Electronic Supplementary Material (ESI) for Dalton Transactions.
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Supporting Information to Paper

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PRIMARY PHOTOCHEMICAL PROCESSES FOR Pt(IV) DIAZIDO COMPLEXES PROSPECTIVE IN PHOTODYNAMIC THERAPY OF TUMORS

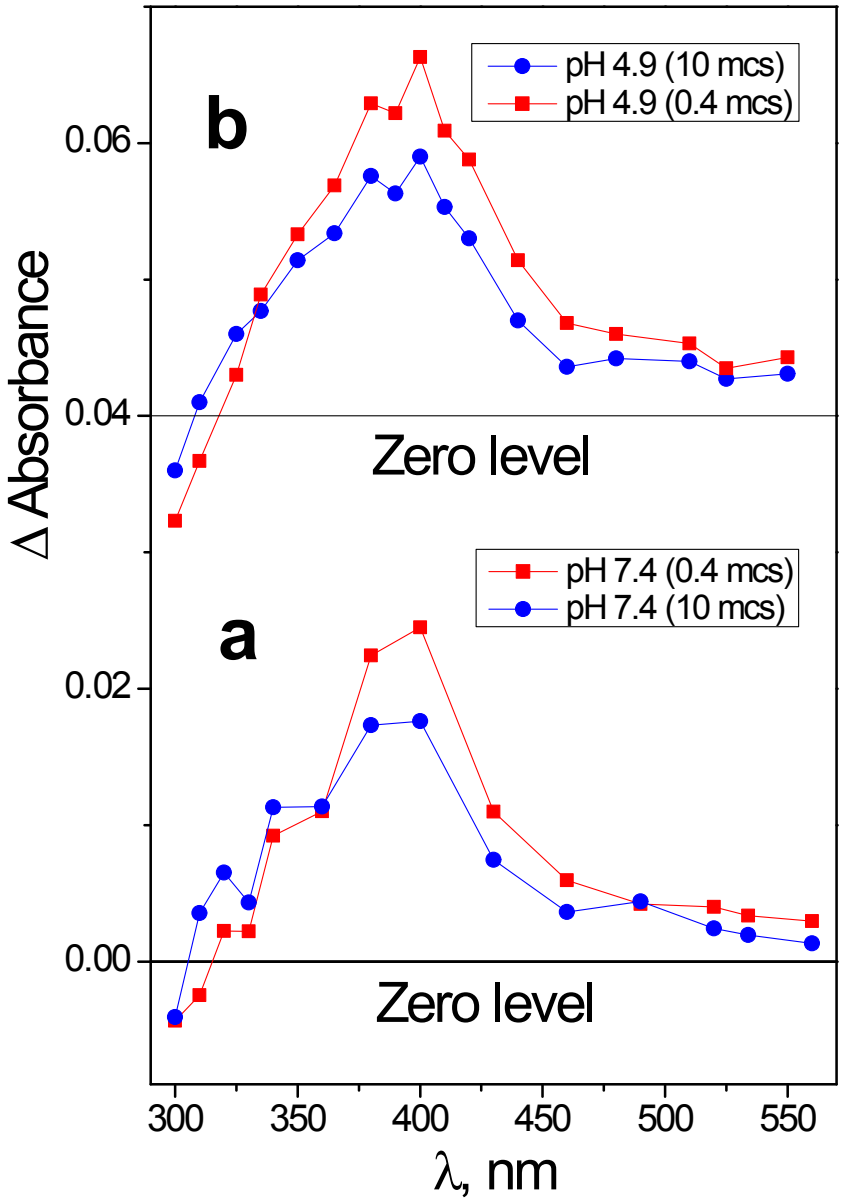

Figure S1. Results of laser flash photolysis (266 nm, 1 cm cell; air saturated solutions) experiment with complex **1** in water. Intermediate absorption spectra. Red and blue curves correspond to time delays 0.4 and 10 μs after the laser pulse. **a** - pH 7.4, initial concentration 5.8×10^{-5} M, average laser energy 4.4 mJ/pulse. **b** (shifted up to 0.04) – - pH 4.9, initial concentration 4.2×10^{-5} M, average laser energy 4.1 mJ/pulse.

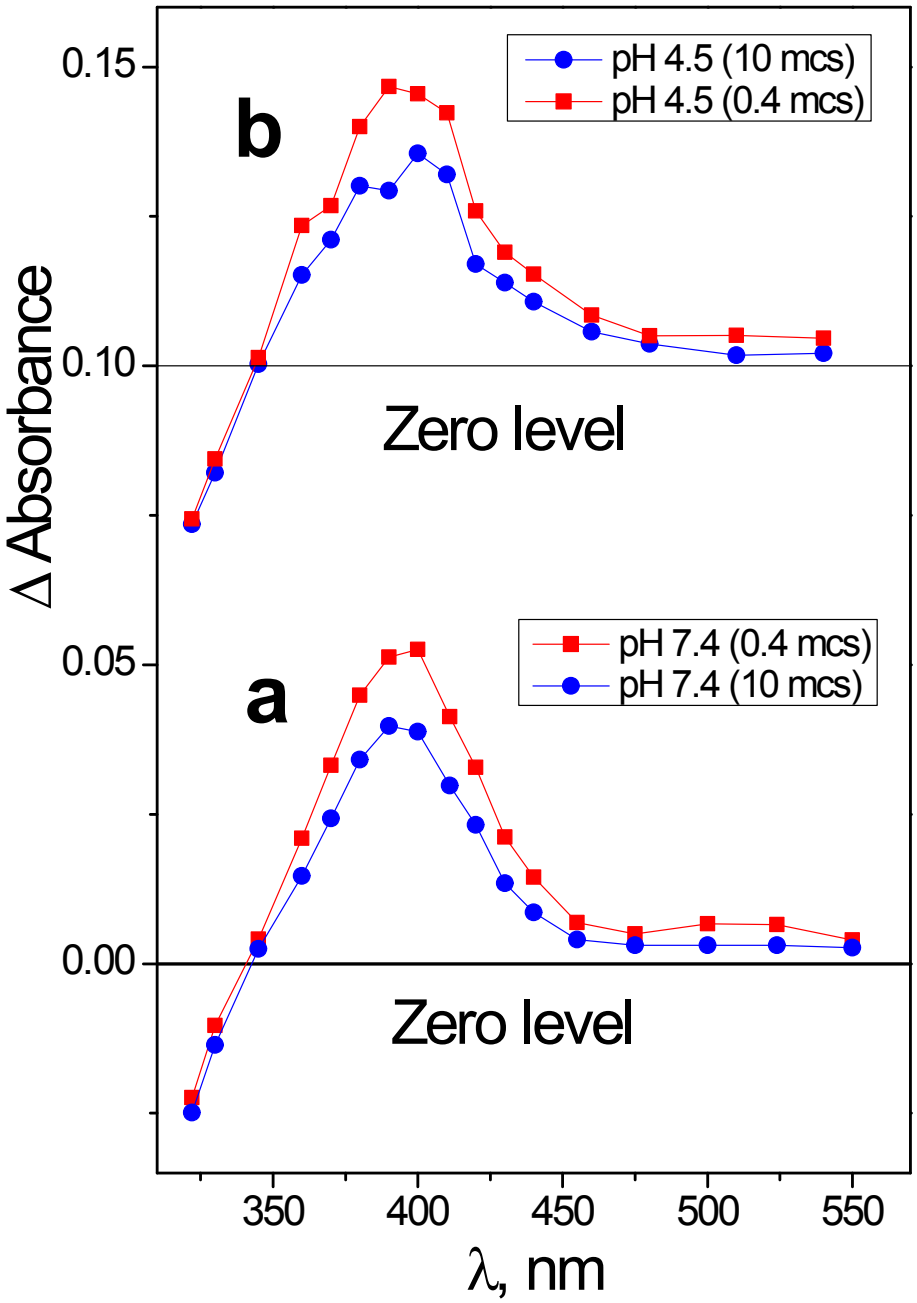

Figure S2. Results of laser flash photolysis (266 nm, 1 cm cell; air saturated solutions) experiment with complex **2** in water. Intermediate absorption spectra. Red and blue curves correspond to time delays 0.4 and 10 μs after the laser pulse. **a** - pH 7.4, initial concentration 5.8×10^{-5} M, average laser energy 4.5 mJ/pulse. **b** (shifted up to 0.1) – - pH 4.9, initial concentration 5.0×10^{-5} M, average laser energy 4.0 mJ/pulse.

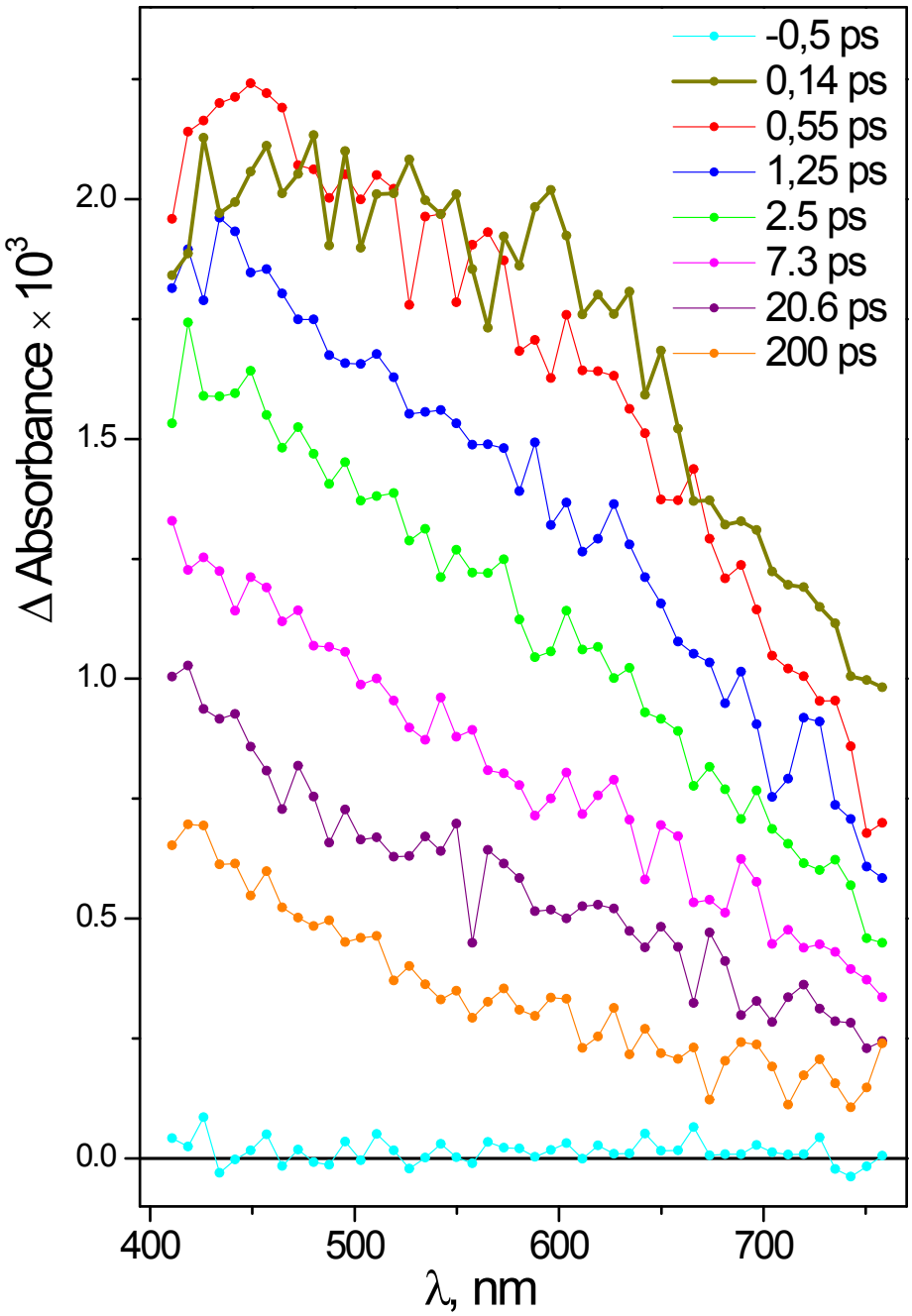

Figure S3. Results of ultrafast kinetic spectroscopy experiment (λ_{pump} = 320 nm) with complex **1** in water (pH 7.4; initial concentration 2.5×10^{-3} M; 1 mm cell). Time evolution of intermediate absorption spectrum. Spectra are corrected for the coherent solvent artifact.

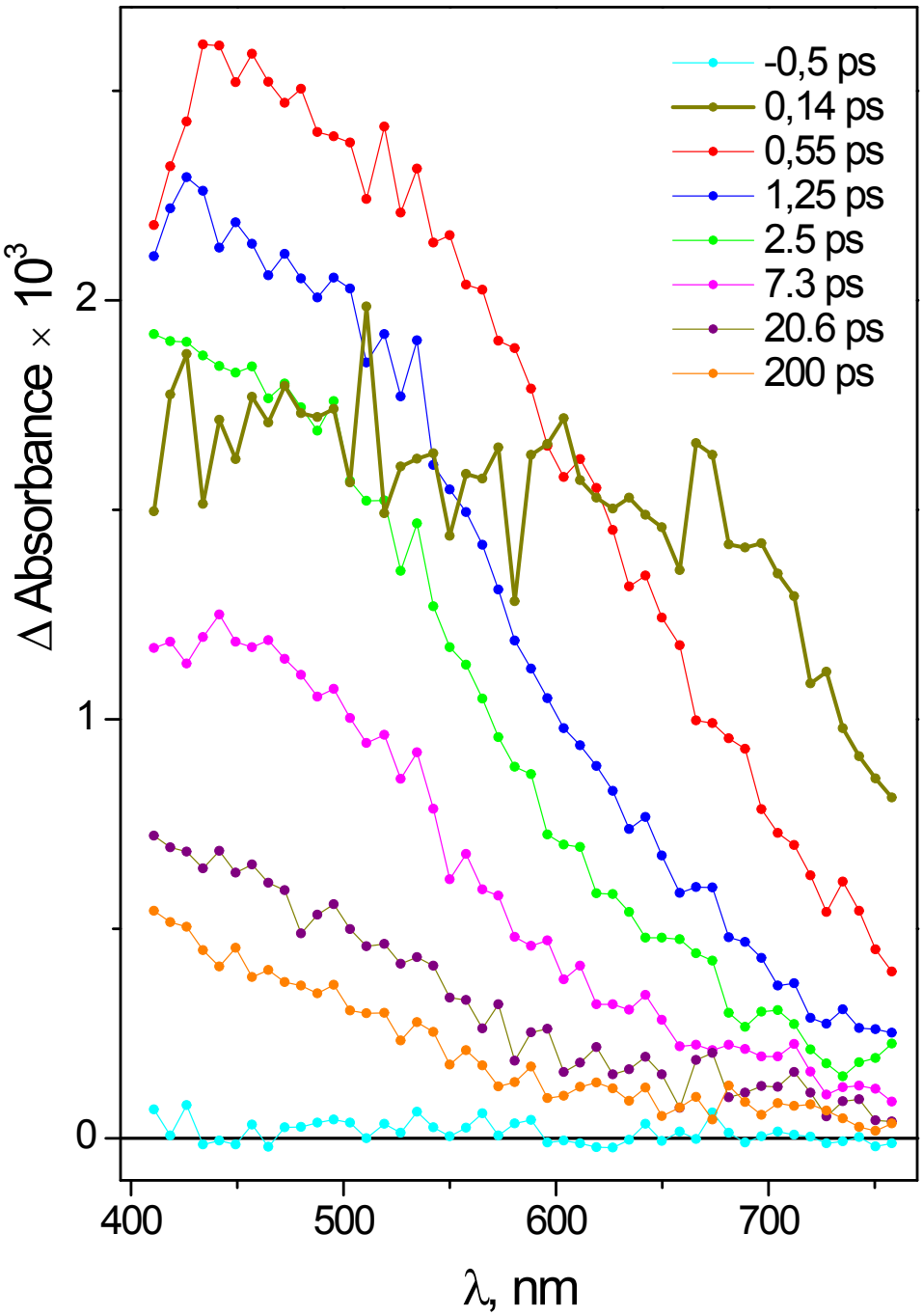

Figure S4. Results of ultrafast kinetic spectroscopy experiment (λ_{pump} = 320 nm) with complex **2** in water (pH 7.4; initial concentration 1.2×10^{-3} M; 1 mm cell). Time evolution of intermediate absorption spectrum. Spectra are corrected for the coherent solvent artifact.

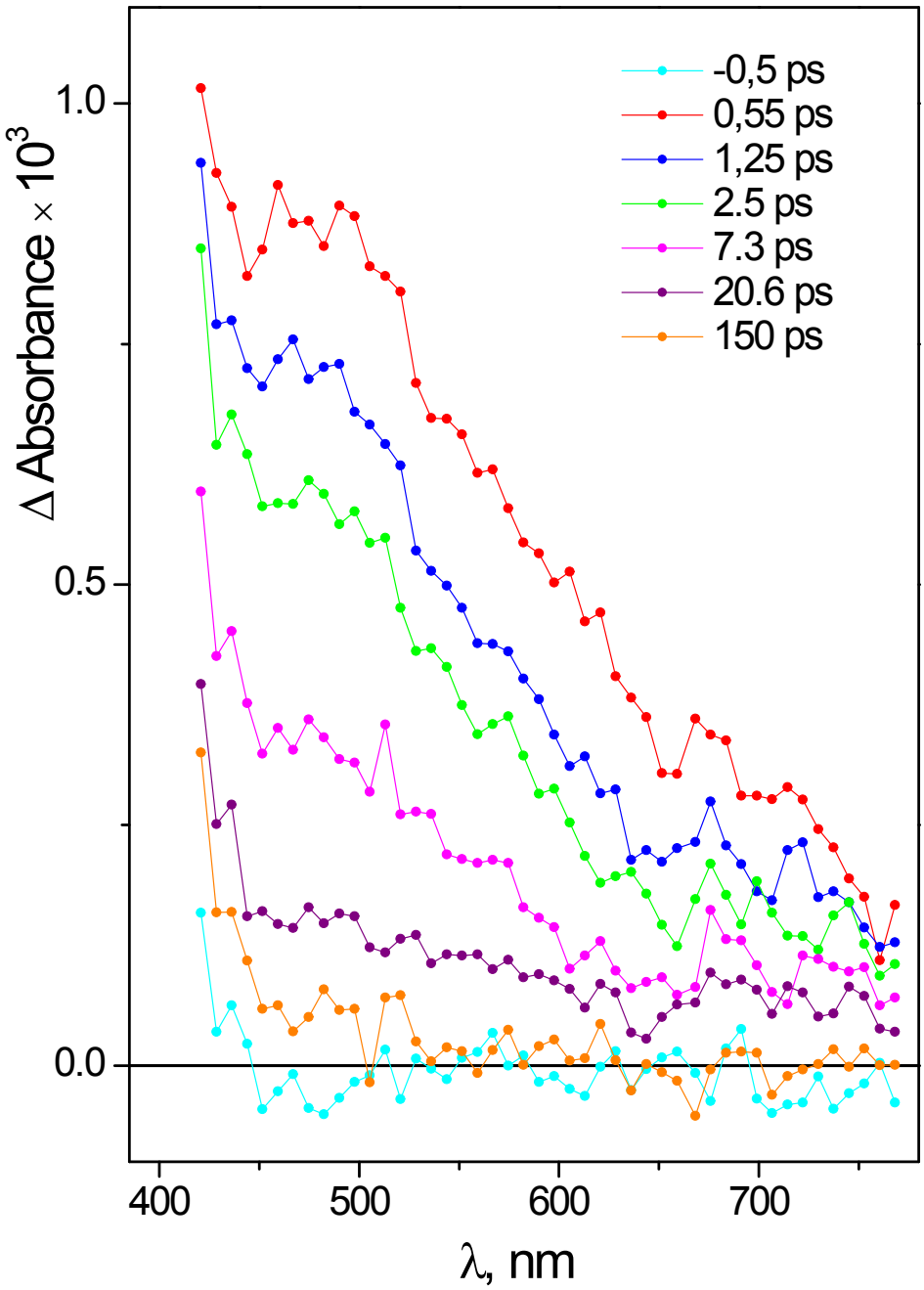

Figure S5. Results of ultrafast kinetic spectroscopy experiment (λ_{pump} = 400 nm) with complex **2** in water (pH 7.4; initial concentration 2.75×10^{-3} M; 1 mm cell). Time evolution of intermediate absorption spectrum. Spectra are corrected for the coherent solvent artifact.

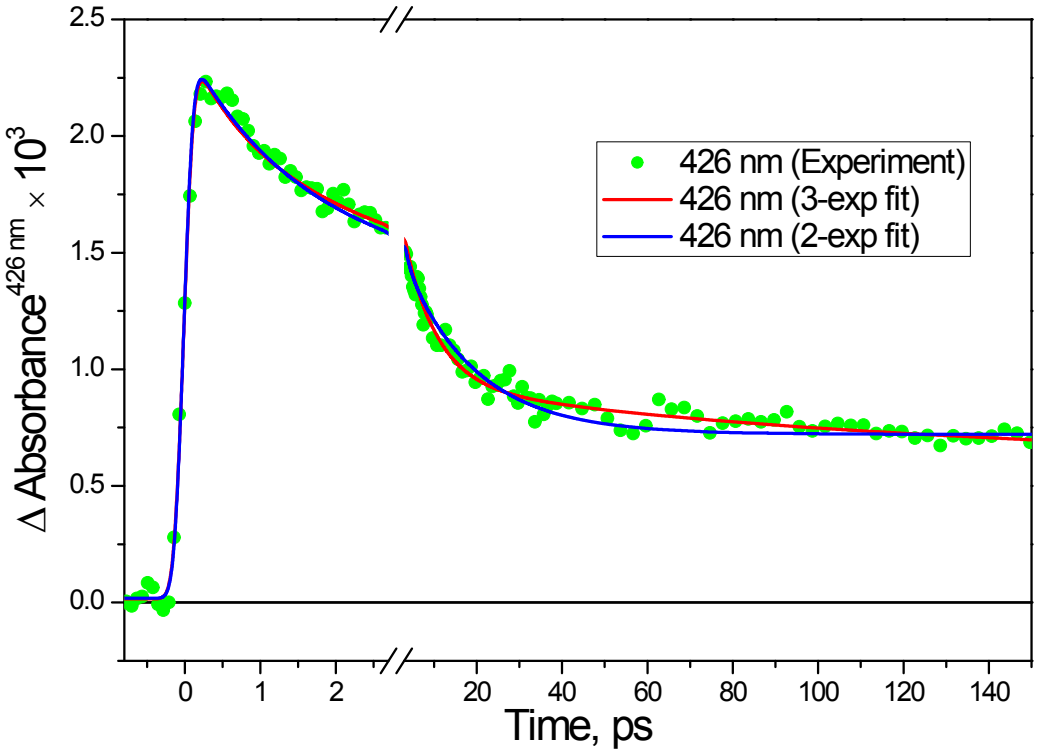

Figure S6. Green dots - initial part of the kinetic curve (λ_{pump} = 320 nm, λ_{probe} = 426 nm) recorded after excitation of complex **1** in water (pH 7.4; initial concentration 2.5×10^{-3} M; 1 mm cell). Blue and red lines correspond to 2-exponential and 3-exponential fits (with residuals). Kinetic curve was corrected for the coherent solvent artifact by subtracting the second derivative of Gaussian function.

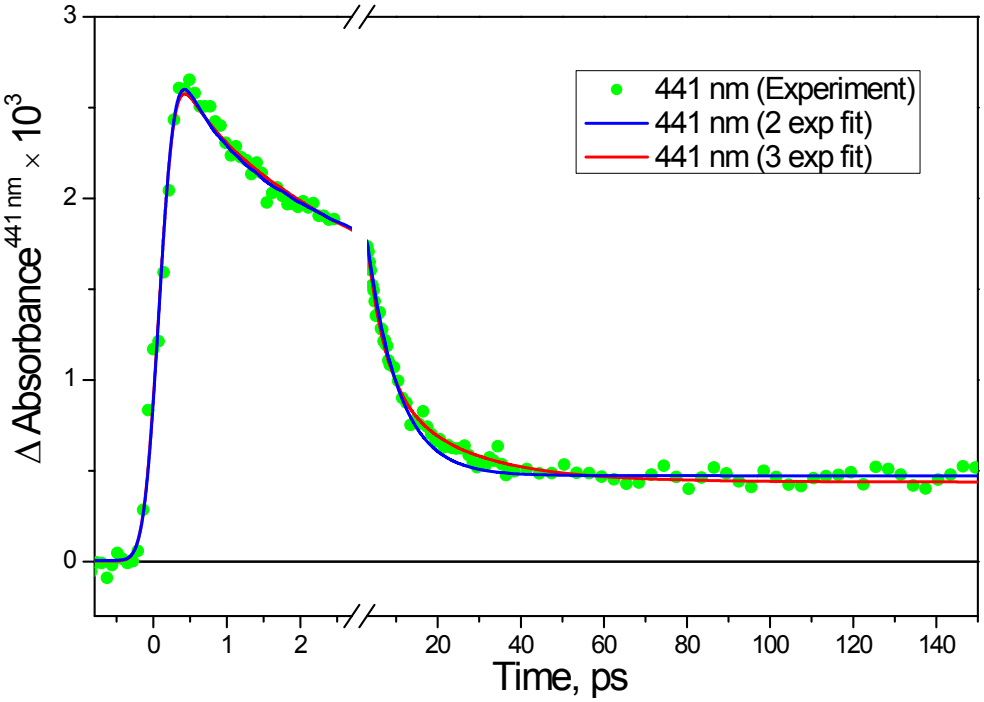

Figure S7. Green dots - initial part of the kinetic curve (λ_{pump} = 400 nm, λ_{probe} = 441 nm) recorded after excitation of complex **1** in water (pH 7.4; initial concentration 1.2×10^{-3} M; 1 mm cell). Blue and red lines correspond to 2-exponential and 3-exponential fits (with residuals). Kinetic curve was corrected for the coherent solvent artifact by subtracting the second derivative of Gaussian function.

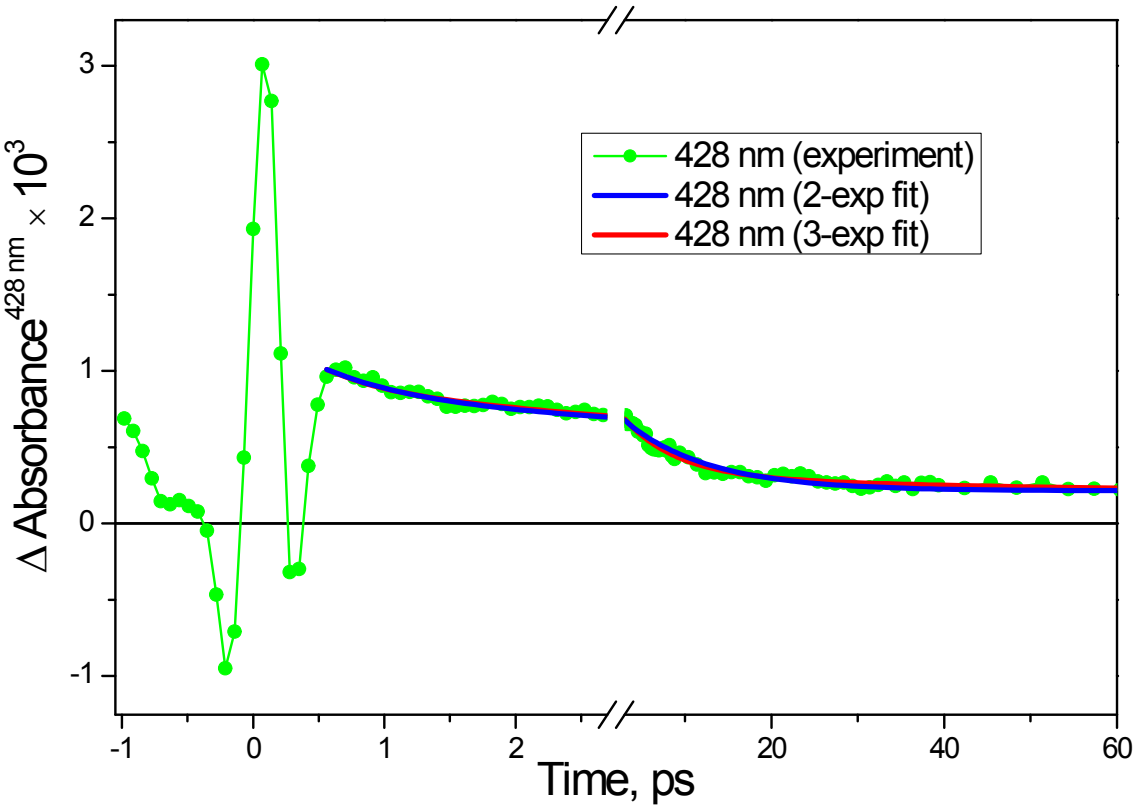

Figure S8. Green dots - initial part of the kinetic curve (λ_{pump} = 400 nm, λ_{probe} = 428 nm) recorded after excitation of complex **1** in water (pH 7.4; initial concentration 2.75×10^{-3} M; 1 mm cell). Solvent artifact is presented. Blue and red lines correspond to coinciding 2-exponential and 3-exponential fits with residuals. Experimental points with t < 0.5 ps were excluded from fitting. To avoid influence of the coherent artifact, fitting was started from 0.56 ps.