

High-throughput phenotyping of uropathogenic *E. coli* isolates with Fourier transform infrared spectroscopy.

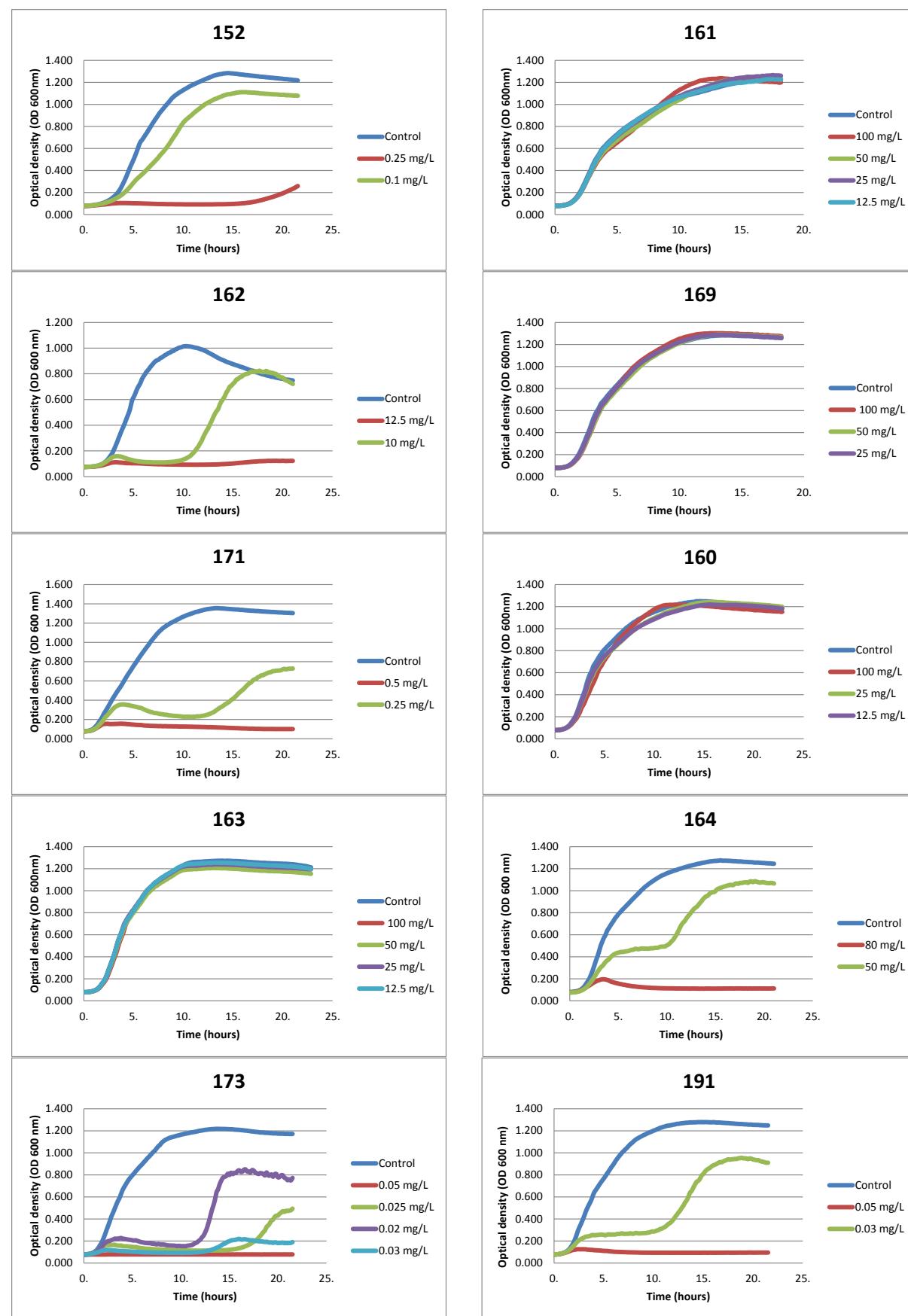


Figure S1

Typical growth curves of 10 pathogenic isolates of *E. coli* showing different susceptibilities to Ciprofloxacin.

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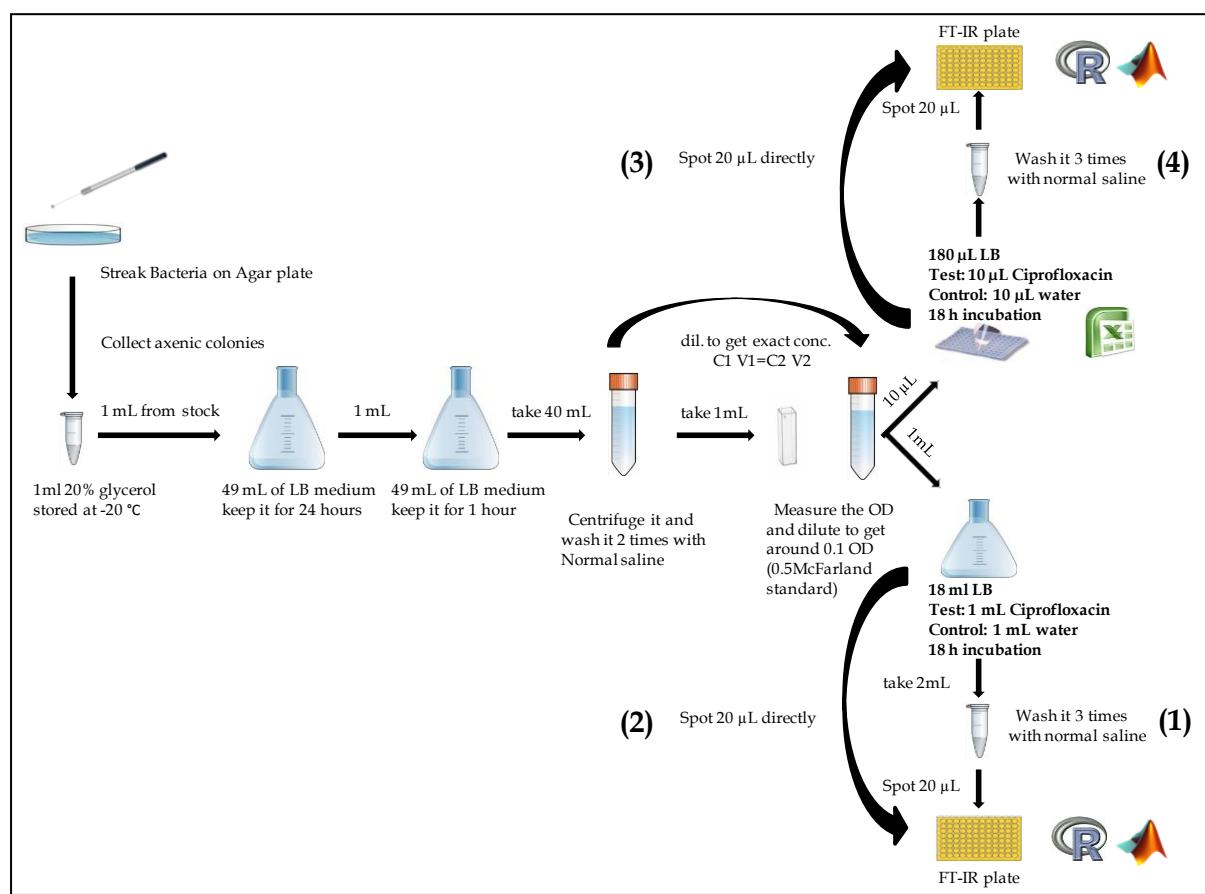


Figure S2 Comparison of four different methods of sample preparation for FT-IR analysis: (1) after washing with saline and (2) directly from the flask from the bioscreen plate (3) directly and (4) after washing

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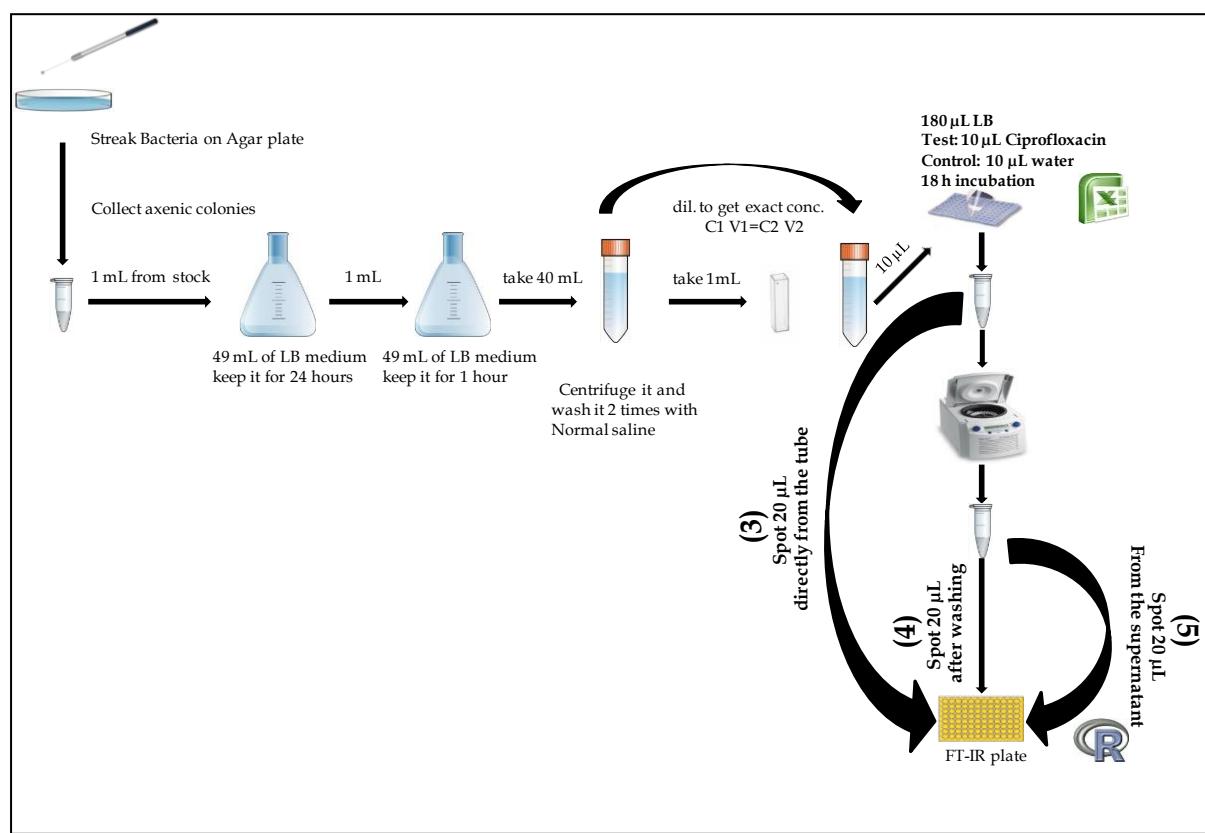


Figure S3 A comparison of three different methods of sample preparation for FT-IR analysis: directly from (3) bioscreen plate, (4) supernatant and (5) after washing.

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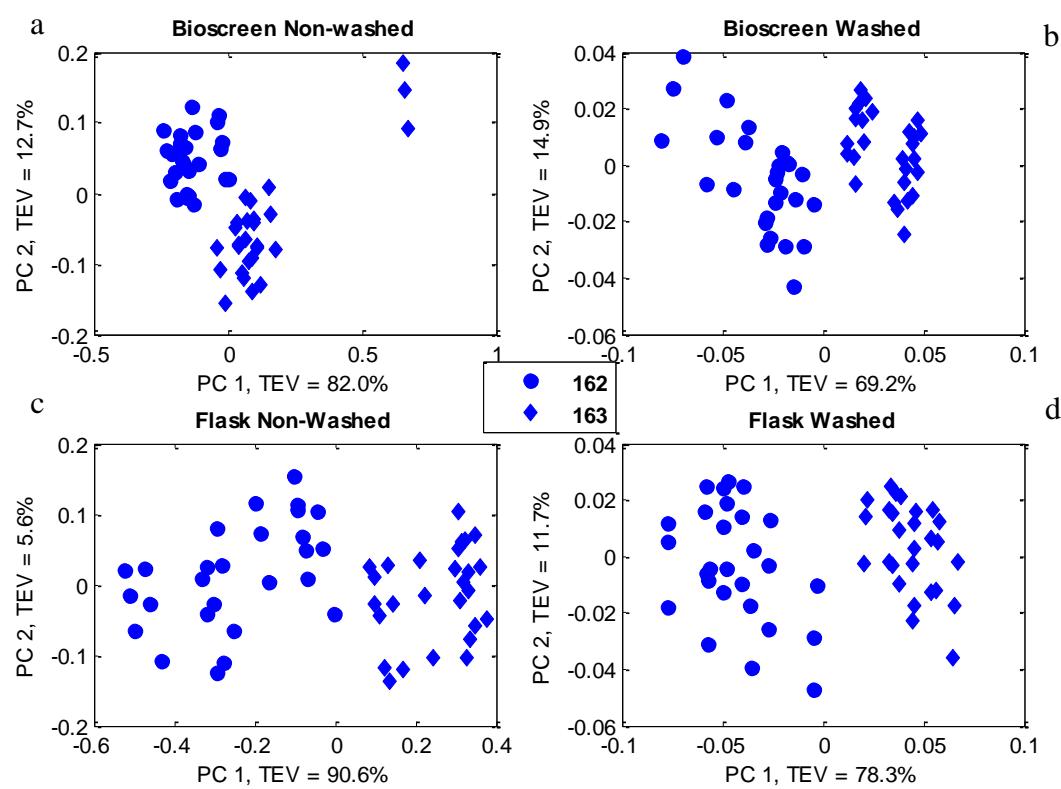


Figure S4 PCA scores plots of PC1 vs. PC2 after  $\text{CO}_2$  removal at *ca.*  $2250\text{ cm}^{-1}$  followed by EMSC scaling. (a) Samples cultured in bioscreen plate and not washed; the total explained variance (TEV) of PC1 is 82% and of PC2 12.7 %. (b) Samples from a bioscreen and washed (TEV of PC1 69.2 % and of PC2 14.9 %). (c) Samples cultured in flasks and not washed (TEV of PC1 90.6% and of PC2 5.6 %). (d) Samples grown in flask and washed (TEV of PC1 78.3% and of PC2 11.7%). Circles representing isolate 162, diamonds representing 163.

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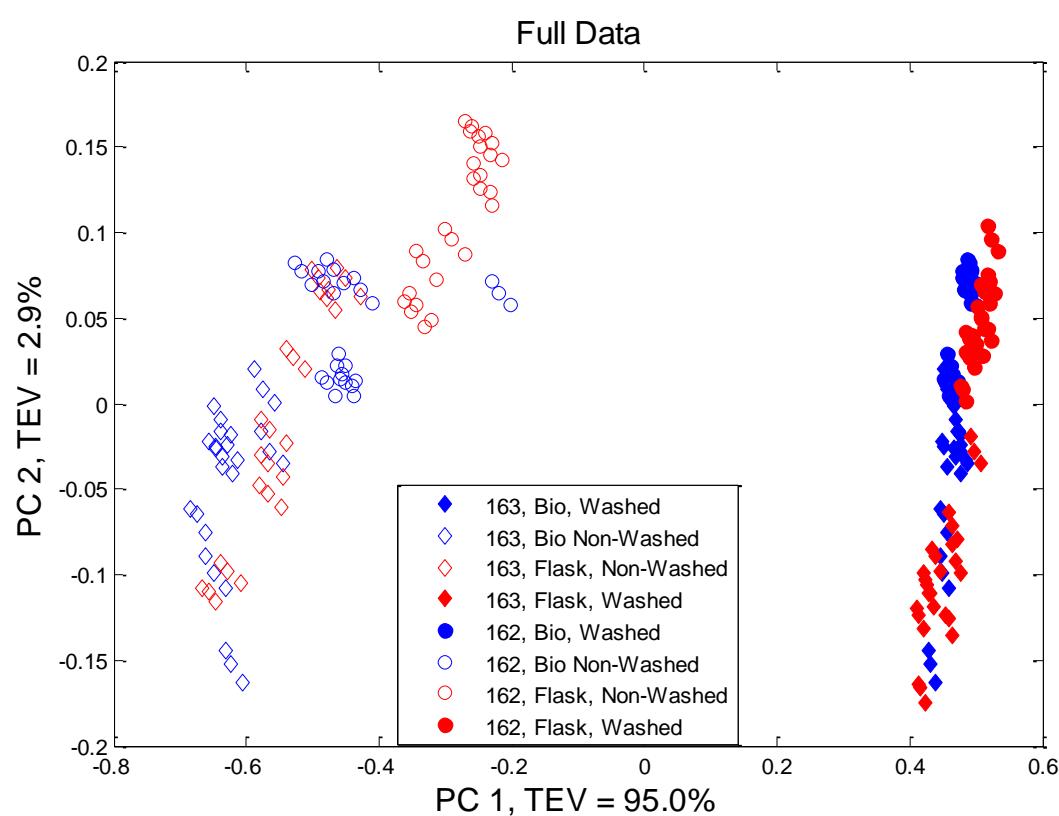


Figure S5: PCA score plot of the full data of isolates 162 and 163, cultured under different conditions. PC1 vs. PC2 after EMSC scaling and CO<sub>2</sub> removal around 2250 cm<sup>-1</sup>. TEV of PC1 is 95% and for PC2 2.9%. Closed symbols for washed samples while open symbols for non washed samples. 162 represented by circles, diamonds symbolise isolate 163.

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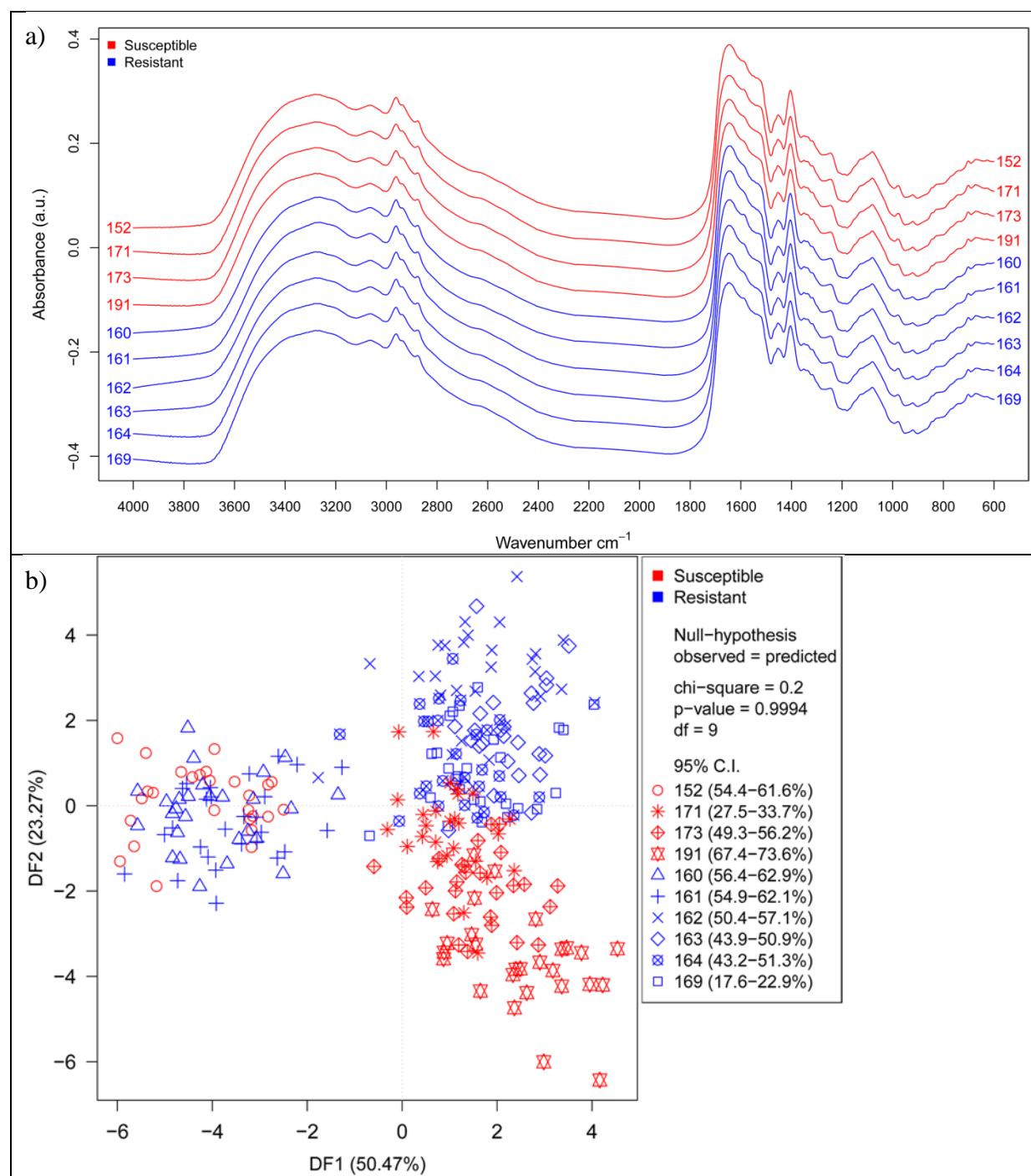


Figure S6 (a) Raw FT-IR spectra obtained from supernatants of isolates 152, 160, 161, 162, 163, 164, 169, 171, 173 and 191; the spectra are offset in the Y-axis for ease of visualisation. (b) PC-DFA scores plots of supernatant samples; 50 PCs were extracted from PCA and used as inputs to DFA, these 50 PCs explain 99.98% of the data variance.

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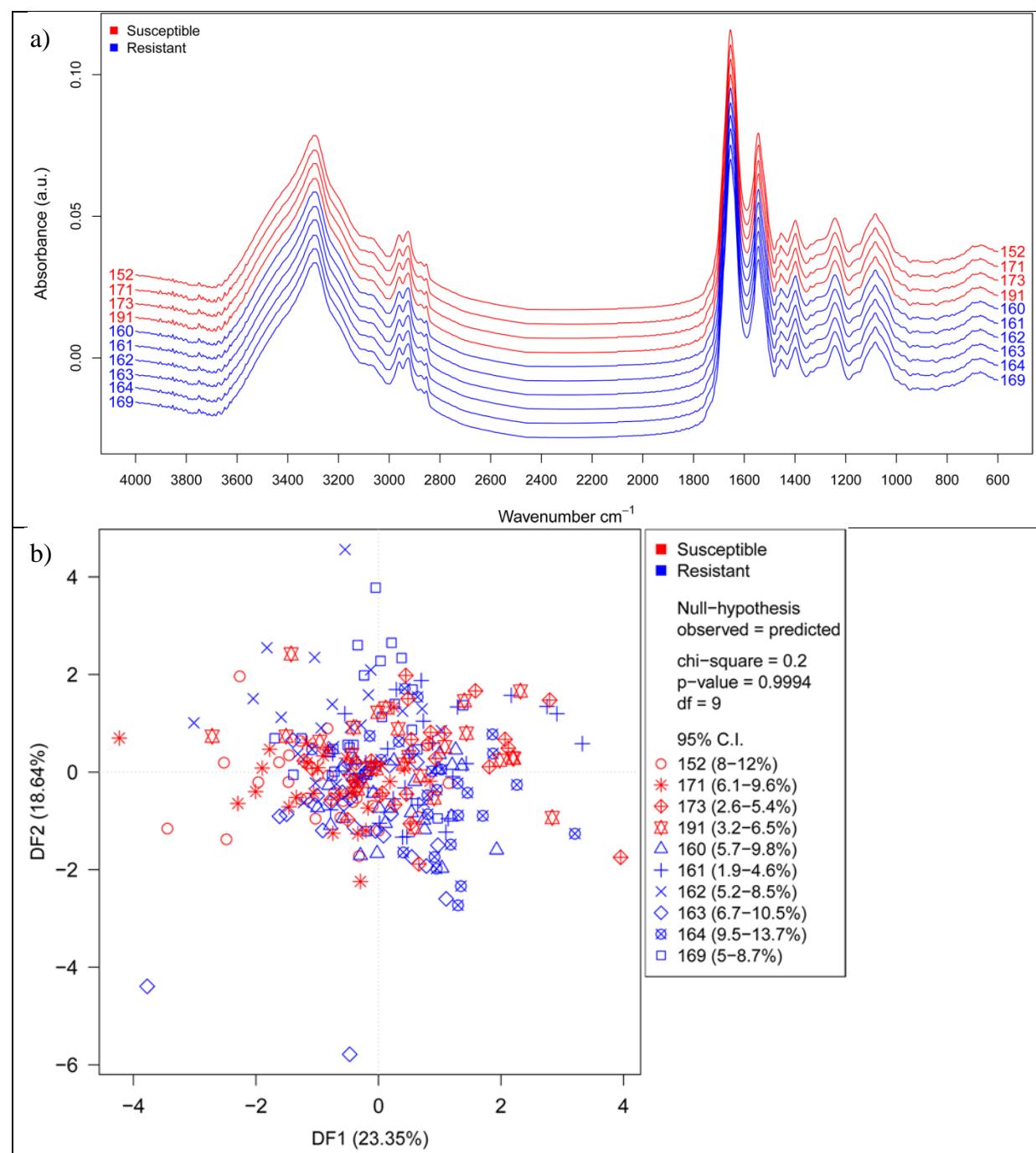


Figure S7 (a) Raw FT-IR spectra obtained from isolates 152, 160, 161, 162, 163, 164, 169, 171, 173 and 191 after washing; the spectra are offset in the Y-axis for ease of visualisation. (b) PC-DFA scores plots of washed samples; 50 PCs were extracted from PCA and used as inputs to DFA, these 50 PCs explain 99.73% of the data variance.