## **Supporting Information**

## **Dual Peptides Modified Fluorescence-SERS Dual Mode Imaging**

## Nanoprobes with Improved Cancer Cell Targeting Efficiency

Yizhi Zhang, Zhuyuan Wang\*, Lei Wu, Shenfei Zong, Binfeng Yun, Yiping Cui\*



Figure. S 1 Competition experiments for FSN-T7 in a wide view of fluorescence and bright field.



Figure. S 2 Competition experiments for FSN-RGD in a wide view of fluorescence and bright field.



Figure. S 3 Cellular uptake experiments for four different functionalized nanoprobes in a wide view of fluorescence and bright field.



Figure. S 4 a) confocal fluorescence imaging (orange) and SERS mapping (red) of MRC5 cells respectively incubated with FSN-RGD and FSN-T7. b) Mean fluorescence intensity ratio of HeLa over MRC5 when both HeLa and MRC5 were incubated with four different functionalized nanoprobes respectively.



Figure. S 5 The histogram of fluorescence intensity distribution of individual cells from four groups of HeLa cells treated with FSN-mPEG, FSN-RGD, FSN-T7 and FSN-T7&RGD respectively and the corresponding fit curves.