Journal Name

ARTICLE

S1.

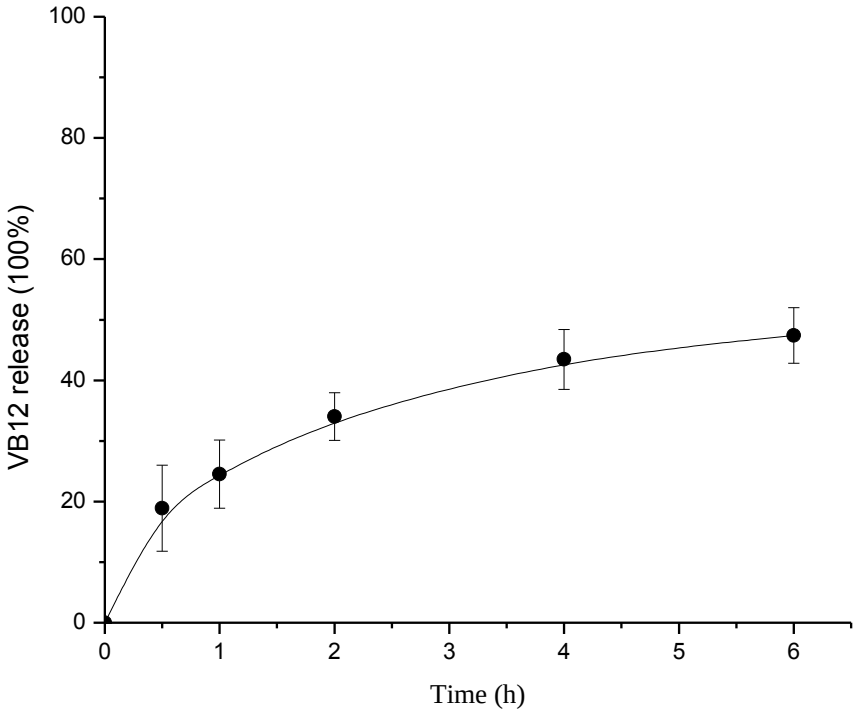

Figure S1. VB12 release profile of nanoparticles in SIF-trypsin (0.305%) and chymotrypsin (0.305%)

S2.

The uptake of nanoparticles was also investigated by confocal laser scanning microscopy (CLSM, 510 Meta Carl Zeiss, Jena, Germany). Nile red (3 mg) was incorporated in ethanol during nanoparticle preparation (section 2.2). Caco-2 cells were seeded onto glass bottom microwell dishes (P35G-1.5-14-C, MatTek Corp., USA) at a density of 10^5 cells per dish and cultured for 5-7 days until full confluency. Before experiment, cells were incubated with HBSS for 30 min. After equilibration, 2 mL of Nile red labeled nanoparticle (0.1 mg/ml in HBSS) was added and incubated with the cells for 1, 3, and 6 h. The cells were then gently washed with PBS 3 times and fixed with 4% paraformaldehyde (w/v in PBS, pH 7.2) at 37 ^{o}C for 15 min. The cell nuclei were stained with DAPI for observation.

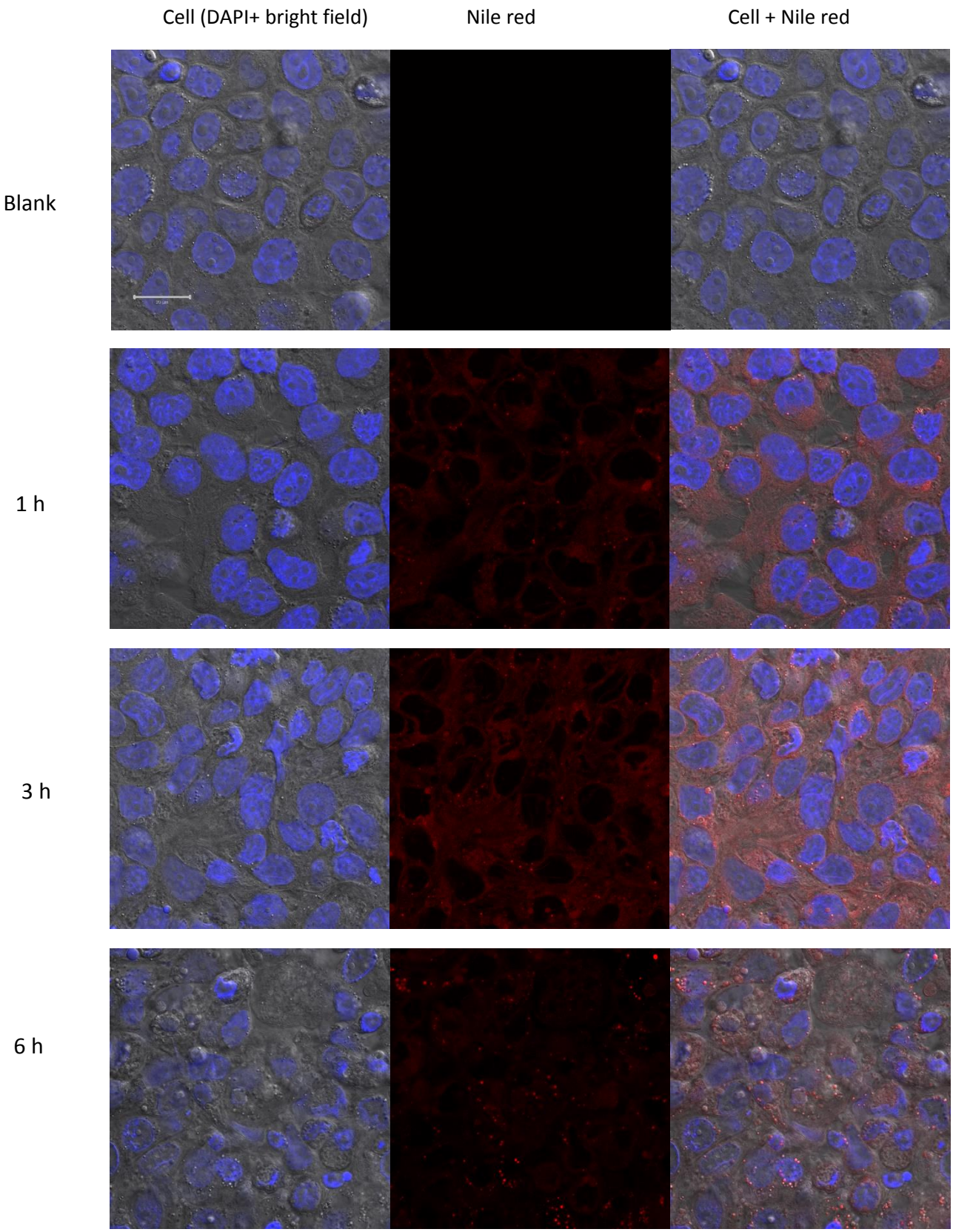

Figure S2. Change of fluorescent intensity (Nile red) at 1, 3, and 6 h. Blank: no nanoparticle was added. Scale bar=20 µm