Supplementary Information

Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications

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Figure S1 Fluorescence intensity of the reaction solution (37 °C, pH 10.0) versus time for different molar ratios of DPA/Au. The emission was recorded at 610 nm with excitation at 400 nm.

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**Figure S2** Fluorescence intensity of the reaction solution (5 mM DPA, 37 °C), recorded at 610 nm versus time for different pH values, taken with excitation at 400 nm.

**Figure S3** Fluorescence emission spectra of aqueous solutions of DPA-AuNCs upon excitation at 400 (black), 450 (red), and 500 (blue) nm.
**Figure S4** Fluorescence emission spectra of DPA-AuNCs in 0.01 M PBS at pH 5, 6, 7, 8, 9 and 10, taken with excitation at 400 nm.

**Figure S5** Size distribution of an aqueous solution of DPA-AuNCs determined by DLS.
Figure S6 Fluorescence emission (A) and absorption (B) spectra of DPA-AuNCs in buffer solution immediately after synthesis (black) and after storage at 4 °C for 1 month (red) and 3 months (blue).

Figure S7 3D image reconstruction of a HeLa cell (plasma membrane stained in red) exposed to DPA-AuNCs (green). The voxel size is 110 nm × 110 nm × 184 nm.