

## Electronic Supporting Information

### PET imaging with multimodal upconversion nanoparticles

*Juan Gallo,<sup>1, 2</sup> Israt S. Alam,<sup>1</sup> Jiefu Jin,<sup>3</sup> Yan-Juan Gu,<sup>4</sup> Eric O. Aboagye,<sup>1</sup> Wing-Tak Wong,<sup>4, 5, \*</sup> and Nicholas J. Long<sup>1, 2, \*</sup>*

<sup>1</sup> Comprehensive Cancer Imaging Centre, Department of Surgery and Cancer, Hammersmith Campus, Imperial College London, Du Cane Road, London, W12 0NN, UK

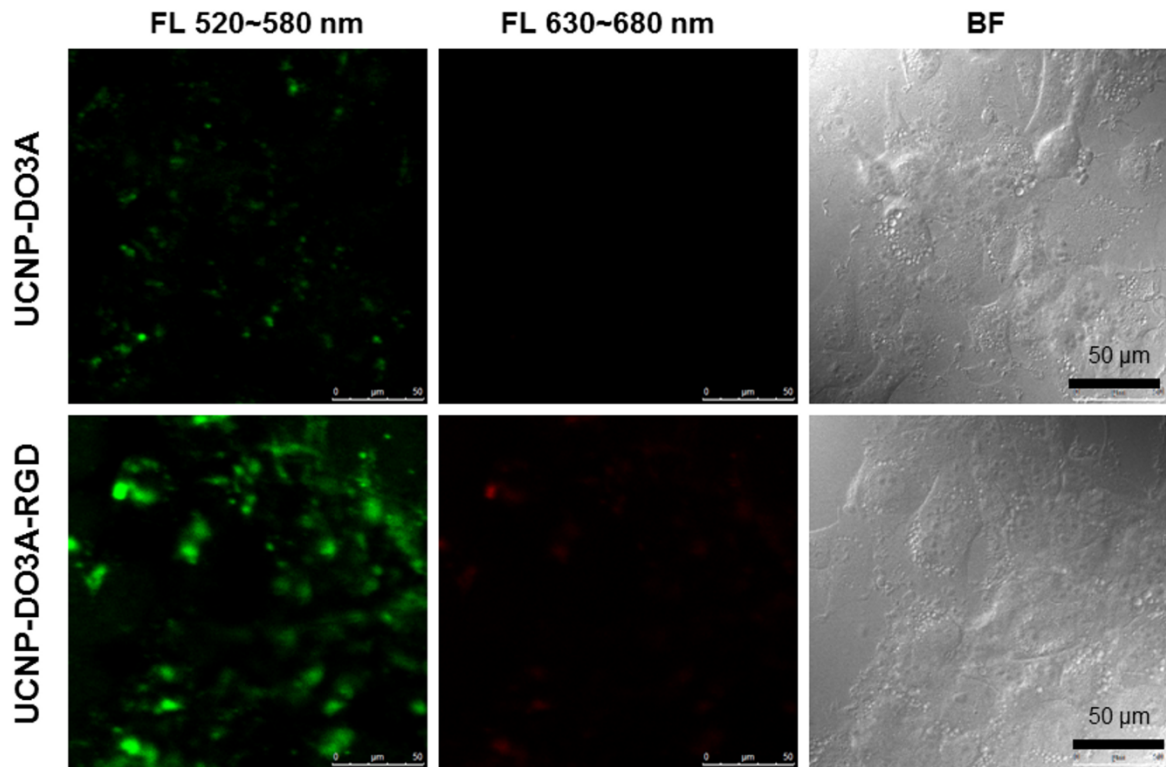
<sup>2</sup> Department of Chemistry, Imperial College London, South Kensington, London, SW7 2AZ, UK

<sup>3</sup> Department of Chemistry, The University of Hong Kong, Pokfulam Road, Hong Kong, SAR China

<sup>4</sup> Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, SAR China

<sup>5</sup> Pearl Materia Medica Development (Shenzhen) Ltd., Shenzhen 518057, China

## U87MG cells



**Figure S1.** Upconversion confocal live cell imaging. Green (left) and red (middle) upconversion luminescence and bright-field (right) images of U87MG cells incubated with UCNP-DO3A (upper row) or UCNP-DO3A-RGD (lower row) at 4 °C for 1 h. The incubation concentration of Y was set at 1 mM for all the samples (40 × oil lens, zoom = 1, scale bar = 50 μm).