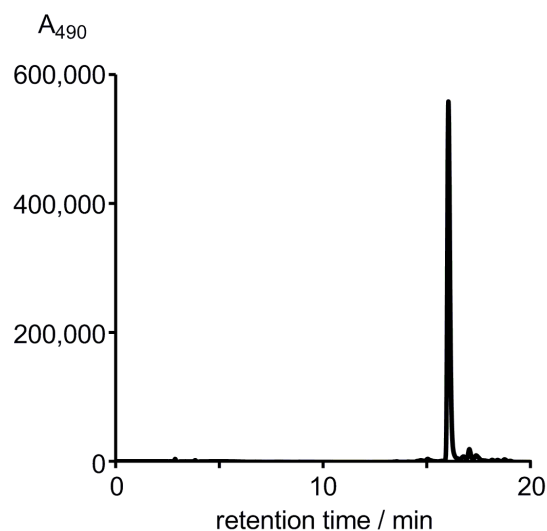


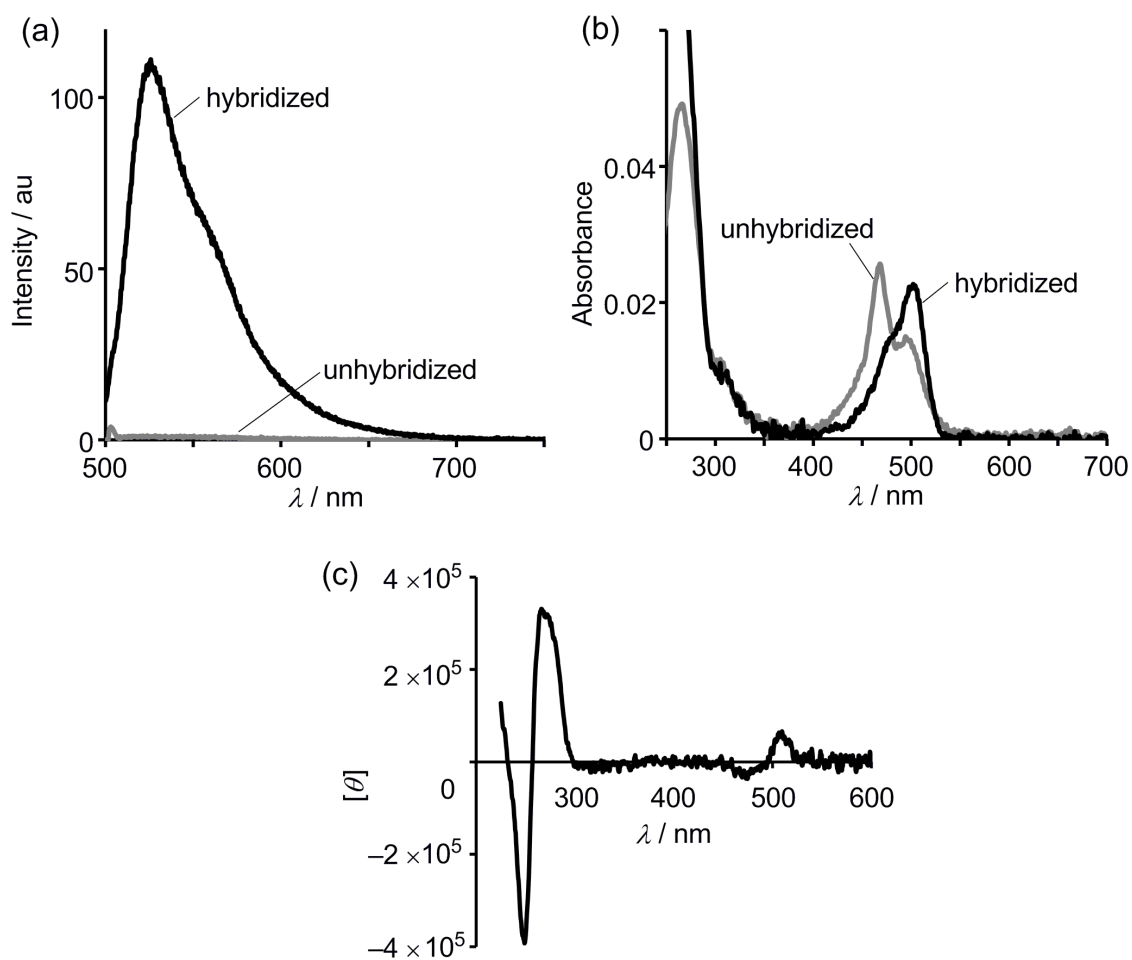
**A nucleic acid probe labeled with desmethyl thiazole orange: A new type of hybridization-sensitive fluorescent oligonucleotide for live-cell RNA imaging**

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**Supplementary Information**



**Fig. S1.** HPLC profile after the synthesis of a D'<sub>505</sub>-containing oligonucleotide. TTTTTTD'<sub>505</sub>-TTTTTT was analyzed by HPLC (elution with a solvent mixture of 0.1 M triethylamine acetate, pH 7.0, linear gradient over 30 min from 5% to 42.5% acetonitrile at a flow rate of 3.0 mL/min).



**Fig. S2** Emission, absorption, and CD spectra of  $D'_{505}$ -containing ODN ODN2( $D'_{505}$ ), TTTTTT $D'_{505}$ TTTTTT. Emission and absorption spectra of the probes ( $0.4 \mu\text{M}$ ) were measured in the presence or absence of the complementary RNA in 50 mM sodium phosphate (pH = 7.0) containing 100 mM sodium chloride. (a) Emission spectra on excitation at 505 nm; (b) absorption spectra; (c) CD spectrum of the hybrid.