

## Supporting Information for

### From Live Cells to *C. elegans*: Selective Staining and Quantification of Lipid Structures Using a Fluorescent Hybrid Benzothiadiazole Derivative

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Figure S1 \_\_\_\_\_ Page S2

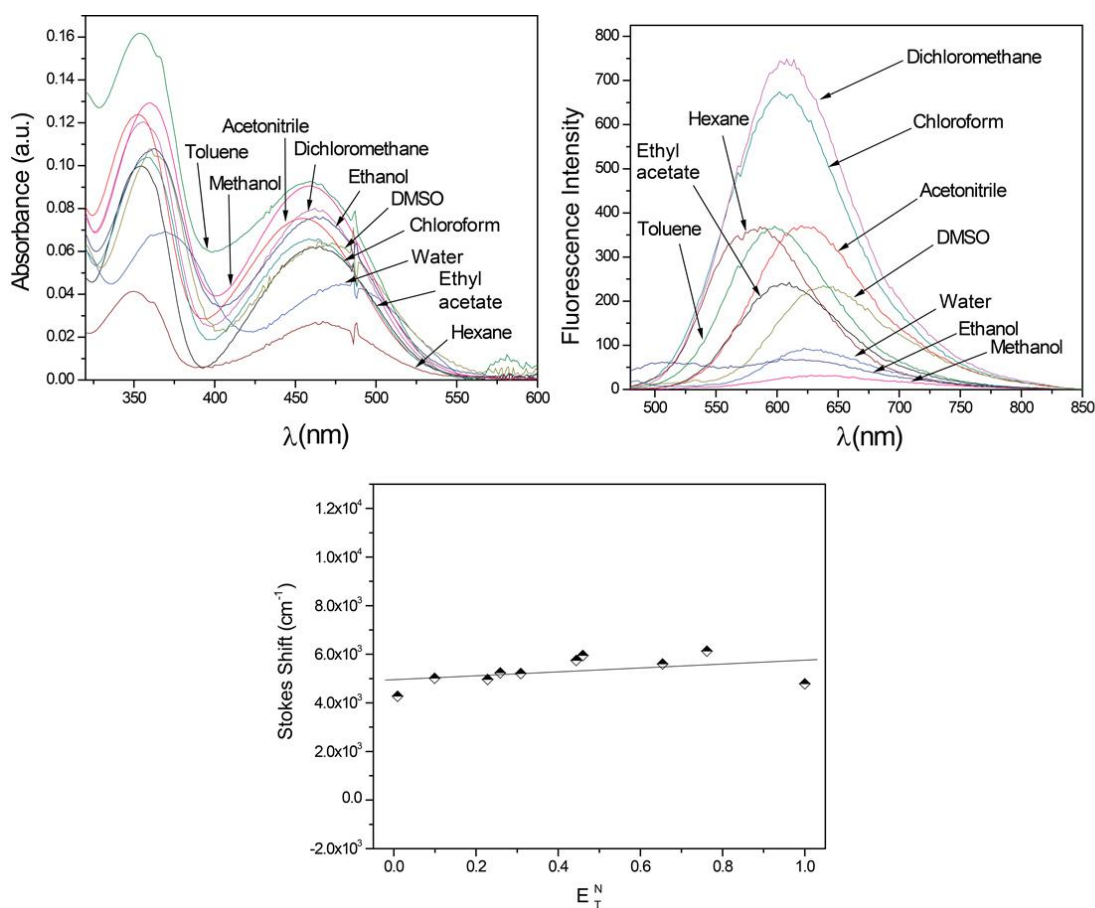
Figure S2 \_\_\_\_\_ Page S2

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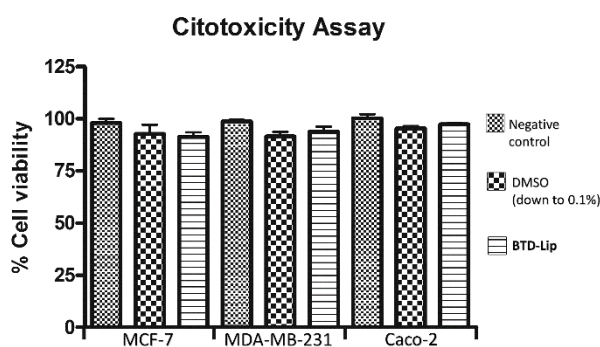
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**Figure S1.** UV-Vis, fluorescent emission and Stokes shift ( $\text{cm}^{-1}$ ) vs.  $E_T^N$  values for the tested solvents of the new fluorescent **BTD-Lip**. 10  $\mu\text{M}$  concentration for all analyses.



**Figure S2.** Cell viability assays. No statistically significant cytotoxic effect in the samples incubated with **BTD-Lip** (24 hours) was noted. The incubation in the presence of DMSO (down to 0.1%) was used as a positive control due to its already known cytotoxic effect with concentration dependence. Samples maintained only in the culture medium were used as negative control.

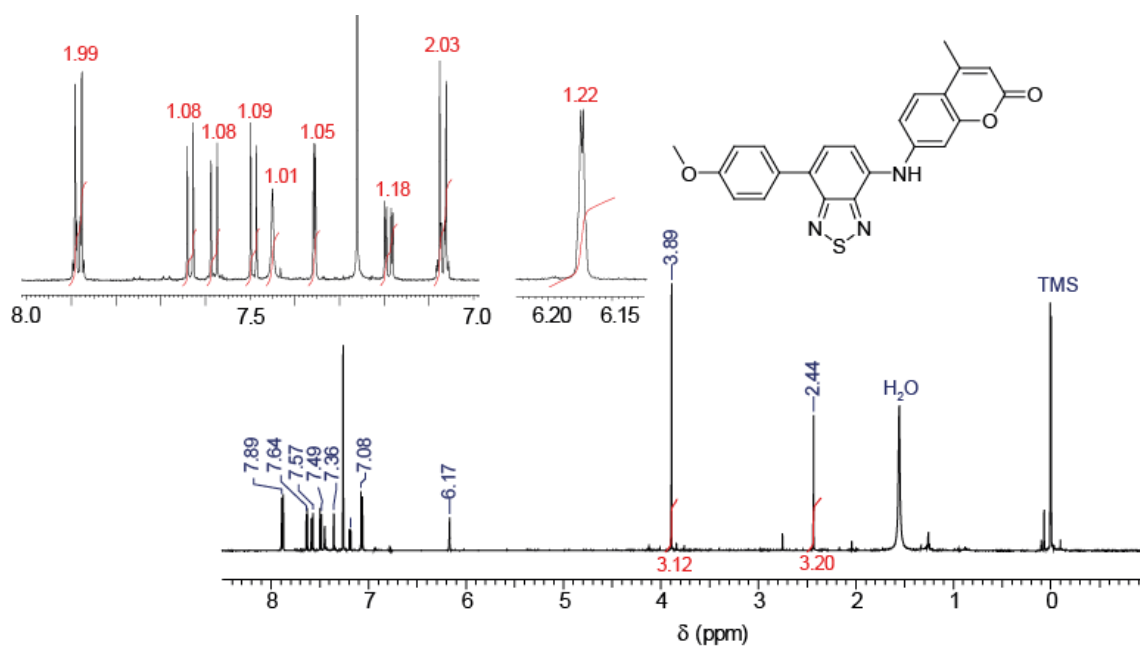


Figure S3. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 600 MHz) of BTD-Lip.

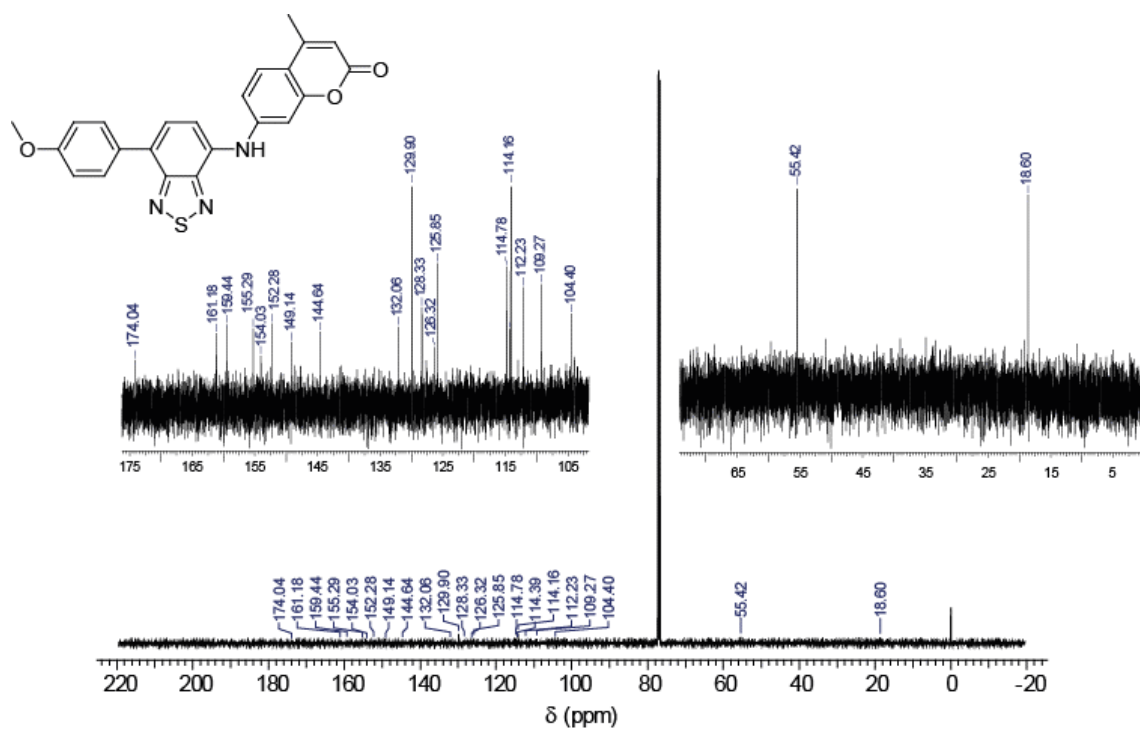
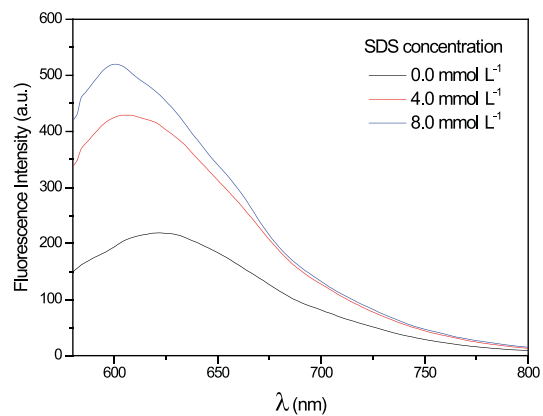
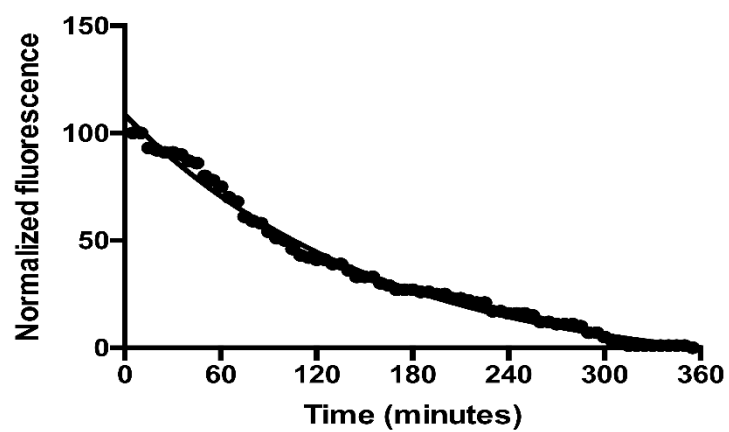


Figure S4. <sup>13</sup>C NMR (CDCl<sub>3</sub>, 150 MHz) of BTD-Lip.



**Figure S5.** Fluorescence intensity of **BTD-Lip** (10 μM) below and above the critical micellar concentration of SDS.



**Figure S6.** Photostability assay.