

Electronic supplementary information

Wavenumber-Intensity Joint SERS Encoding Using Silver Nanoparticles for Tumor Cell Targeting

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Table S1. Amounts of BDT, 2-NAT and 4-MT used for SERS encoded Ag NPs.

No.	1	2	3	4	5	6	7	8	9	10
code	100	010	001	101	102	201	110	120	210	011
molar ratio	1:0:0	0:1:0	0:0:1	5:0:3	4:0:5	5:0:2	5:2:0	5:3:0	5:1:0	0:2:5
No.	11	12	13	14	15	16	17	18	19	
code	012	021	111	112	121	211	122	212	221	
molar ratio	0:1:7	0:3:5	4:3:5	4:3:11	2:6:5	6:3:5	1:3:5	6:3:11	4:6:5	

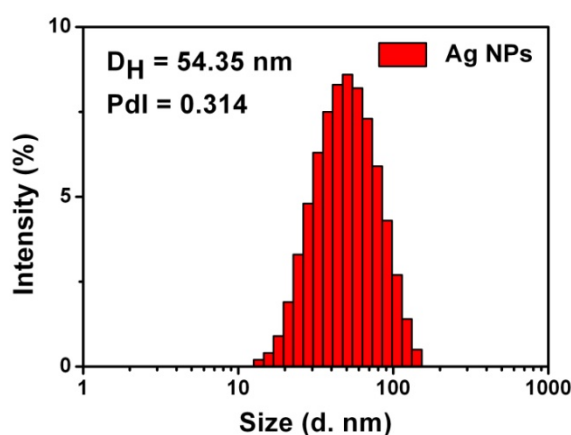


Figure S1. Hydrodynamic size of silver nanoparticles (Ag NPs) measured by dynamic light scattering (DLS).

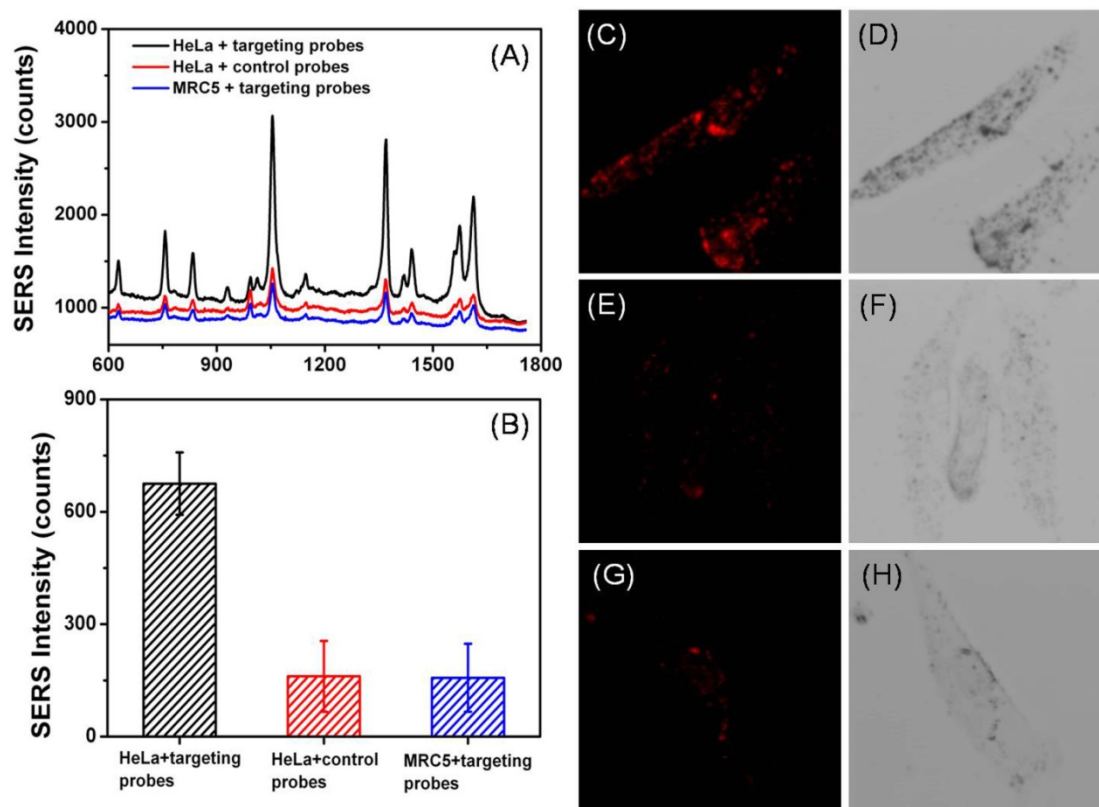


Figure S2. (A) SERS spectra of the nanoprobe in living cells under different conditions; for each situation, the SERS spectra were collected from 10 randomly selected cells and average results were presented; (B) SERS intensities of the bands at 767 cm^{-1} correspond to the Figure S2A, the error bars represent the standard deviation of 10 measurements; (C, D) SERS mapping of HeLa cells incubated with the targeting probe; (E, F) SERS mapping of HeLa cells incubated with the transferrin free probe; (G, H) SERS mapping of MRC5 cells incubated with the targeting probe.