Supporting Information

Indocyanine green (ICG) fluorescence is dependent on monomer with planar and twisted structures and inhibited by H-aggregation

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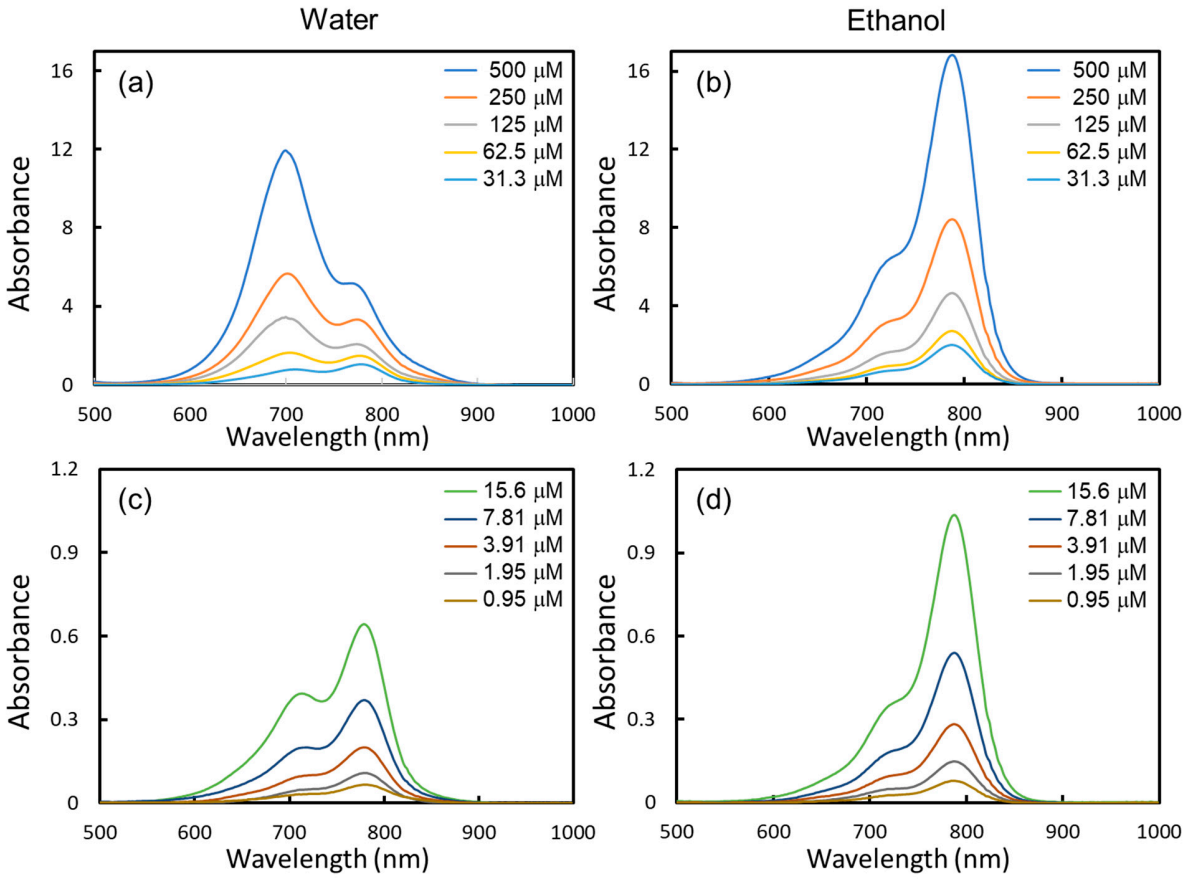


Figure S1. Absorption spectra of ICG dissolved in (a, c) water and (b, d) ethanol for high (500 – 31.3 µM) and low (15.6 – 0.95 µM) concentrations

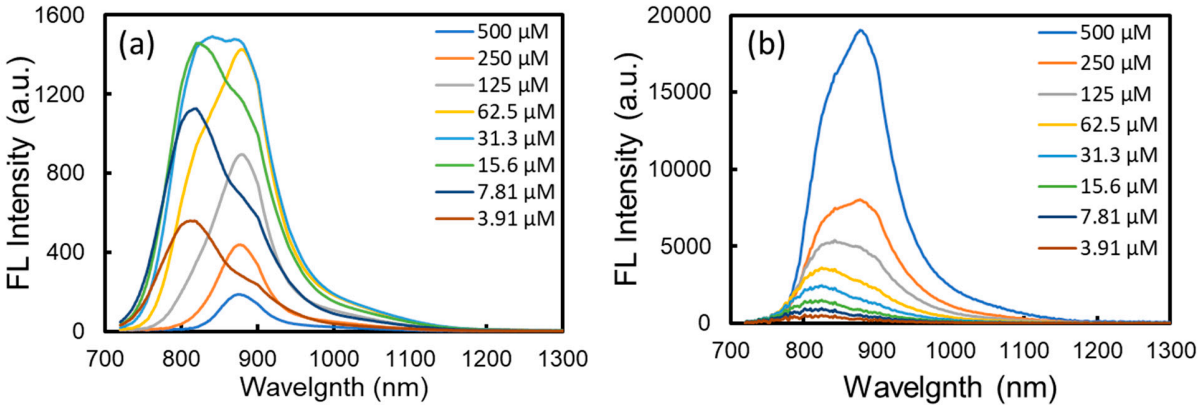


Figure S2. Intensity-corrected fluorescence spectra of ICG in (a) water and (b) ethanol, respectively. The fluorescence intensity was corrected by the sensitivity of a linear InGaAs array detector as provided by the company.

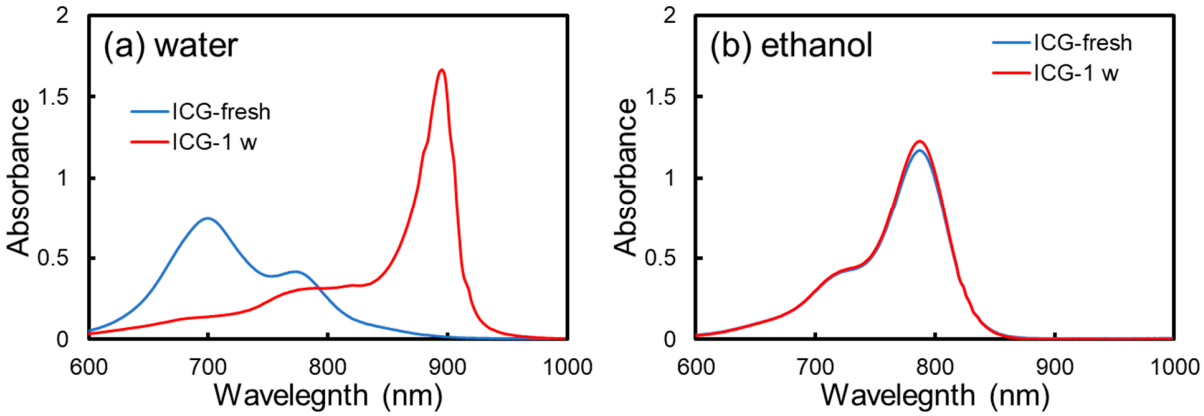


Figure S3. Representative absorption spectra of 125 µM ICG solution in (a) water and (b) ethanol for freshly prepared sample (blue) vs. another sample stored at ambient temperature for one week (red), corresponding to H-aggregates (700 nm), monomer (780 nm), and J-aggregates (890 nm). The absorption spectra of the freshly prepared sample were measured on the same day, while the sample that was stored at room temperature for one week was measured one week later after preparation.