Electronic Supplementary Material (ESI) for Analytical Methods.

Supplementary Material

Split aptamer-based imaging solution for visualization of latent fingerprints

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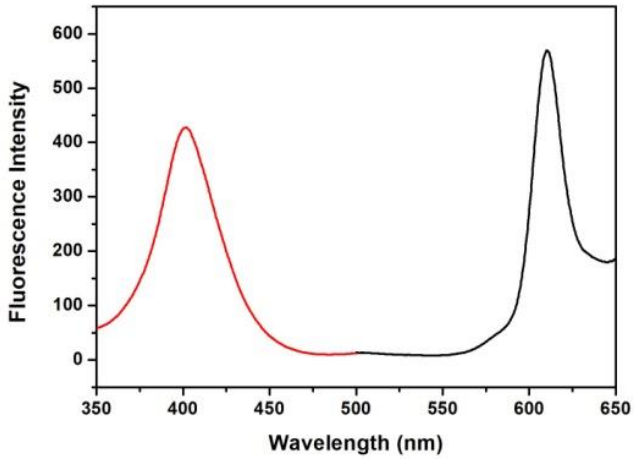

Fig. S1 Fluorescent excitation (red curve) and emission spectra of the G-quadruplex/NMM complex (black curve).

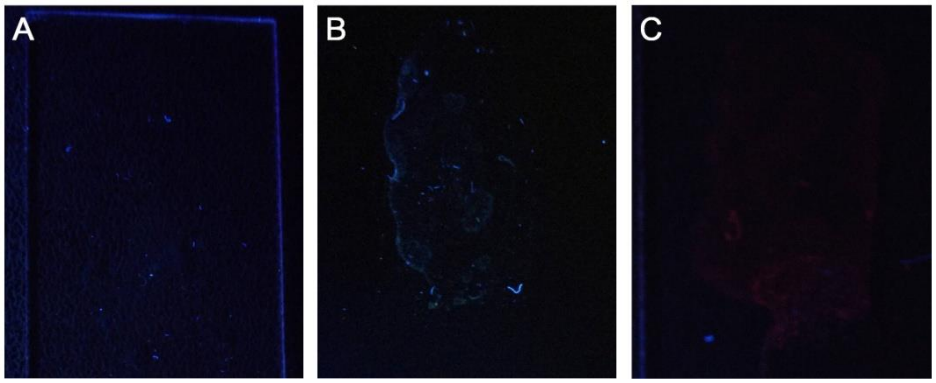

Fig. S2 Photographs of different treated LFPs under UV irradiation: (A) without any treatment; (B) treated with DNA solution consisted of AP1 and AP2; (C) treated only with NMM solution.

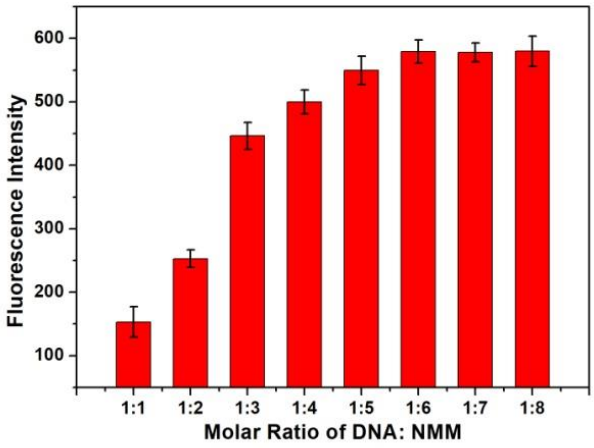

Fig. S3 Fluorescence intensity of the mixed solution of lysozyme and imaging solution with different molar ratio of DNA: NMM. The concentration of lysozyme was 0.25 mg/mL, the imaging solution consists of 1 μM AP1, 1 μM AP2, and different concentrations of NMM. Here DNA represents AP1 and AP2, and its concentration was denoted by AP1 concentration. The error bars represent the standard deviation of three independent measurements.

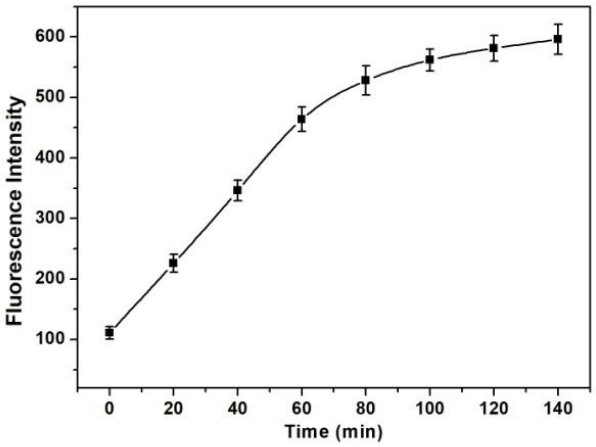

Fig. S4 Fluorescence intensity of the mixed solution of lysozyme and imaging solution observed after different reaction time. The concentration of lysozyme was 0.25 mg/mL, the imaging solution consists of 1 μM AP1, 1 μM AP2, and 6 μM NMM. The error bars represent the standard deviation of three independent measurements.

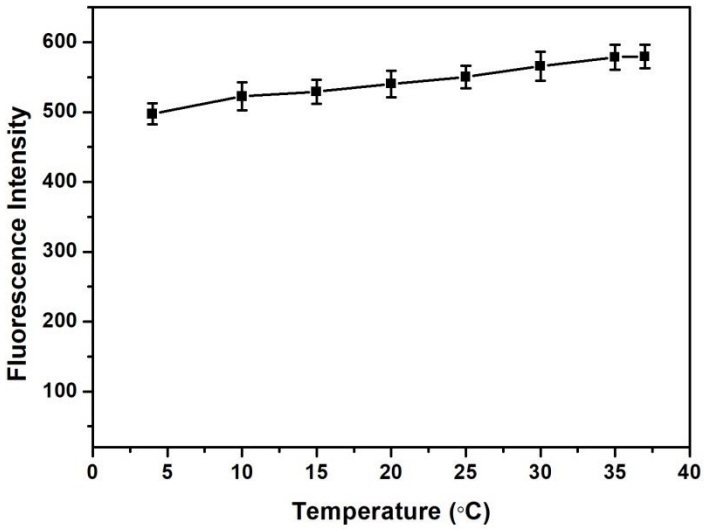

Fig. S5 Fluorescence intensity of the mixed solution of lysozyme and imaging solution observed under different reaction temperature. The concentration of lysozyme was 0.25 mg/mL, the imaging solution consists of 1 μM AP1, 1 μM AP2, and 6 μM NMM. The error bars represent the standard deviation of three independent measurements.

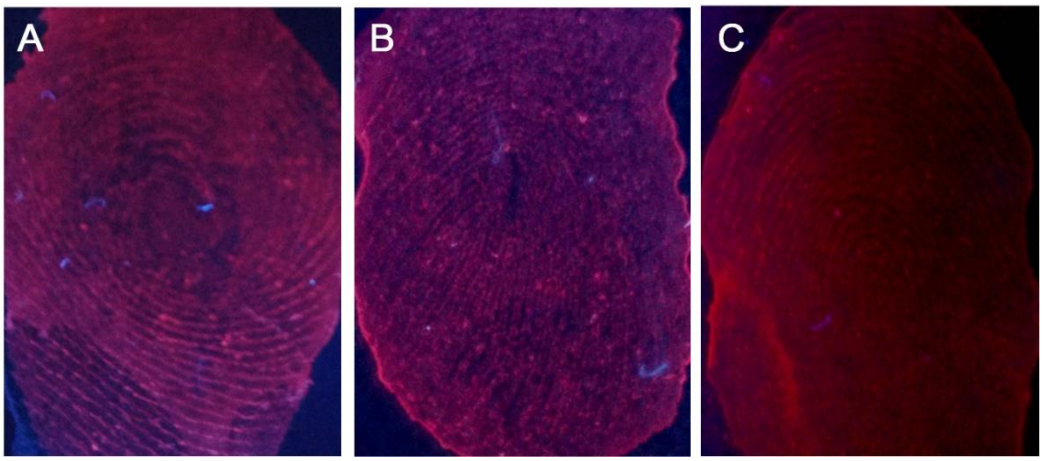

Fig. S6 Photographs of the developed LFPs from different volunteers.