

Supplementary Material

Fiber enhanced Raman spectroscopic analysis as a novel method for diagnosis and monitoring of diseases related to hyperbilirubinemia and hyperbiliverdinemia

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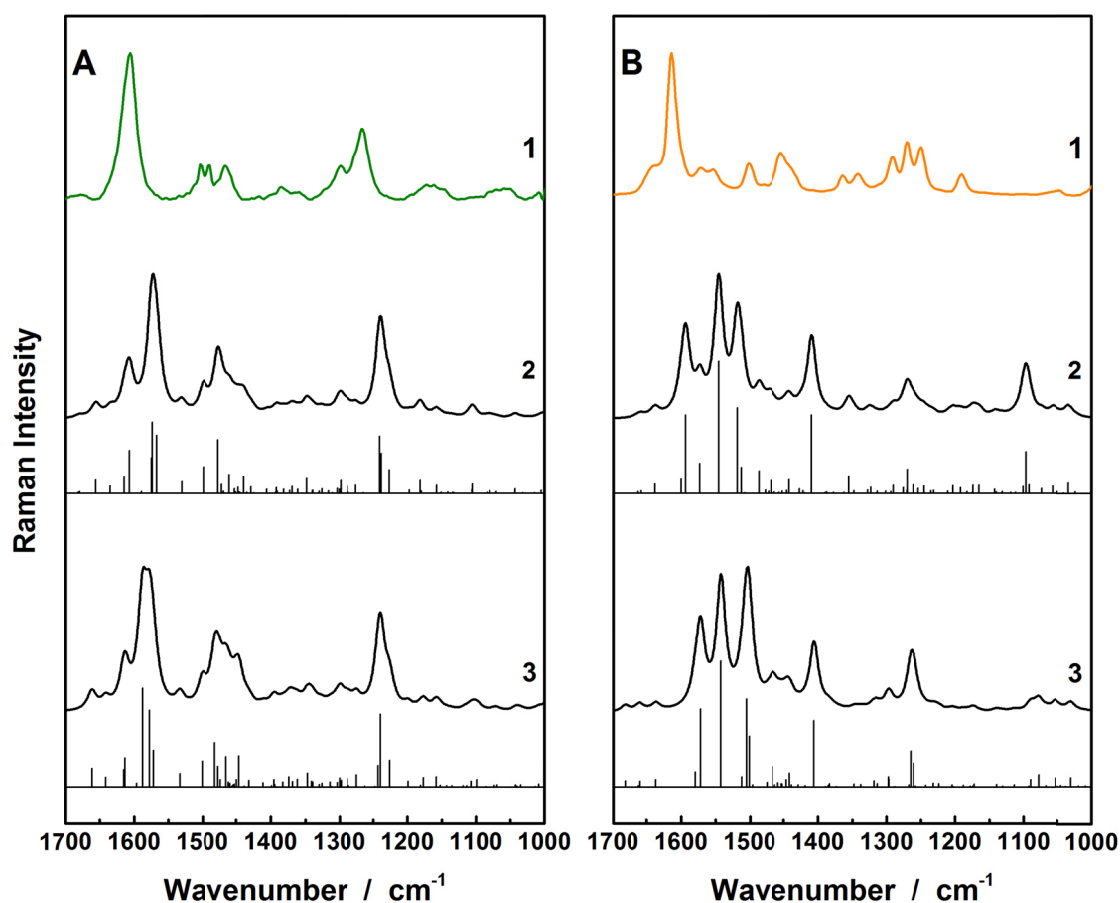


Figure S1

Comparison of the experimental FT-Raman spectra ($\lambda_{\text{exc.}} = 1064 \text{ nm}$) of bilirubin (**A1**) and biliverdin (**B1**) with the calculated Raman spectra (B3LYP/cc-pVTZ) of bilirubin (in water (PCM): **A2** and in gas phase: **A3**) and biliverdin (in water (PCM): **B2** and in gas phase: **B3**). The scaling factors for A were 0.9762 and 0.9809 and for B were 0.9794 and 0.9792 for the gas phase and the PCM calculation, respectively.

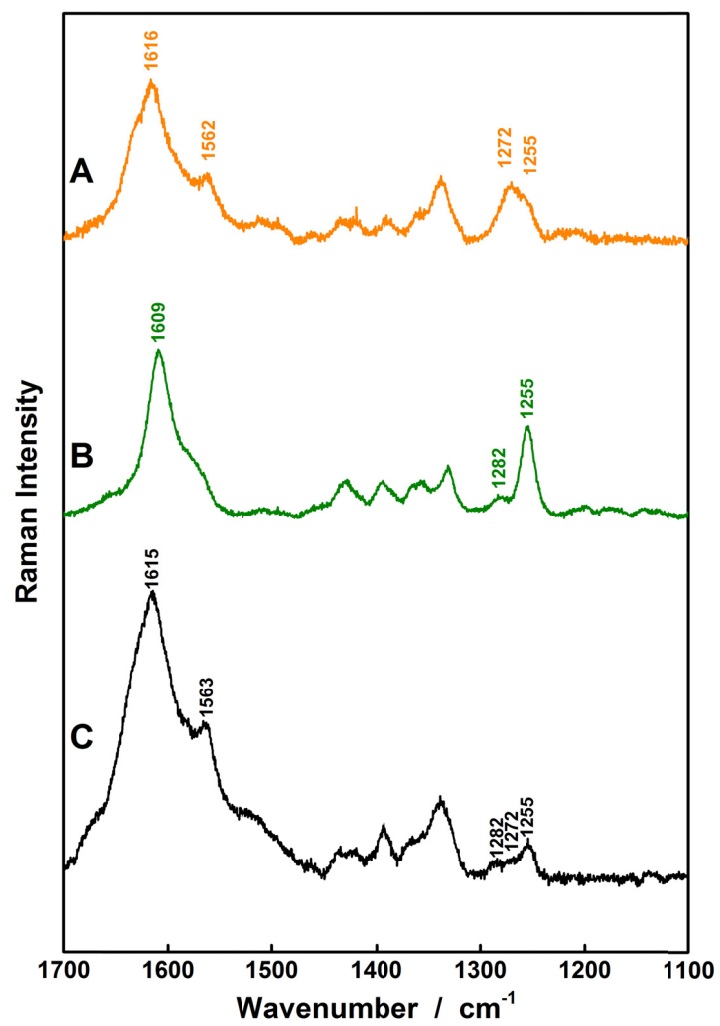


Figure S2

Raman spectra of 100 μM bilirubin (A), 1 μM biliverdin (B), and their mixture (C) with $\lambda_{\text{exc.}} = 364$ nm.