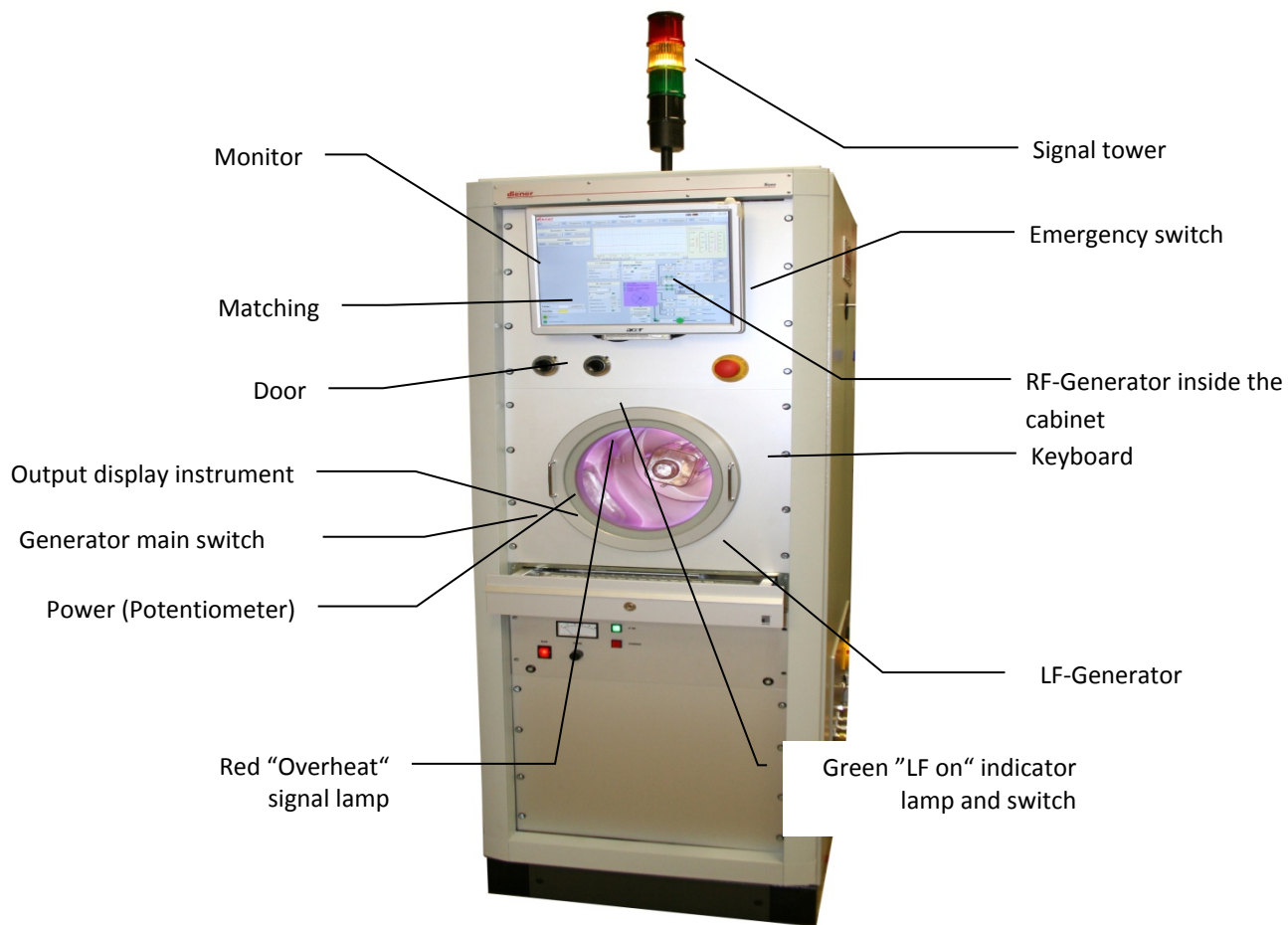


Fig S7. The image of the equipment used in this study: Nano-LF-RF-PC, Diener electronic Technology, Germany.