

## SUPPORTING INFORMATION

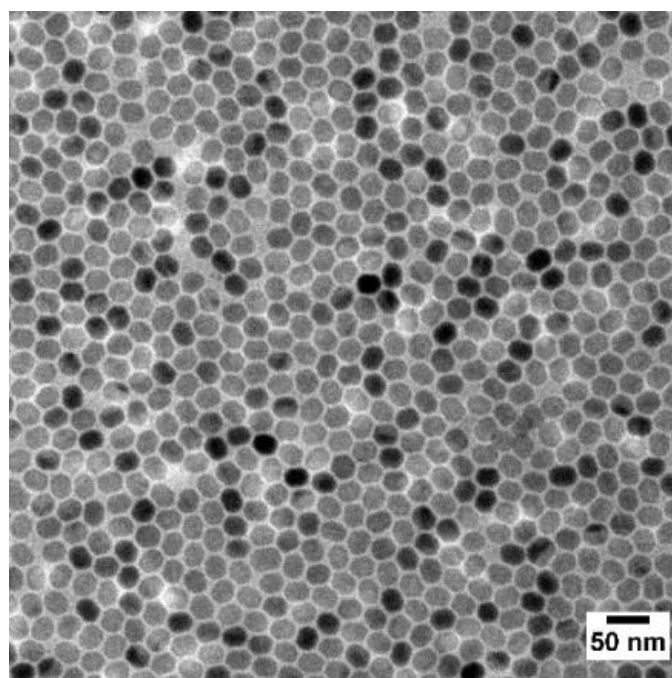
# Upconverting Nanoparticle to Quantum Dot FRET for Homogeneous Double-Nano Biosensors

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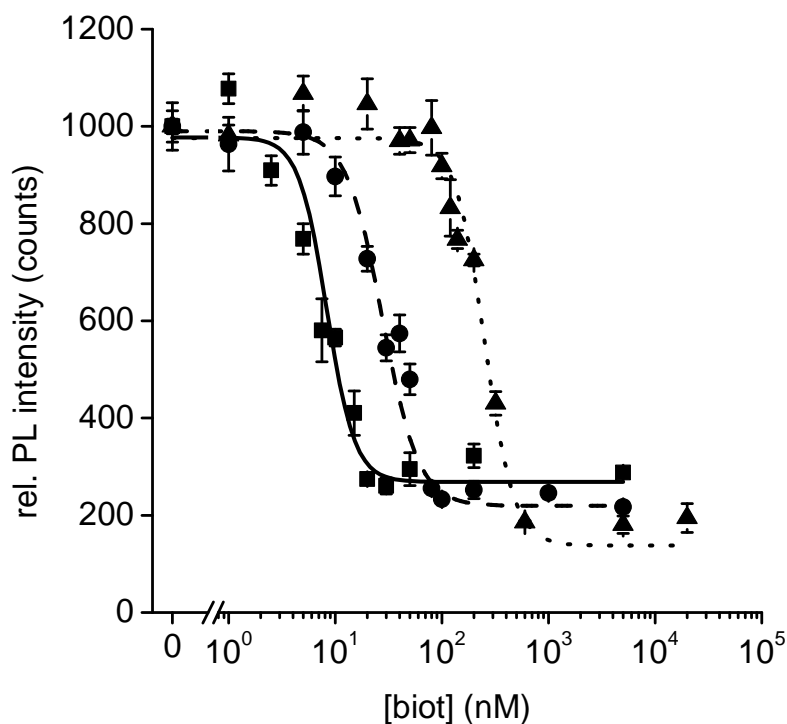
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**Figure S1.** Transmission electron microscopy (TEM) image of the UCNPs with an average dimensions of ca. 23x26x36 nm. (Tecnai 12 BioTwin TEM, 120 kV; FEI, Hillsboro, OR).



**Figure S2.** Competitive homogeneous assay for biotin. 75 (solid line), 300 (dashed line) and 1200 pM (dotted line) UCNP-sAv in the presence of 250, 1000 and 4000 pM of biot-QD, respectively, and different concentrations of free biotin (0 to 20 000 nM). Sensitized emission signals were normalized using signal from the reaction containing no biotin (maximal sensitized emission signal) as a reference.