

Supplementary Information

Bacterial Growth Monitored by Two-Dimensional Tandem Mass Spectrometry

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Note: If the figures in this document appear to change over time, .mp4 files are available with file names corresponding with the associated figure.

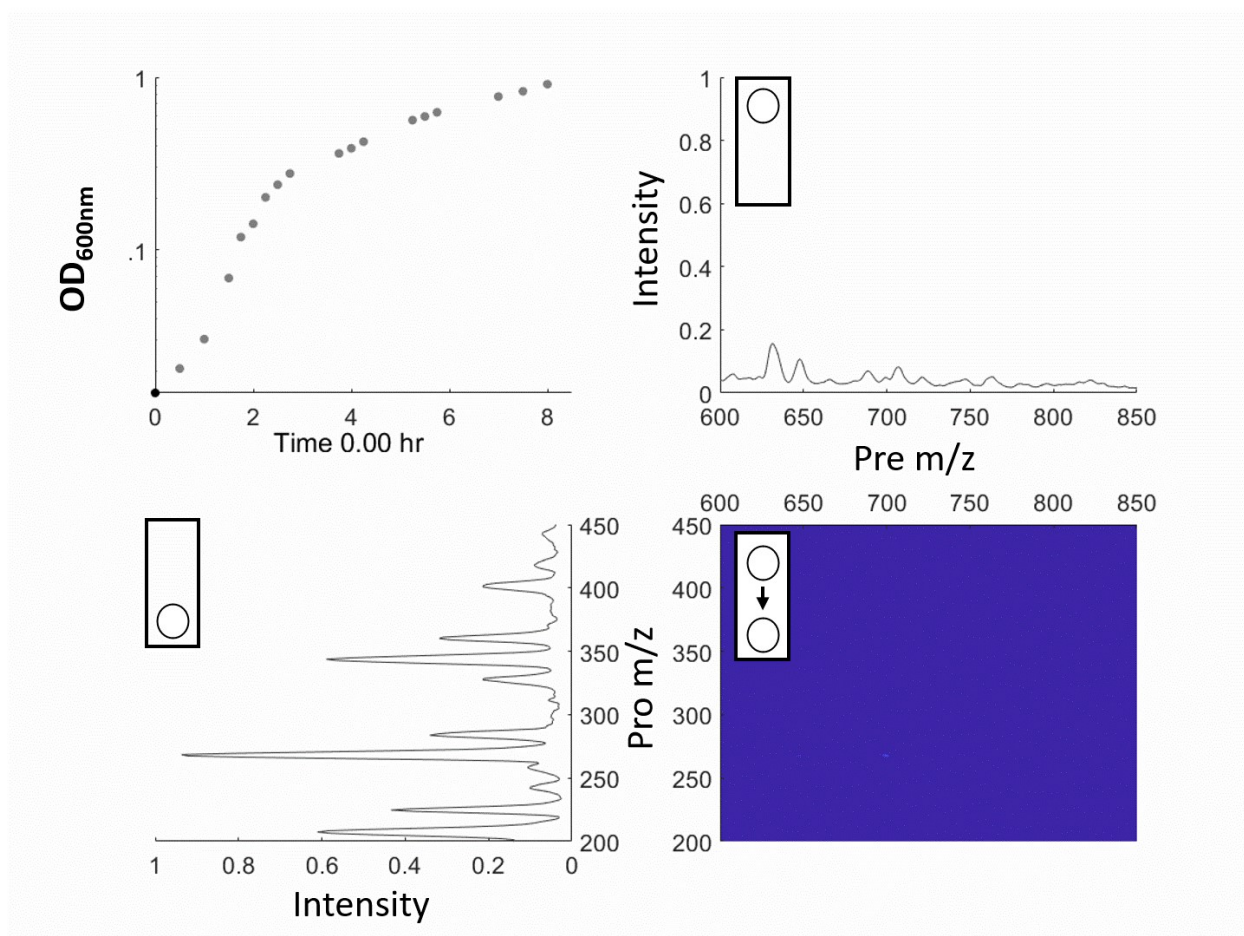


Figure S1. (top left) Growth curve of *E. coli* over 8 hours. (top right) Anterior mass spectrum obtained by summing all product ions from each designated precursor ion in the 2D MS/MS mass spectrum. (bottom left) Posterior mass spectrum obtained by summing all precursor ions which produce each designated product ion in the 2D MS/MS mass spectrum. (bottom right) 2D MS/MS mass spectrum focused on the lipid mass region. All plots can be seen in the video to change as a function of the time indicated in the top left plot.

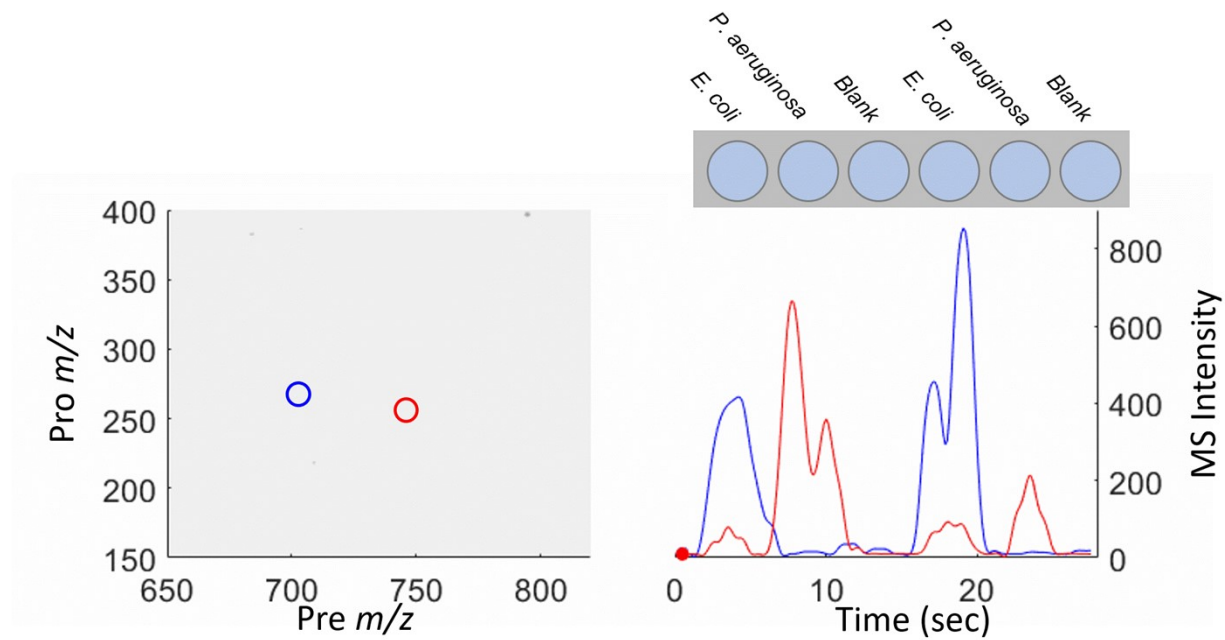


Figure S2. (left) Rolling average of three 2D MS/MS spectra acquired as the DESI spray is rastered across five wells containing (left to right) *E. coli* replicate 1; *Pseudomonas aeruginosa* replicate 1; empty well; *E. coli* replicate 2; *Pseudomonas aeruginosa* replicate 2. (right) Extracted ion signal for two lipid fragments present predominantly in *E. coli* (red) and *P. aeruginosa* (blue). The plots are updated in time at a rate that matches the sample analysis rate.