Supplementary Information

Monitoring Ultrafast Intramolecular Proton Transfer Processes in an Unsymmetric β-Diketone

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Results from the global analysis

Fig. S1 Evolution-associated difference spectra (EADS) obtained from the global fitting of the transient absorption data of BZA in acetonitrile after excitation with 335 nm. The UV region corresponds to Fig. 2a of the manuscript (top panel), the UV and visible region corresponds to Fig. 2b of the manuscript (bottom panel).





Fig. S2 Transient absorption map in (a) the UV and (b) the visible region of benzoylacetone (BZA) in hexane after excitation with 335 nm. Note that the time delay is plotted on a linear scale up to 2 ps and then on a logarithmic scale. The "uneven" Δ Absorbance (mOD) between 260 and 280 nm is due to the characteristic of the utilized spectral filter (see Experimental Methods in the main manuscript)



Transient absorption of DBM in hexane in the UV and the VIS region

Fig. S3 Transient absorption map in (a) the UV and (b) the visible region of dibenzoylmethane (DBM) in hexane after excitation with 340 nm. Note that the time delay is plotted on a linear scale up to 2 ps and then on a logarithmic scale. The "uneven" Δ Absorbance (mOD) between 260 and 280 nm is due to the characteristic of the utilized spectral filter (see Experimental Methods in the main manuscript)