

Electronic Supporting Information

A fluorescent molecular rotor for the *in situ* imaging of latent fingerprints

Na-Eun Choi, Eun-Ji Kim, and Jiyoun Lee *

School of Biopharmaceutical and Medical Sciences, Sungshin University, Seoul 01133,

Republic of Korea

Figure S1. Normalized (a) absorbance and (b) emission spectra for **LFP-1** in various solvents

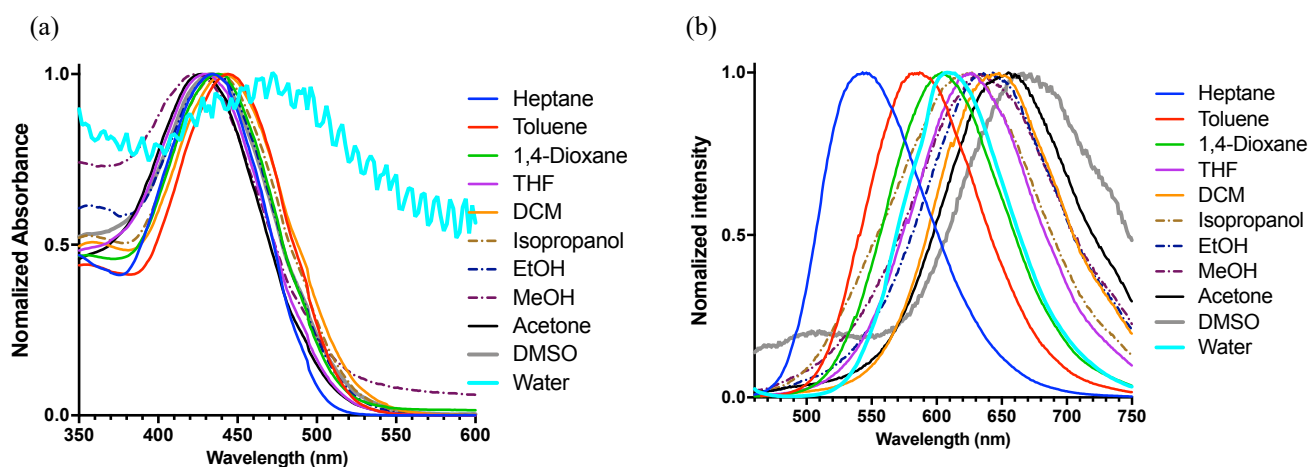


Figure S2. Changes in fluorescence signals and emission maxima in different fractions of heptane-THF mixtures (a), and heptane-corn oil mixtures.

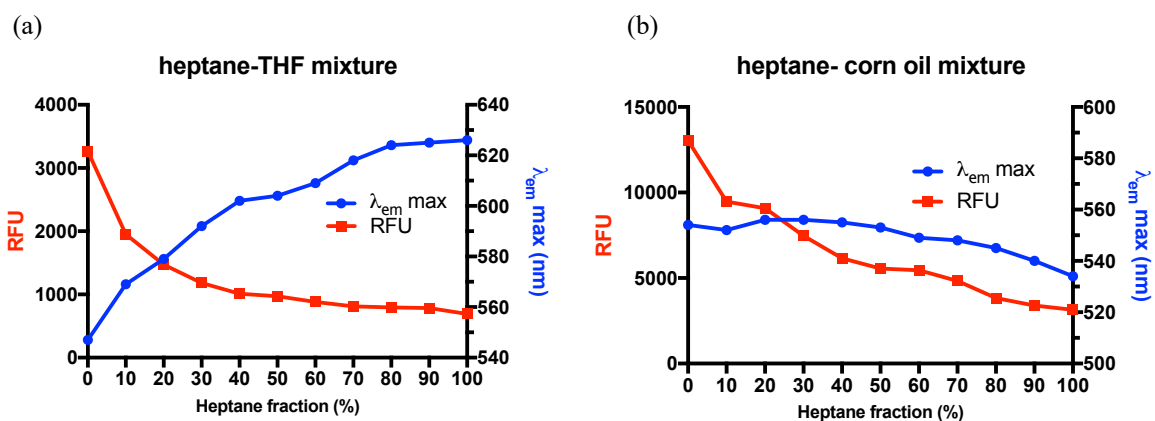


Figure S3. Cytotoxicity of LFP-1 tested in HeLa cells

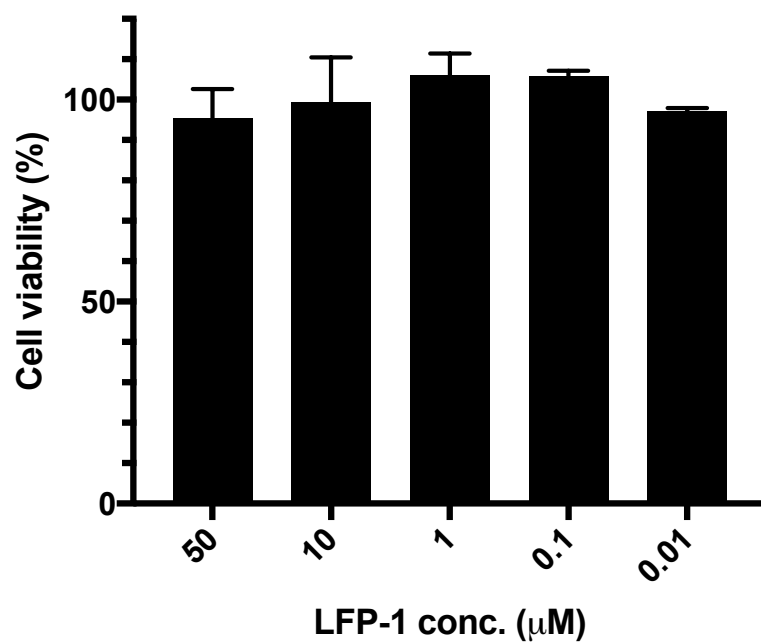


Figure S4. Photographs of fingerprints deposited on glass slides developed with aqueous LFP-1 at different concentrations.

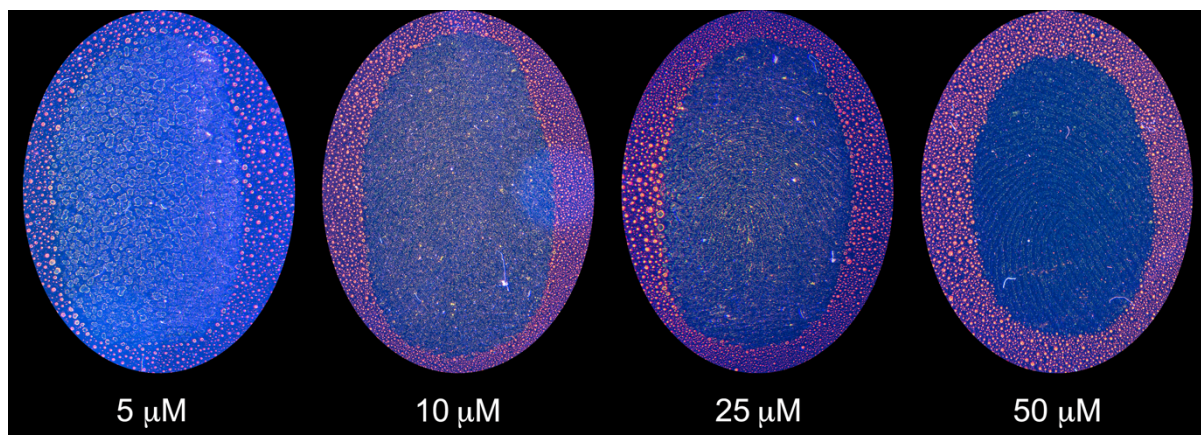
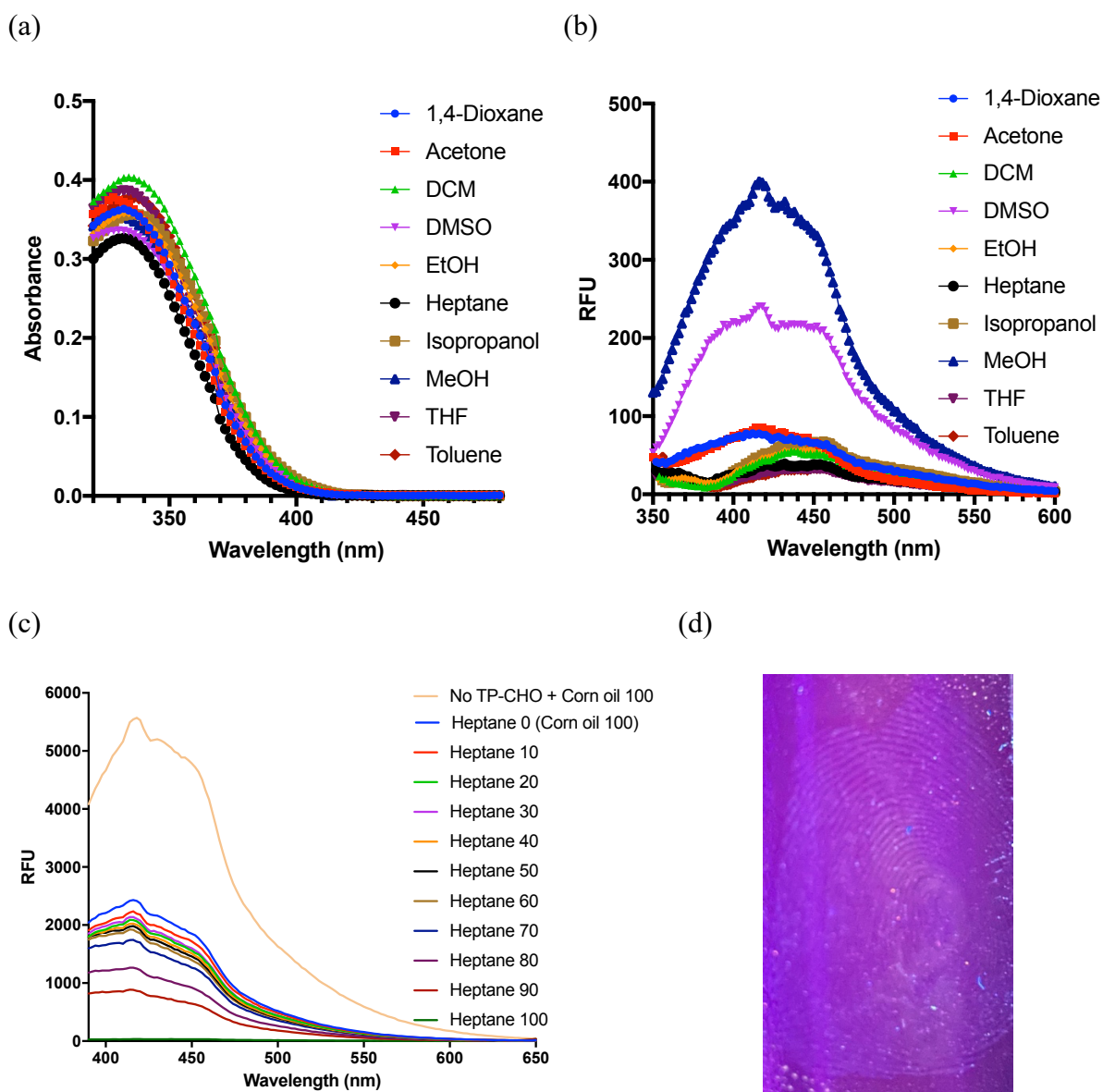
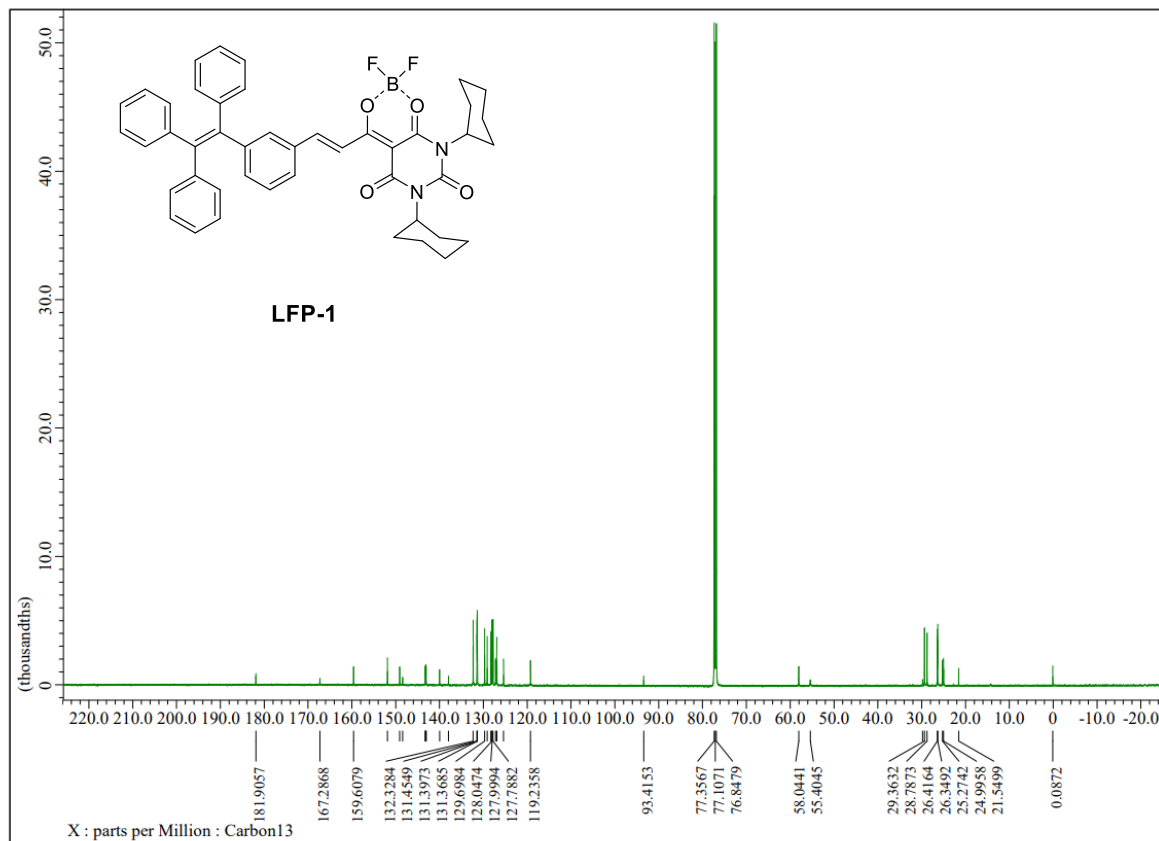


Figure S5. Spectroscopic analysis and latent fingerprint visualization of compound **2**. Absorbance (a) and emission (b) spectra of compound **2** (25 μM); (c) emission spectra of **2** in heptane/corn oil mixture; (d) digital picture of the latent fingerprint on a glass slide developed by spraying compound **2** under UV light (365 nm) illumination.



¹³C NMR of LFP-1



¹⁹F NMR of LFP-1

