

Dendritic Nanoconjugates of Photosensitizer for Targeted Photodynamic Therapy

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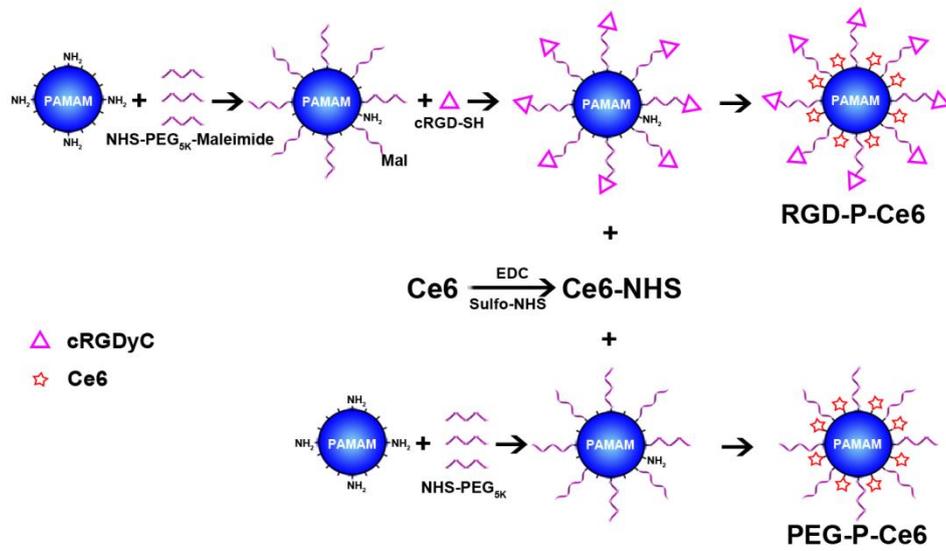


Figure 1: The reaction scheme of RGD-P-Ce6 and PEG-P-Ce6.

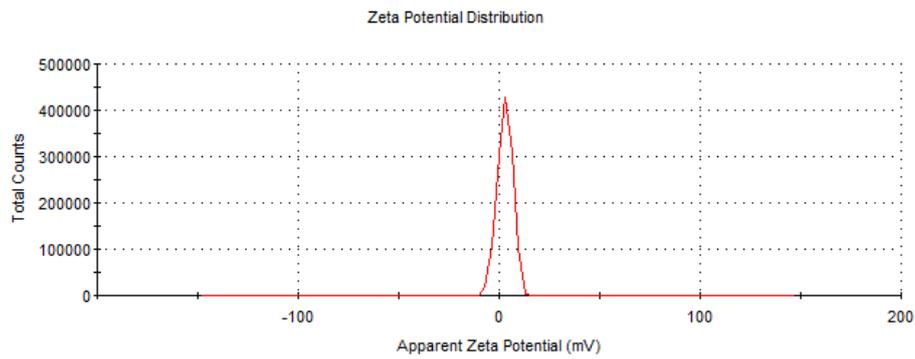


Figure 2: Zeta potential of non-targeted nanoconjugates PEG-P-Ce6 with +2.9mV.

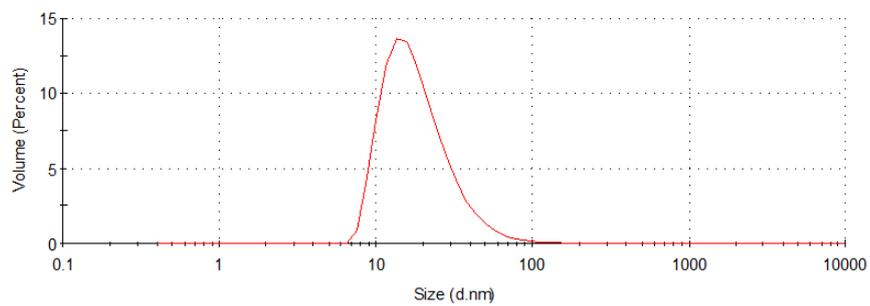


Figure 3: Particle size distribution of non-targeted nanoconjugates PEG-P-Ce6 with mean diameter of 20nm.

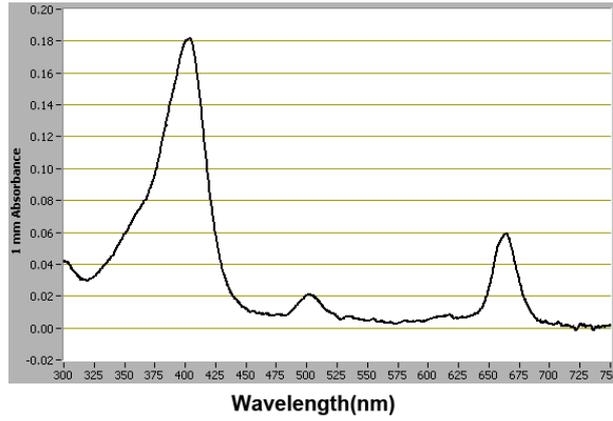


Figure 4: UV/vis absorption spectrum of RGD-P-Ce6 (20µM).

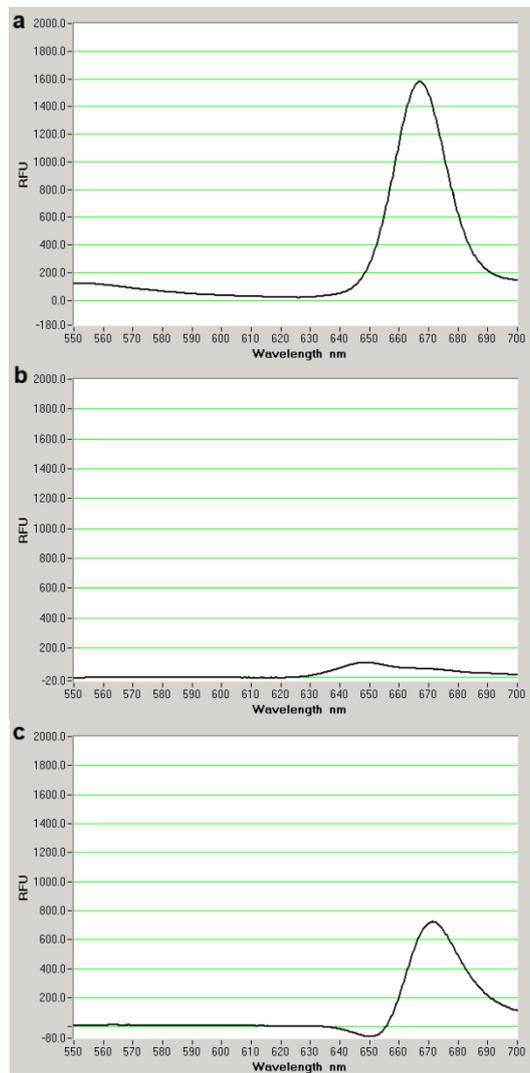


Figure 5: Fluorescent spectrum of free Ce6 dissolved in methanol (a) and PBS (b), RGD-P-Ce6 diluted in PBS(c). The concentration was 20µM.

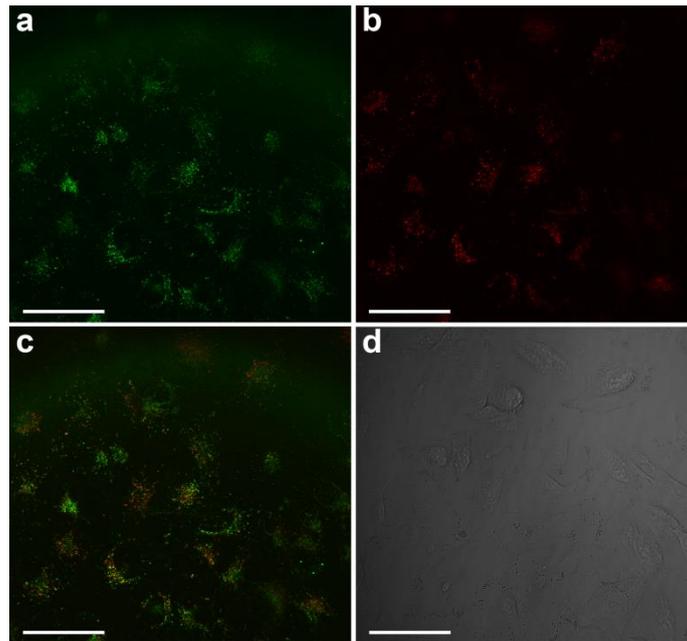


Figure 6: Confocal fluorescence microscopy of A375 cells after treatment with RGD-P-Ce6. (a) early endosomes labelled by Transferrin-Alexa 488, (b) RGD-P-Ce6, (c) merged and (d) DIC. Scale bar, 50 μ m.

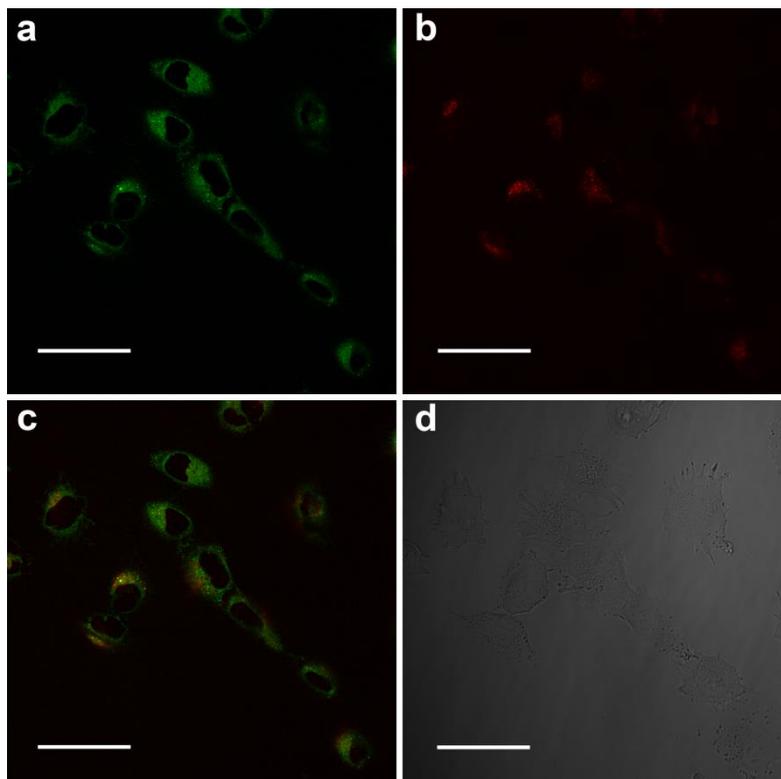
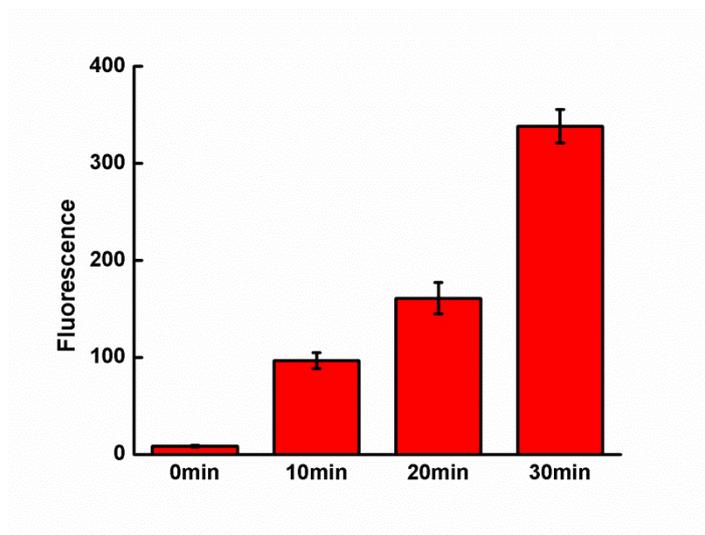
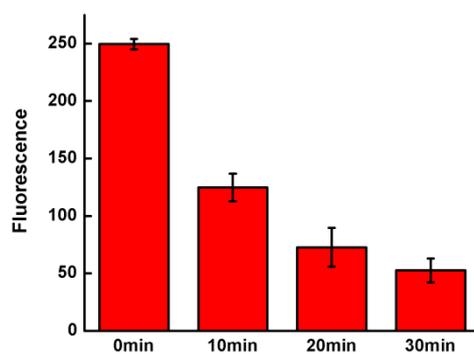


Figure 7: Confocal fluorescence microscopy of A375 cells after treatment with RGD-P-Ce6. (a) ER labelled by ER Tracker Green, (b) RGD-P-Ce6, (c) merged and (d) DIC. Scale bar, 50 μ m.



Sfigure 8: Mean fluorescence of ROS probe-CM-H₂DCFDA using FITC channel upon photo-irradiation for 0, 10, 20 and 30min, respectively.



Sfigure 9: The remaining RGD-P-Ce6 in cells upon photo-irradiation for 0, 10, 20 and 30min, respectively.

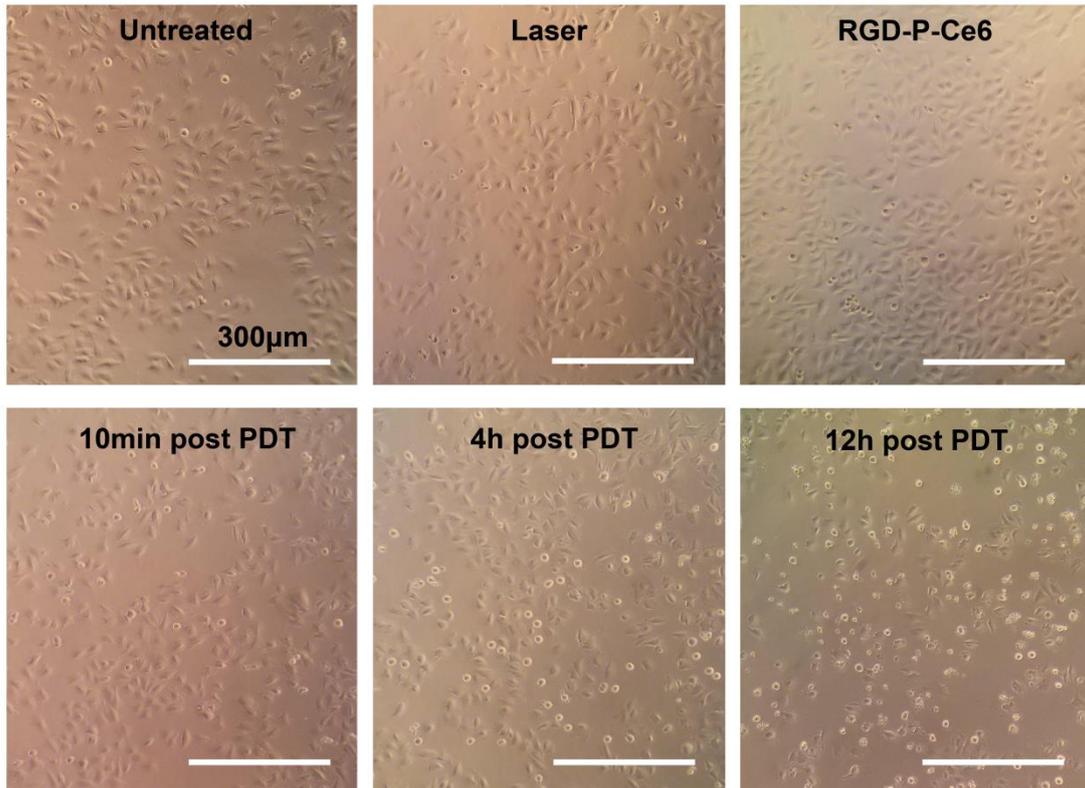


Figure 10: Microscopic images of A375 cells apoptosis induced by RGD-P-Ce6 mediated PDT. Scale bar, 300µm.

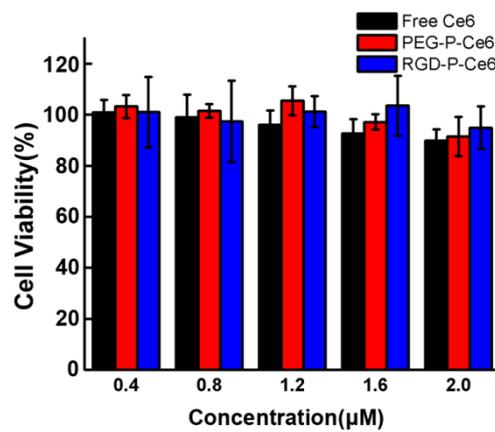


Figure 11: Dark toxicity of free Ce6, PEG-P-Ce6 and RGD-P-Ce6 in A375 cells.

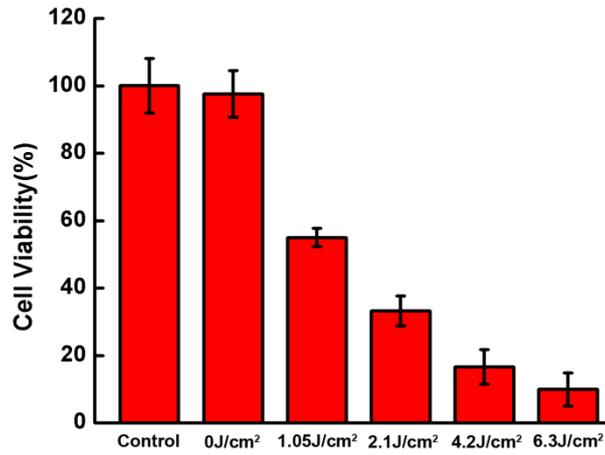


Figure 12: Effect of the dose of the light exposure on the cell viability of RGD-P-Ce6 (100nM) mediated PDT in A375 cells. Non-treated cells were set as control. Data are presented as the mean \pm SD (n=3).

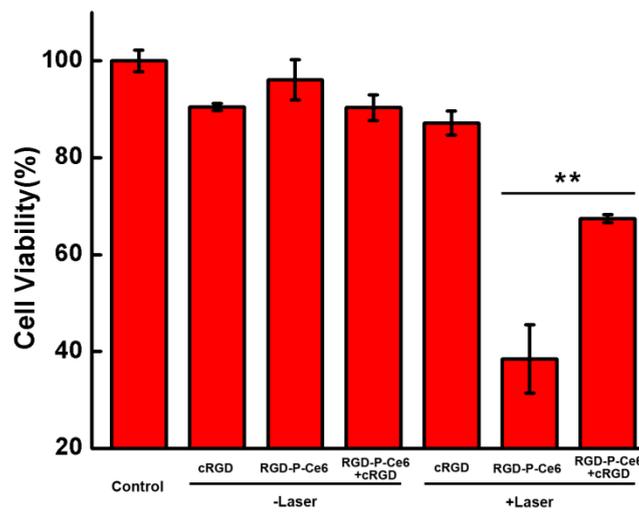


Figure 13: Effect of free cRGD on the cell viability of RGD-P-Ce6 (50nM) mediated PDT in A375 cells. Non-treated cells were set as control. Data are presented as the mean \pm SD (n=3), ** p <0.01.

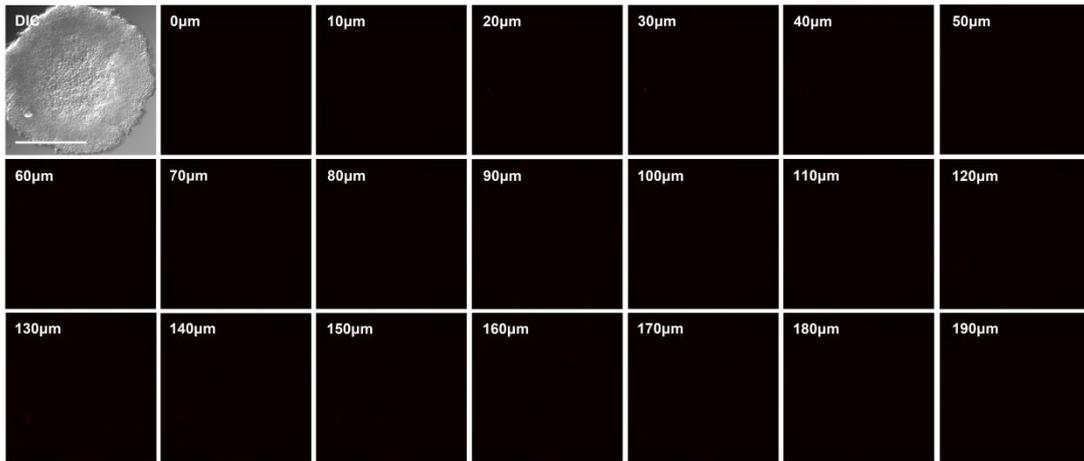


Figure 14: Z-Stack confocal microscopy images of A375 tumor spheroids treated by free Ce6 (800nM) for 24 hours.

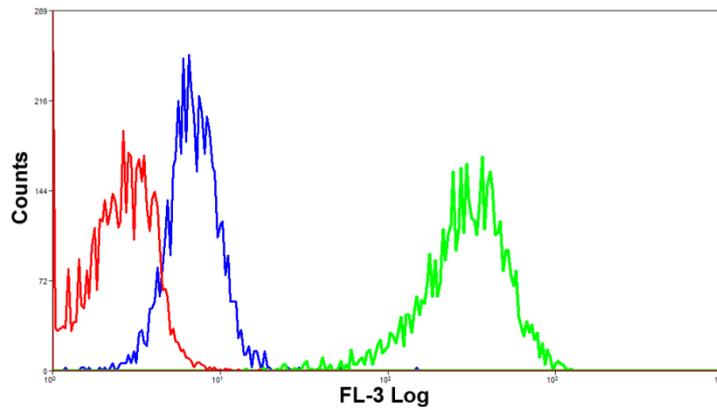


Figure 15: Flow cytometry detection of free Ce6 cellular uptake in A375 cells. Free Ce6 was incubated with DMEM+10% FBS (blue) and opti-MEM (green).

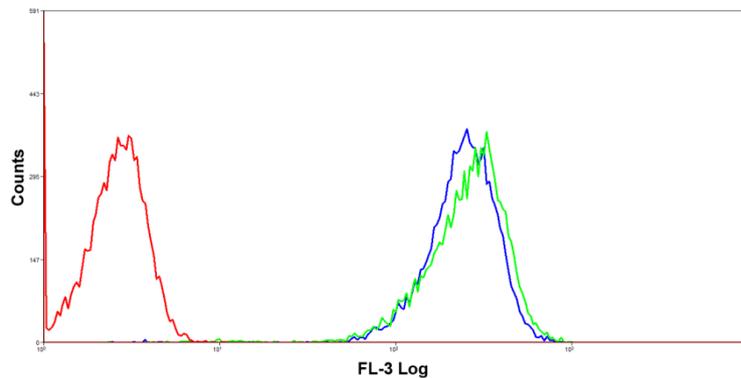


Figure 16: Flow cytometry detection of RGD-P-Ce6 cellular uptake in A375 cells. RGD-P-Ce6 was incubated with DMEM+10% FBS (blue) and opti-MEM (green).