Supporting Informations:

Understanding the Aggregation Induced Emission Enhancement for a Compound with Excited State Intramolecular Proton Transfer Character

Rui Hu,a Shayu Li,*a Yi Zeng,b Jinping Chen,b Shuangqing Wang,a Yi Li,*b and Guoqiang Yang*a

a Beijing National Laboratory for Molecular Sciences, Key laboratory of Photochemistry, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China. Fax: +86-10-82617315; Tel: +86-10-82617263. E-mail: gqyang@iccas.ac.cn, shayuli@iccas.ac.cn

b Key Laboratory of Photochemical Conversion and Optoelectronic Materials, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China, E-mail: yili@mail.ipc.ac.cn.

Figure S1. Absorption (a) and fluorescence (b) spectra of BTHPB in CH3CN, THF, EtOEt, respectively. concentration: 1.0×10^{-5} M; excitation at 360 nm
Figure S2. Image of BTHPB aggregates.

Figure S3. Excitation spectrum of BTHPB in cyclohexane (■) and water (□). Concentration: $1.0 \times 10^{-5}$ M. $\lambda_{em} = 509$ nm.

Figure S4. a) Absorption and fluorescence spectra of BTHPB in basic water (PH = 11); b) excitation spectrum of BTHPB in basic water (PH = 11), excitation at 385 nm. Concentration: $1.0 \times 10^{-5}$ M.
Figure S5. Kinetic traces of the transient absorption signals for BTHPB in THF, and the fits for the detection wavelengths 530 nm (△) and 660 nm (■).

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<tr>
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<th>Dipole moment (debye)</th>
<th>electronic transitions &amp; oscillator strengths</th>
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<tbody>
<tr>
<td>Ground state of enol tautomer</td>
<td>4.54 X=0.7992  Y=4.4564  Z=0.3262</td>
<td>HOMO-LUMO 3.54 eV (0.878)</td>
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<tr>
<td>Lowest excited state of keto tautomer</td>
<td>4.96 X=0.7313  Y=4.9068  Z=0.2495</td>
<td>HOMO-LUMO 2.53 eV (0.135)</td>
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