Electronic supplementary information

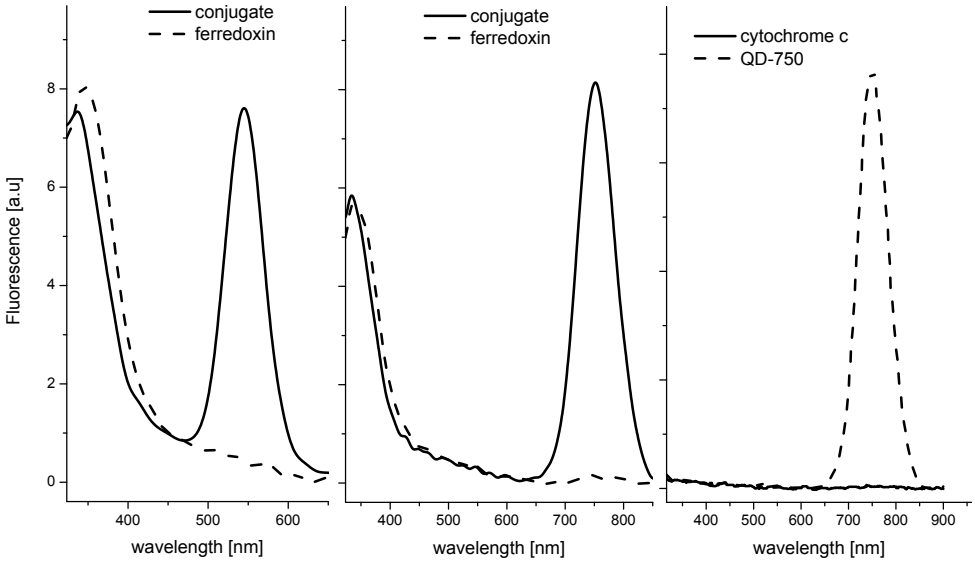

Fig.S-1. Fluorescence emission spectra (extinction at 280 nm) for 1 ml fractions collected during separation of Fd incubated with QD-550 (a) or QD-750 (b) (under illumination), respectively at 13 ml/12 ml (conjugate) and at 16.5 ml (ferredoxin), and during separation of Cyt c incubated with QD-750 (c), respectively at 13 ml (QD-750) and at 17 ml (cytochrome c) For details, see Fig.3

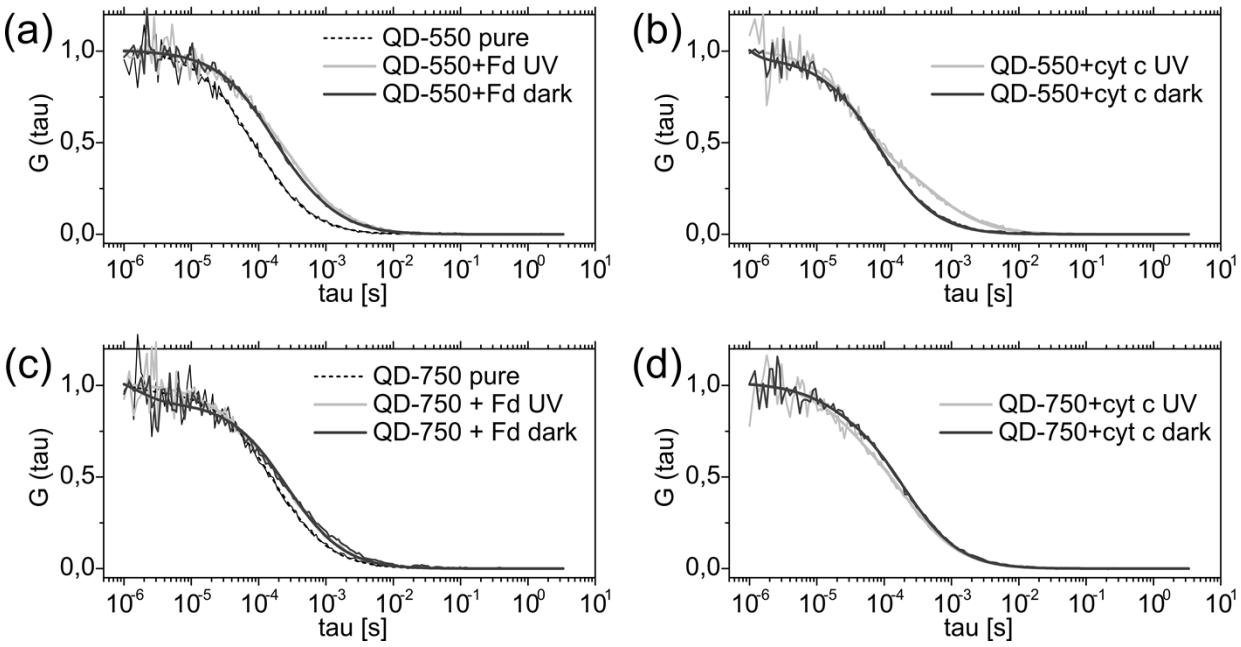

Fig.S-2 Examples of FCS autocorrelation curves, recorded for different experimental variants for pure QDs and after its incubation for 30 min with respective proteins, in darkness or at illumination (a) QD-550 + Fd, (b) QD-550+ Cyt c, (c) QD-750+Fd, (d) QD-750+Cyt c.

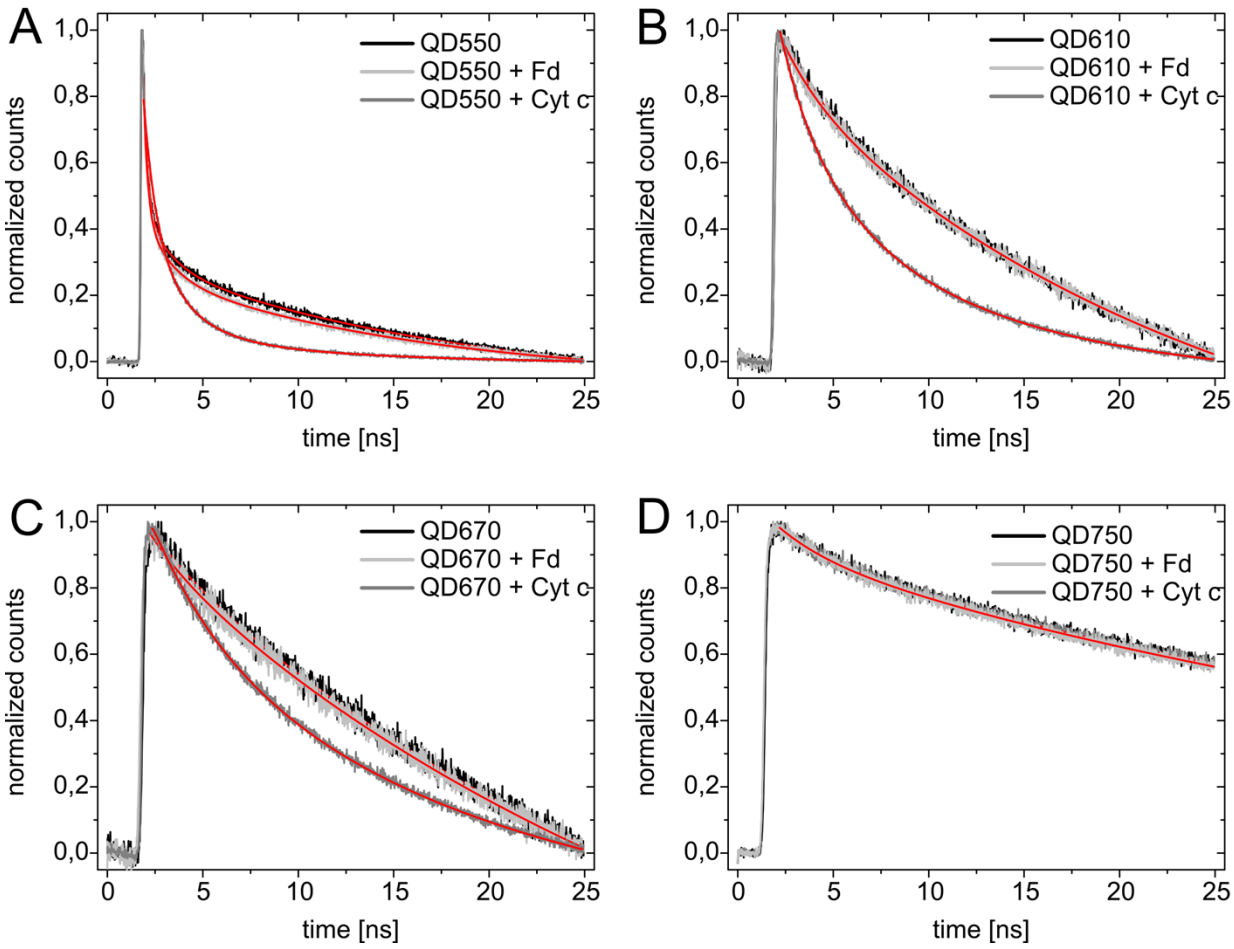

Figure S-3. Normalized luminescence decay curves (representative examples) for pure QDs and their mixture with Fd or Cyt c. Solid lines presents fitted decay.

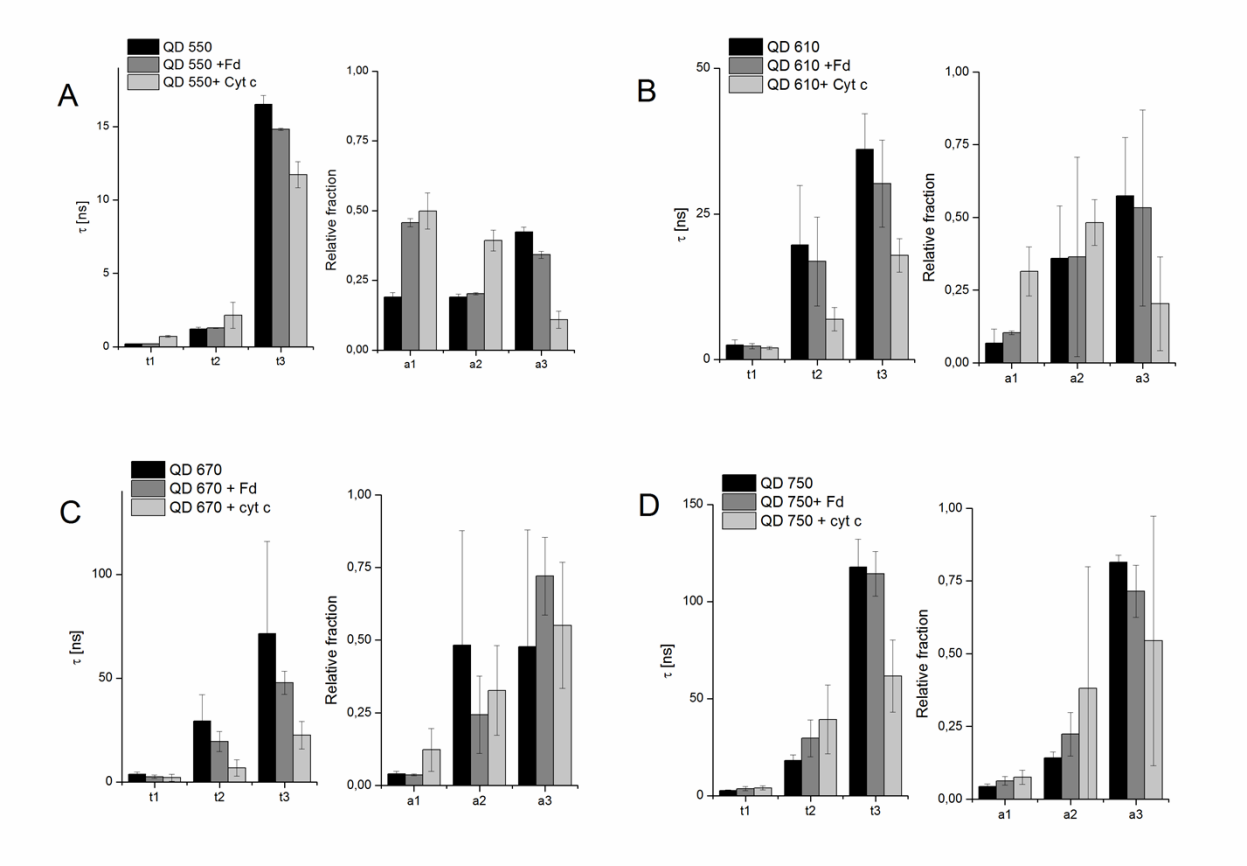

Figure S-4. Detailed characteristics of luminescence decay curves QDs and its mixtures with Fd or Cyt c. Lifetime values (t1, t2, t3) and corresponding relative fractions (a1, a2, a3) were averaged from fitting of decay curves of three independent measurements. Error bars represent SD. Note that values were averaged due to τ, ordered by its increasing length (shortest, medium, longest) and high SD for some experimental cases corresponds to possibility of more than one good fitting.