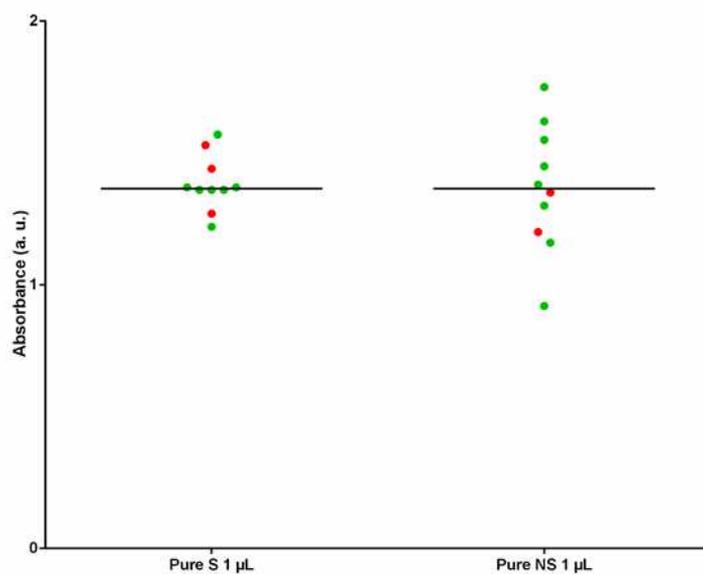
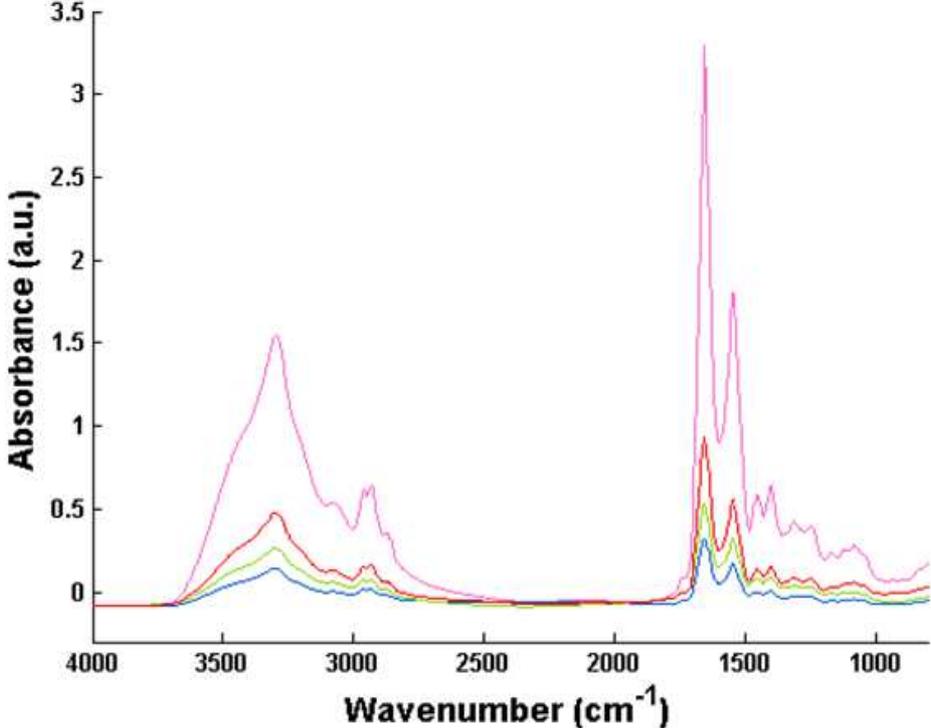


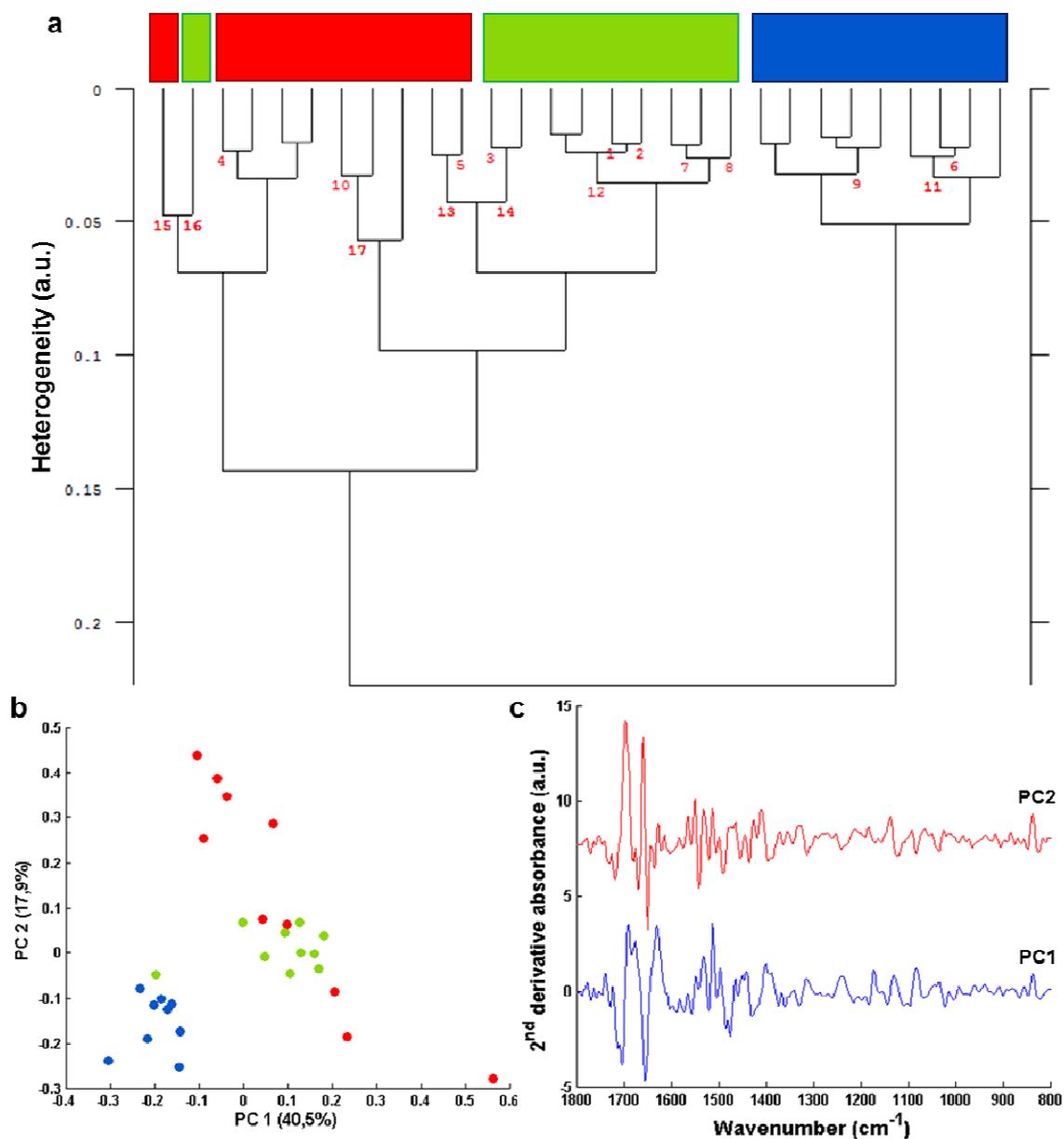
ESI 1: Scatter plot based on the Amide I absorbance value of serum replicate spectra from spread and non-spread pure dried drops (1 μ L deposits onto 3mm diameter well). Validated and discarded spectra after the quality test are represented by green and red dots respectively. The median absorbance value is represented by the black bar. S: spread dried drop, NS: non-spread dried drop.



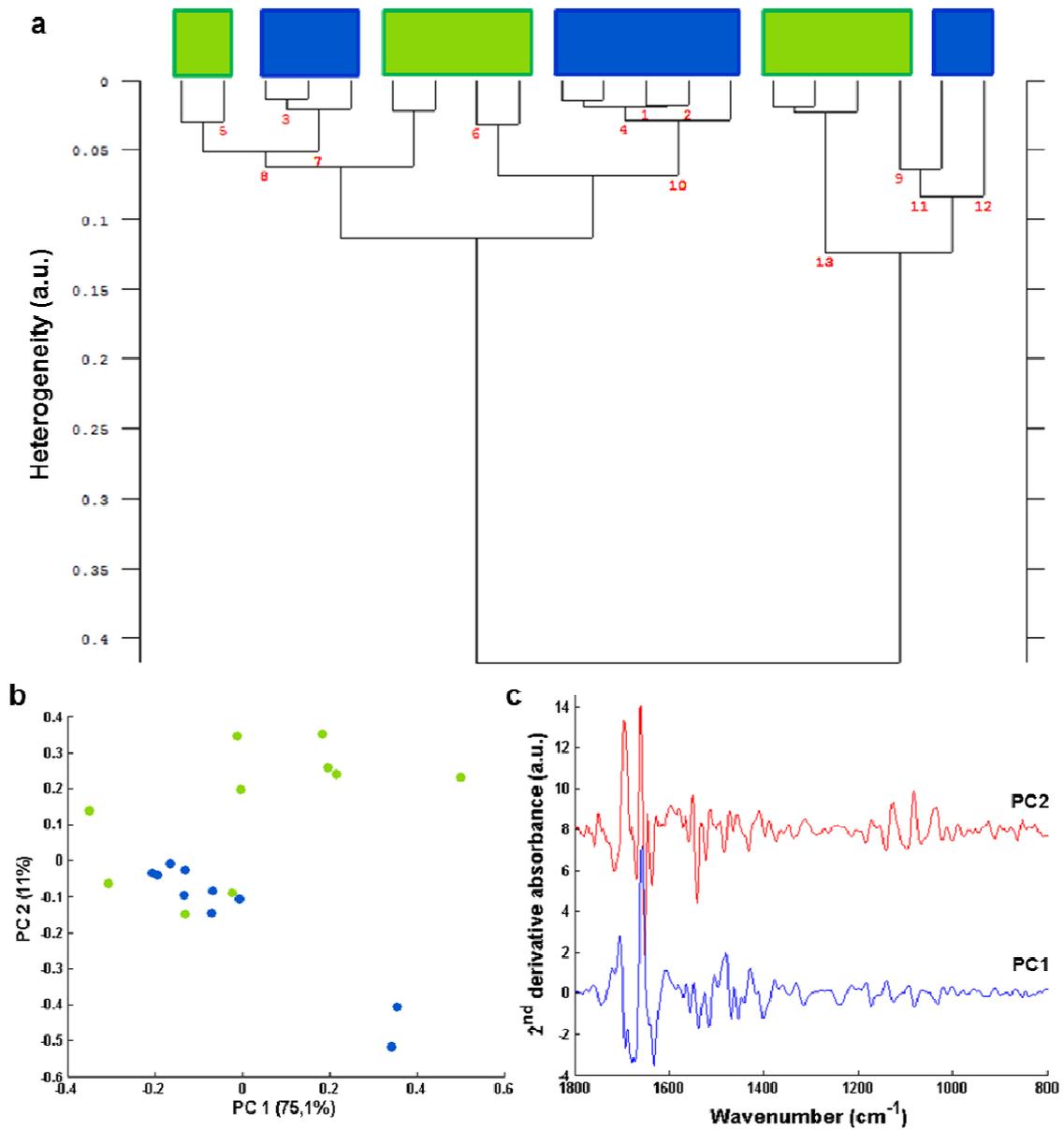
ESI 2: FTIR raw median spectra of serum samples (10 μ L deposits onto 7 mm diameter well) at different dilutions 2-fold (red), 3-fold (green), 4-fold (blue) dilutions and without dilution (pink).



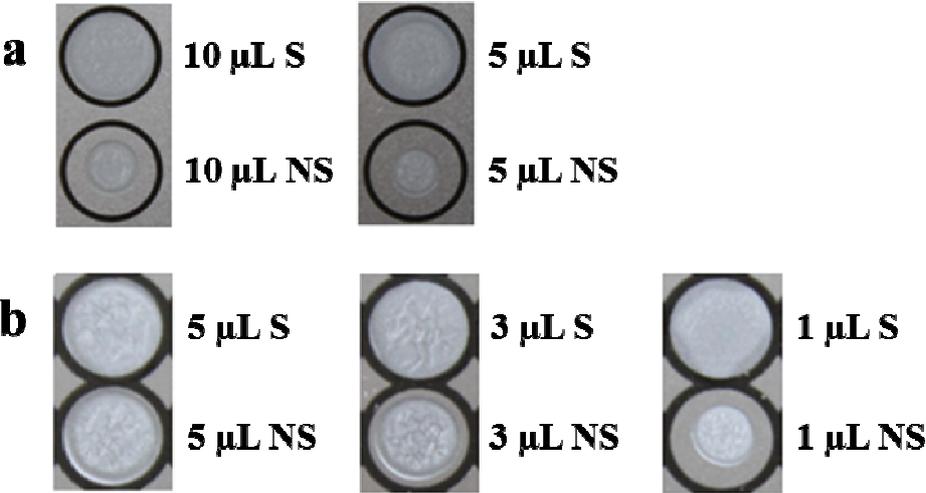
ESI 3: (a) Hierarchical cluster analysis of FTIR pre-processed spectra from 2-fold (red), 3-fold (green) and 4-fold (blue) diluted serum (5 μ L) deposited onto 7 mm diameter wells. (b) PCA scatter plot of the spectral dataset from (a), (c) PC1 and PC2 loadings from (b).



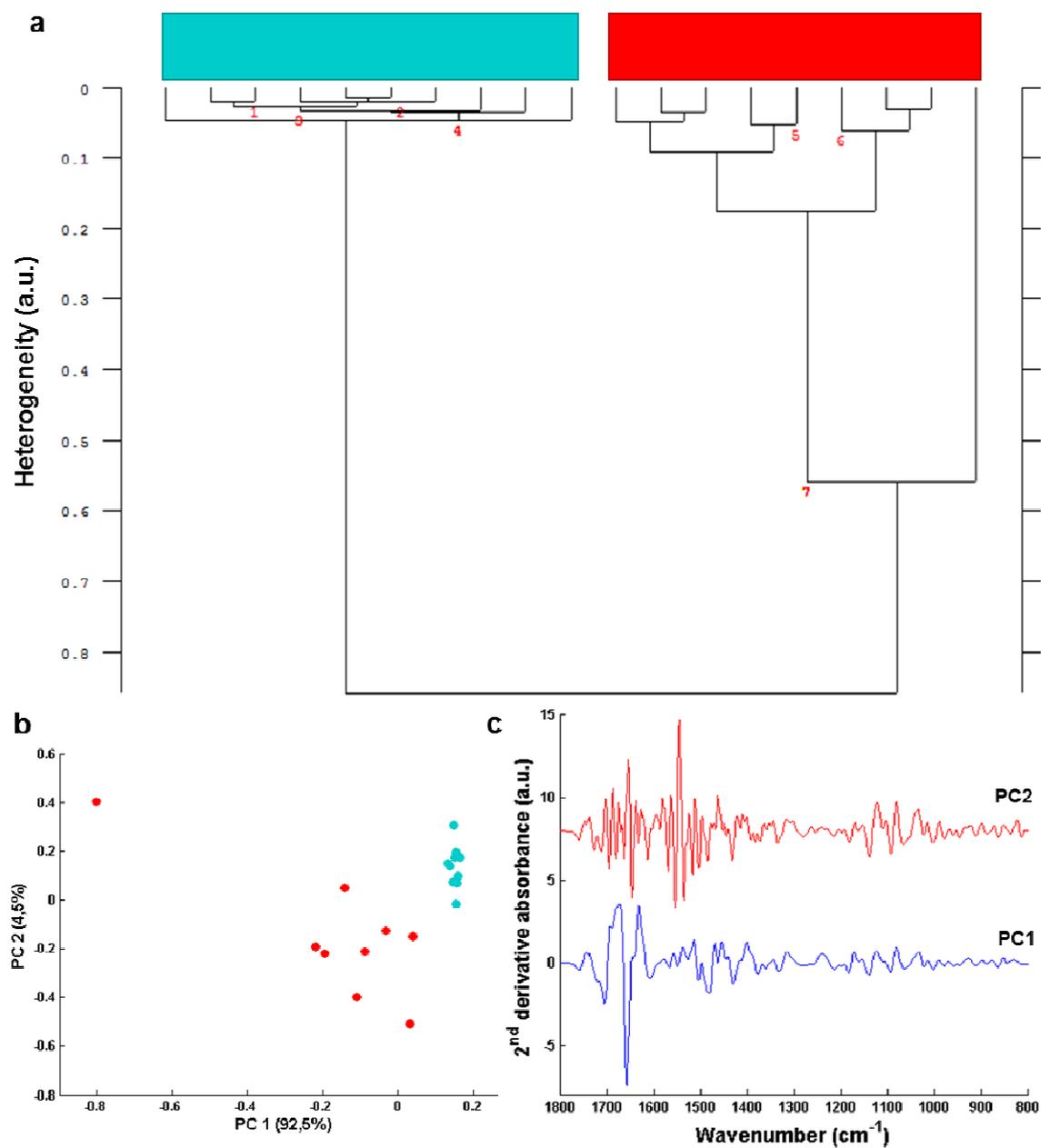
ESI 4: (a) Hierarchical cluster analysis of FTIR pre-processed spectra from 3-fold (green) and 4-fold (blue) diluted serum (5 μ L) deposited onto 3 mm diameter wells. (b) PCA scatter plot of the spectral dataset from (a), (c) PC1 and PC2 loadings from (b).



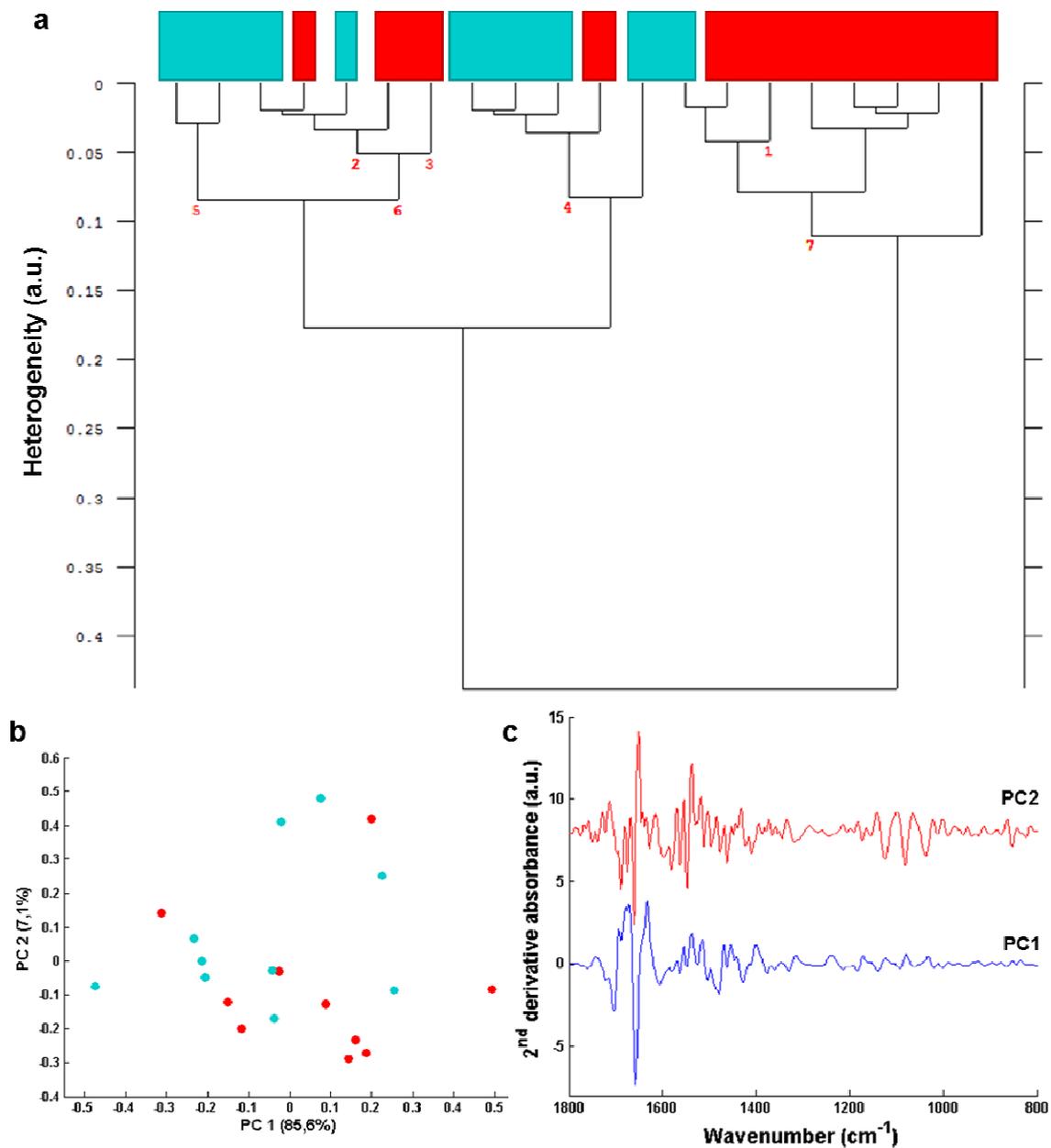
ESI 5: Photographs of different volumes of dried serum drops on 7 mm diameter wells (a) and 3mm diameter wells (b). S: spread drop, NS: non-spread drop.



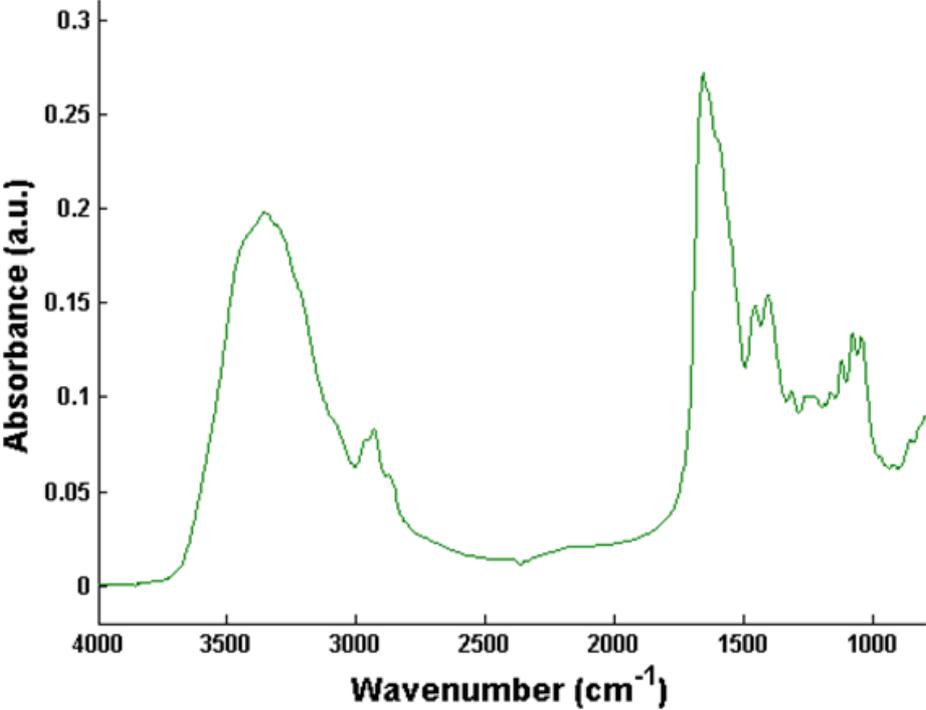
ESI 6: (a) Hierarchical cluster analysis of FTIR pre-processed spectra from 3-fold diluted serum (5 μ L) spread (light blue) or non-spread (red) over the surface of 7 mm diameter wells. (b) PCA scatter plot of the spectral dataset from (a), (c) PC1 and PC2 loadings from (b).



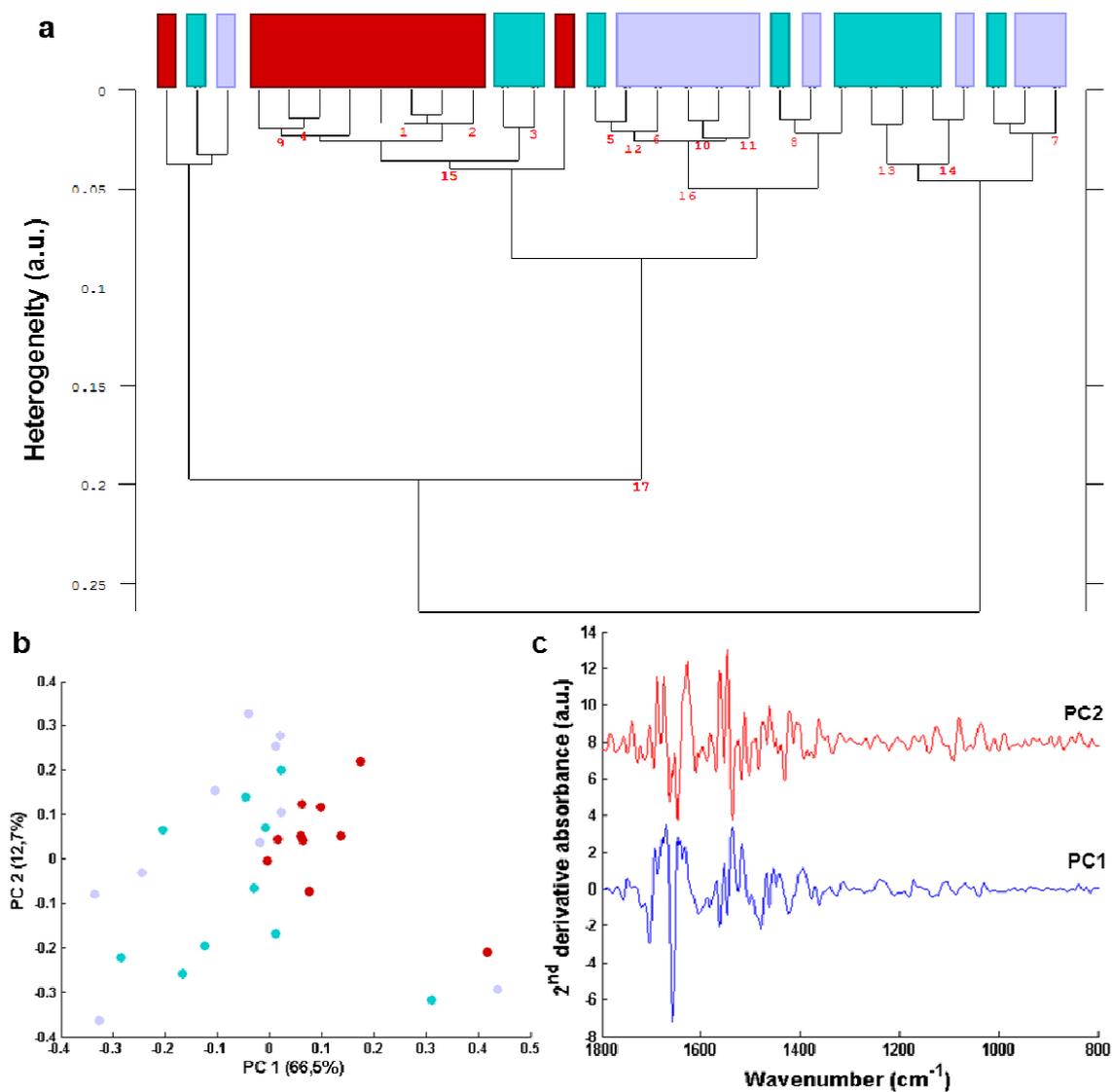
ESI 7: (a) Hierarchical cluster analysis of FTIR pre-processed spectra from 3-fold diluted serum (5 μ L) spread (light blue) or non-spread (red) over the surface of 3 mm diameter wells. (b) PCA scatter plot of the spectral dataset from (a), (c) PC1 and PC2 loadings from (b).



ESI 8: FTIR raw median spectra of bile samples (5 μ L deposits onto 3 mm diameter well) without dilution.



ESI 9: (a) Hierarchical cluster analysis of FTIR pre-processed spectra from one 3-fold diluted serum sample spread (5 μ L) over the surface of 3 mm diameter wells by three different operators (red, light blue and purple). (b) PCA scatter plot of the spectral dataset from (a), (c) PC1 and PC2 loadings from (b).



ESI 10: (a) Hierarchical cluster analysis of FTIR spectra from 3-fold diluted serum (5 μ L) deposited onto 3 mm diameter wells and left dried at room temperature 1h (blue), 2h (green) or 24h (orange). All spectra were cut between 4000-800 cm^{-1} , rubberband baseline corrected and vector normalised. (b) PCA scatter plot of the spectra of serum dried at room temperature 1h (blue) and 2h (green). (c) PC1 and PC2 loadings from (b). (d) PCA scatter plot of the spectra of serum dried at room temperature 2h (green) and 24h (orange). (e) PC1 and PC2 loadings from (d).

