**Figure S1:** Quantification of the fluorescence and amount of FN associated with MPs and NPs. (A) The linear relationship between dot density and the amounts of FN (µg) loaded per dot was determined by performing densitometry of dot blots with known amounts of FN standards. (B) Representative dot blots of FN eluted from varying volumes of NPs and MPs coated with different FN concentration. Estimated FN values by densitometry corresponding to the dots numbered in these figures are summarized on Table S1. (C, D) Effect of varying volumes of NPs (51 nm) or MPs (1 µm) on fluorescence as measured by a fluorimeter. Particles were measured in cuvettes. (E, F) Different volumes of FN-coated NPs or MPs were incubated with cells. The relative abundance of particles internalized at three hours was measured by flow cytometry. Mean ± SEM. n=3 for all experiments.

**Figure S2:** Kinetics of NP- or MP-uptake by Rat-2 fibroblasts. (A) Binding or internalization of FN-coated fluorescent NPs or MPs by cells was measured over 2 days with a fluorimeter. Particles were continuously present during incubations. (B) The percentage of cell population that internalized NPs or MPs and mean fluorescence per cell was determined by flow cytometry. ***; p<0.0001 at indicated time points compared to one hour. Mean ± SEM. n=3 for all experiments.

**Figure S3:** Effect of NPs and MPs on cell viability and integrity of the plasma membrane. (A) The mean total number of cells did not change (p>0.2) even after long exposure to fluorescent particles. (B) Effect of NPs on plasma membrane integrity. Cells were incubated with FN-coated NPs or MPs for three hours and then treated with propidium iodide for 30 minutes. The percentage of propidium iodide positive cells was very low for cells incubated with particles and was comparable to untreated controls.
**Figure S1**

(A) Linear relationship between FN in the coating solution (µg) and Blot Density. The equation is $y = 0.2105x$ with $R^2 = 0.9628$.

(B) Fluorescence (Photon counts x $10^5$) vs. Volume of nanoparticles (µL).

(C) Fluorescence (Photon counts x $10^3$) vs. Volume of microparticles (µL).

(D) Mean Fluorescence (Channel Number) vs. Volume of nanoparticles (µL).

(E) Mean Fluorescence (Channel Number) vs. Volume of microparticles (µL).