Electronic Supplementary Material (ESI) for Nanoscale.

Supplementary/Supporting Information

Induction of Apoptosis in Human Cancer Cells by Targeting Au Nanoparticle to Mitochondria

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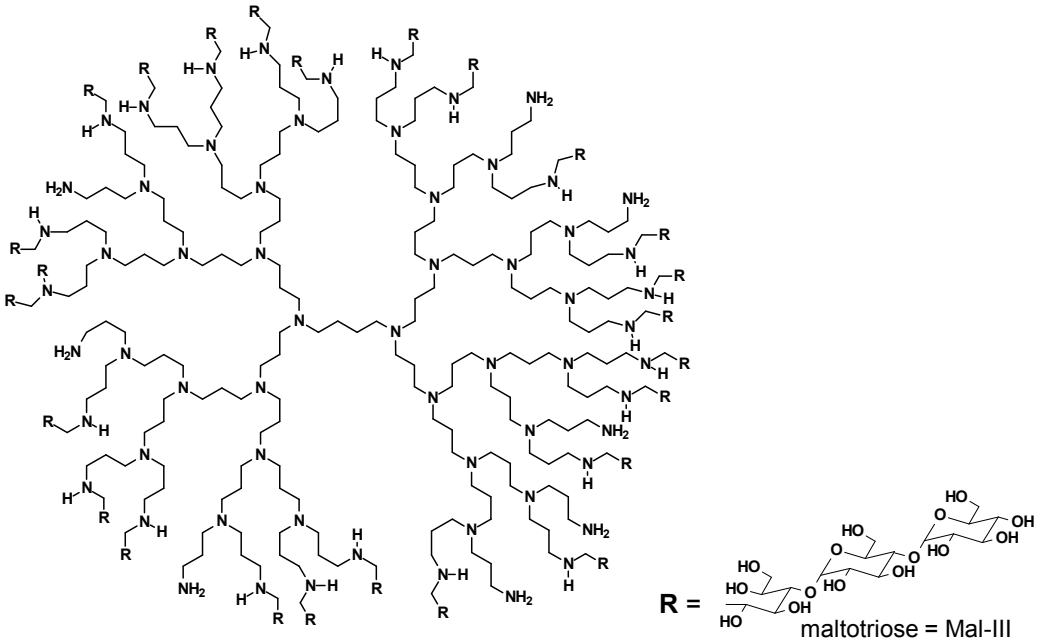

Figure S1 Scheme of maltotriose-modified 3rd generation PPI dendrimers used in this study.

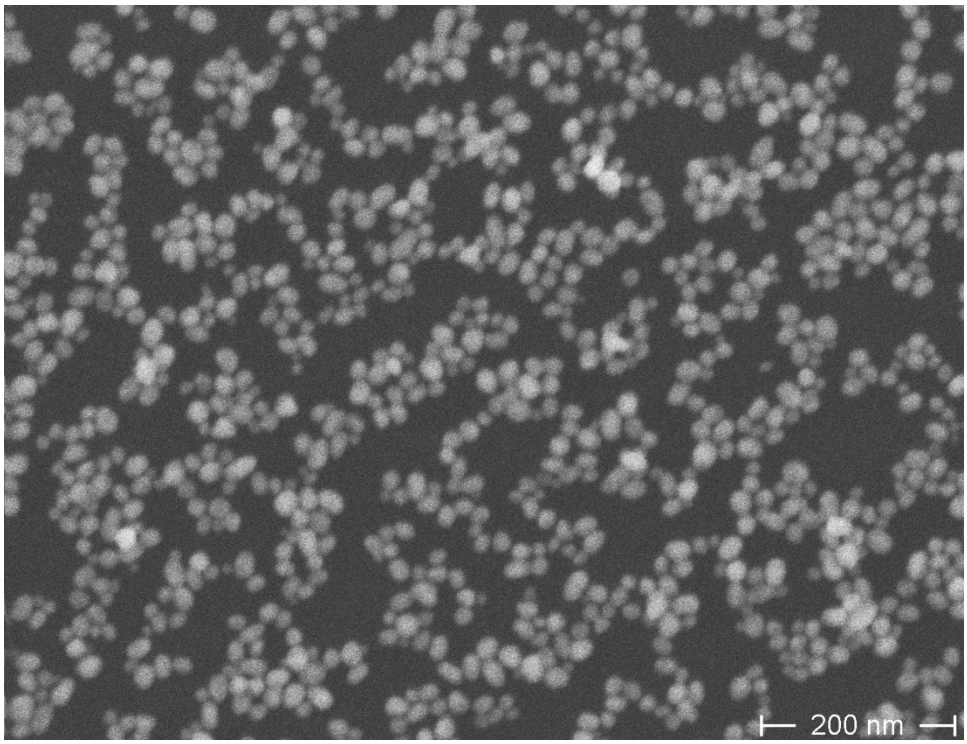

Figure S2. Scanning Electron Microscopy image of citrate stabilized AuNPs (20 nm) used in this study.

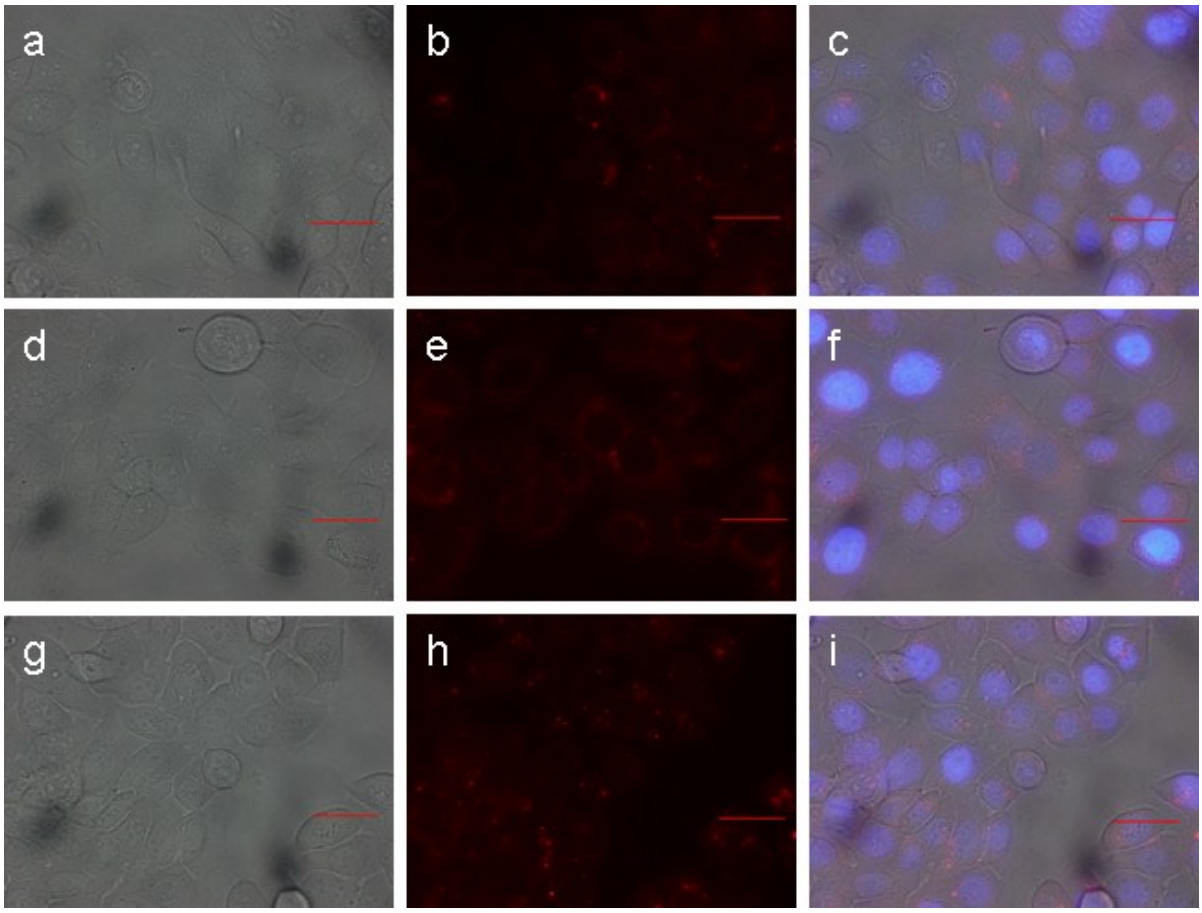

Figure S3. Brightfield (left column), caspase 3 fluorescence staining (middle column) and overlay (right column) images of Caspase 3 activity of transfected cells. The top row shows non-transfected cells (dendrimers (a-c), in the middle row, cells transfected with HA-eGFP (d-f), and the bottom row shows cells transfected with mitoTGFP (g-i). All images were taken under same conditions. The scale bar is 30 μm.

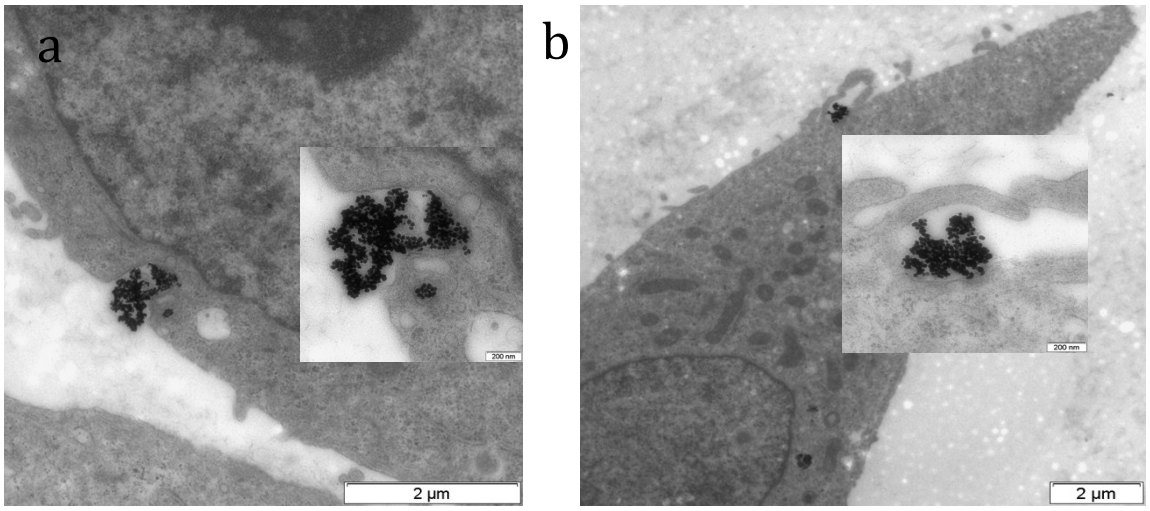

Figure S4: TEM images showing two different uptake mechanisms of dendrimer mediated mitoGFP-AuNP bioconjugates. In (a) bioconjugates were taken up through invagination of the cell membrane. In (b) bioconjugates were taken up through formation of pseudopodia wrapping over the bioconjugates.