

**Electronic supplementary information**

**Safe Core-Satellite Magneto-Plasmonic Nanostructures for Efficient Targeting and Photothermal Treatment of Tumor Cells**

F. Bertorelle<sup>a</sup>, M. Pinto<sup>b</sup>, R. Zappone<sup>a</sup>, R. Pilot<sup>a</sup>, L. Litti<sup>a</sup>, S. Fiameni<sup>c</sup>, G. Conti<sup>d</sup>, M. Gobbo<sup>a</sup>, G. Toffoli<sup>e</sup>, M. Colombatti<sup>b</sup>, G. Fracasso<sup>b</sup>, M. Meneghetti<sup>a\*</sup>

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<sup>a</sup> *Department of Chemical Sciences, University of Padova, Via Marzolo 1, 31033, Padova, Italy*

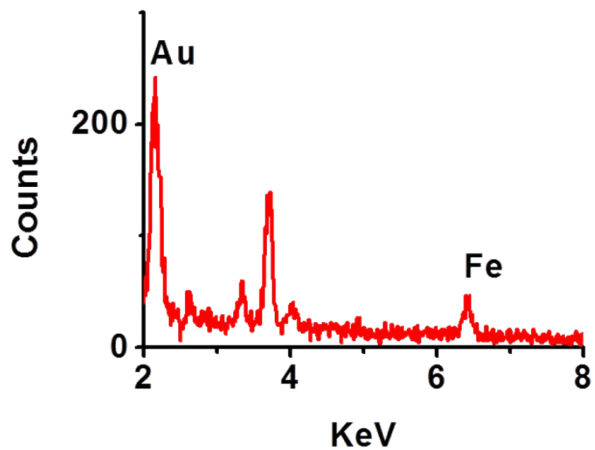
<sup>b</sup> *Department of Medicine, Section of Immunology, University of Verona, c/o Policlinico G.B. Rossi, Piazzale L.A. Scuro, 37134 Verona, Italy*

<sup>c</sup> *IENI CNR, Corso Stati Uniti 4, 35127 Padova, Italy.*

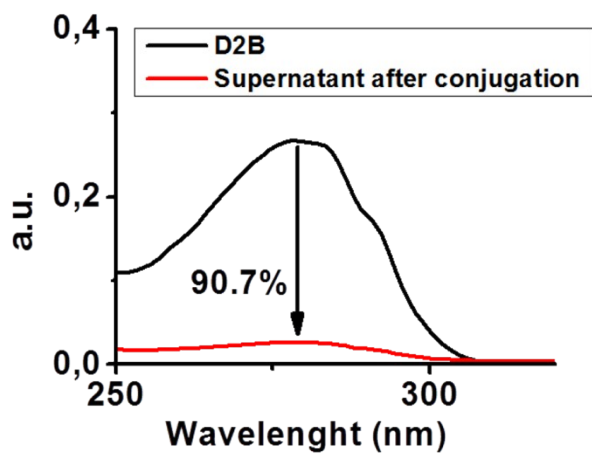
<sup>d</sup> *Department of Neurological and Movement Sciences, University of Verona, c/o Policlinico G.B. Rossi, Piazzale L.A. Scuro 37134 Verona, Italy*

<sup>e</sup> *SOC Farmacologia Sperimentale e Clinica, Centro di Riferimento Oncologico, Via Franco Gallini 2, 33081 Aviano, Italy*

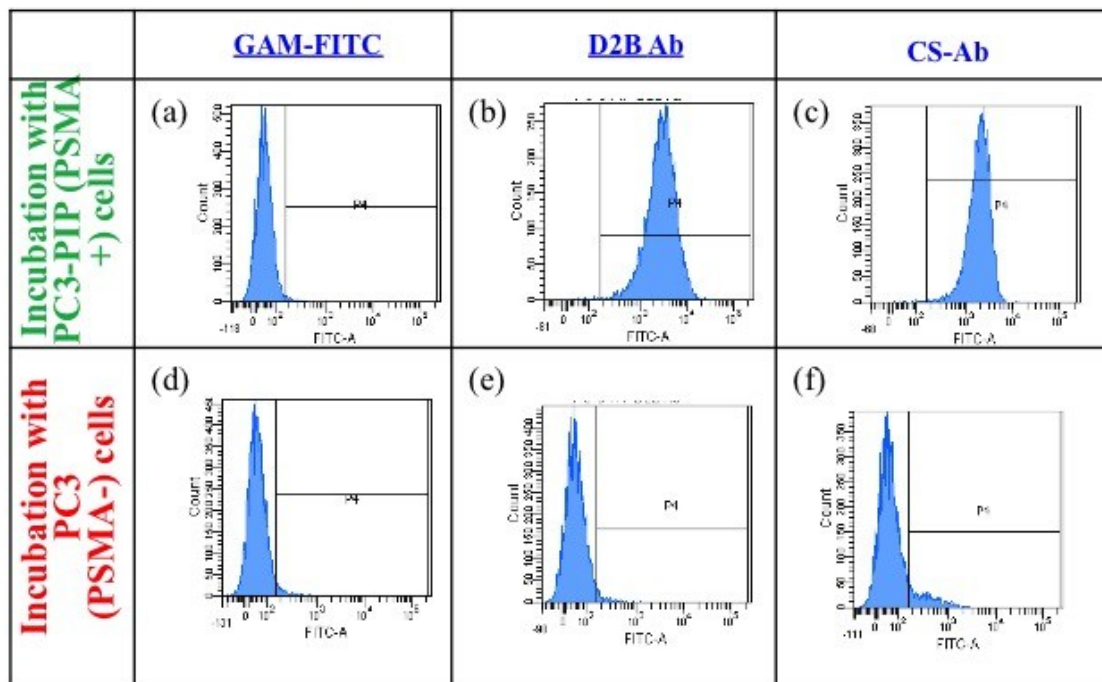
\* Reference author Email: [moreno.meneghetti@unipd.it](mailto:moreno.meneghetti@unipd.it)



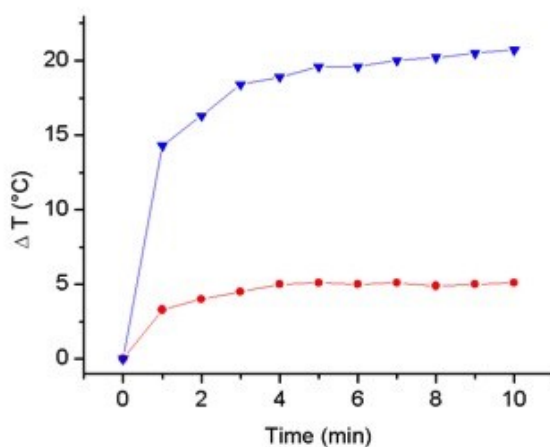
**Figure S1.** EDX measurement of CS nanostructures.



**Figure S2.** Absorption spectra of D2B solution before conjugation (black line) and in the supernatant (red line) after conjugation and centrifugation.



**Figure S3.** Flow cytometry analysis of PC3 PIP (PSMA+) in the upper part and of PC3 (PSMA -) in the lower part. Cells are incubated with GAM-FITC ((a) and (d)), pure D2B and then with GAM-FITC ((b) and (e)) and CS-Ab at a concentration of 4.4 pM and then with GAM-FITC ((c) and (f)). The data show that CS-Ab has a targeting activity similar to pure D2B.



**Figure S4** Temperature of FeO<sub>x</sub> with a silica shell (red) and CS-Ab (blue) loaded hydrogels irradiated for 10 minutes with a 647 nm laser line at a power density of 1.5 W cm<sup>-2</sup>.