Electronic Supplementary Information

Engineering conductive protein films through nanoscale self-assembly and gold nanoparticles doping

Sara Hernández Mejías‡ Elena López-Martínez,‡ Maxence Fernandez, Pierre Couleaud, Ana Martin-Lasanta, David Romera, Ana Sanchez-Iglesias, Santiago Casado, Manuel R. Osorio, Jose M. Abad, M. Teresa González, and Aitziber L. Cortajarena**

Supporting Figures

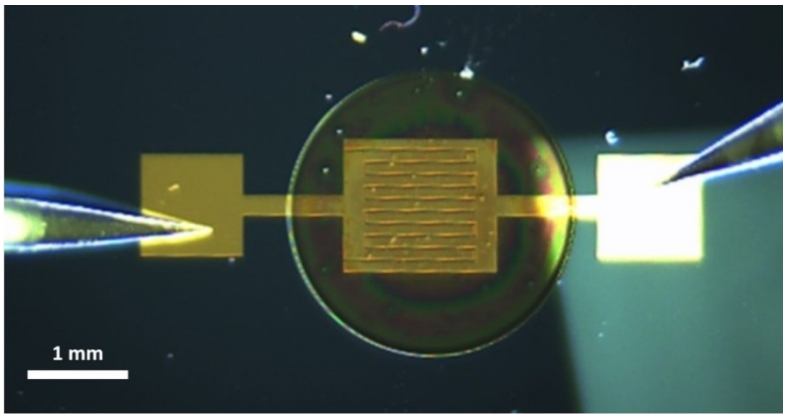

Figure S1. Set up used for conductive measurements. CTPR16$_{4Cys}$-AuNPs film deposited over silicon wafers with gold electrodes patterned over them.

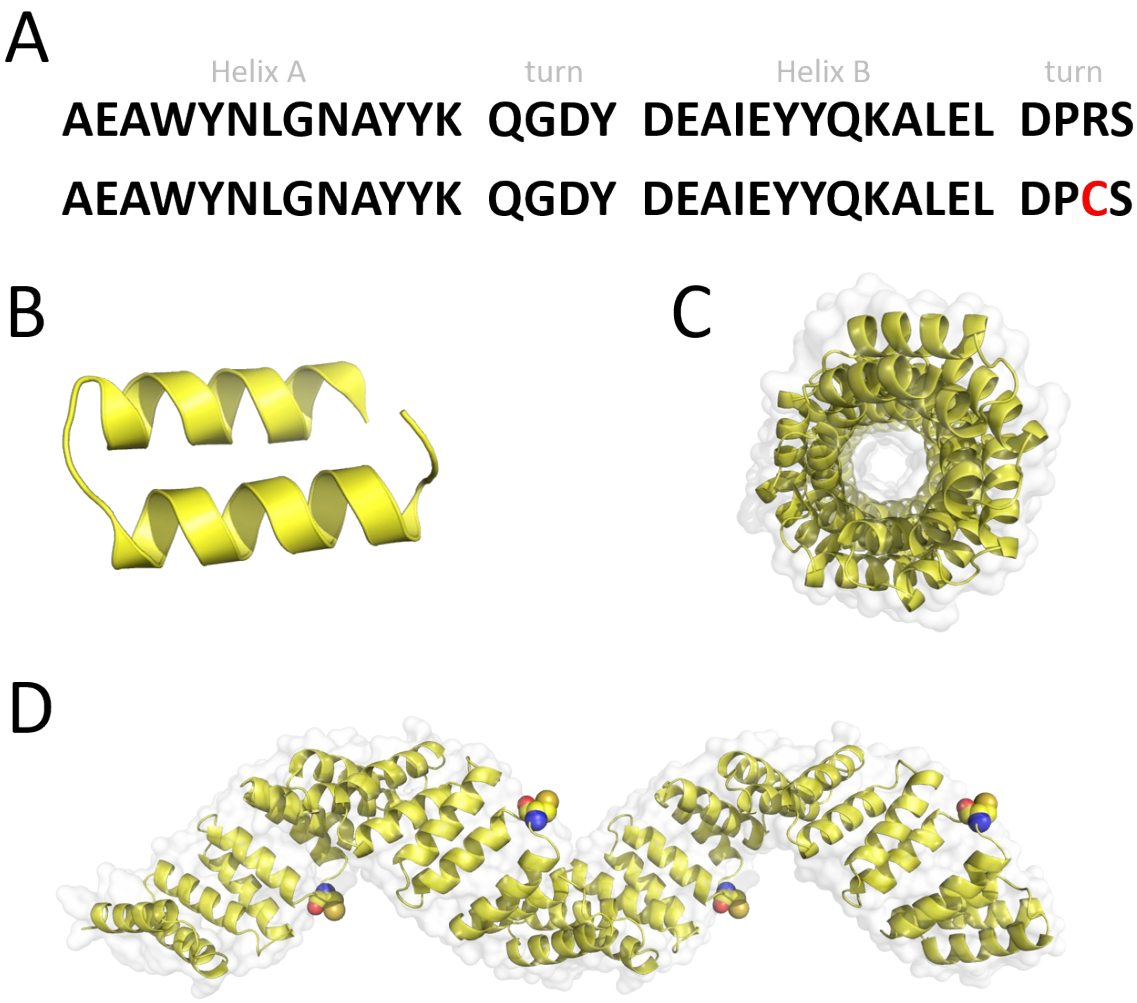

Figure S2. Sequence and structure of CTPR16$_{4cys}$. (A) Sequences of the wild type CTPR consensus (top) and of the mutated CTPR including the cysteine residue used for repeats number 2, 6, 10 and 14 (down). (B) Ribbon representation of one CTPR repeat. (C) and (D) Ribbon representation of CTPR16$_{4Cys}$ with its mutated cysteine residues highlighted as colored spheres.

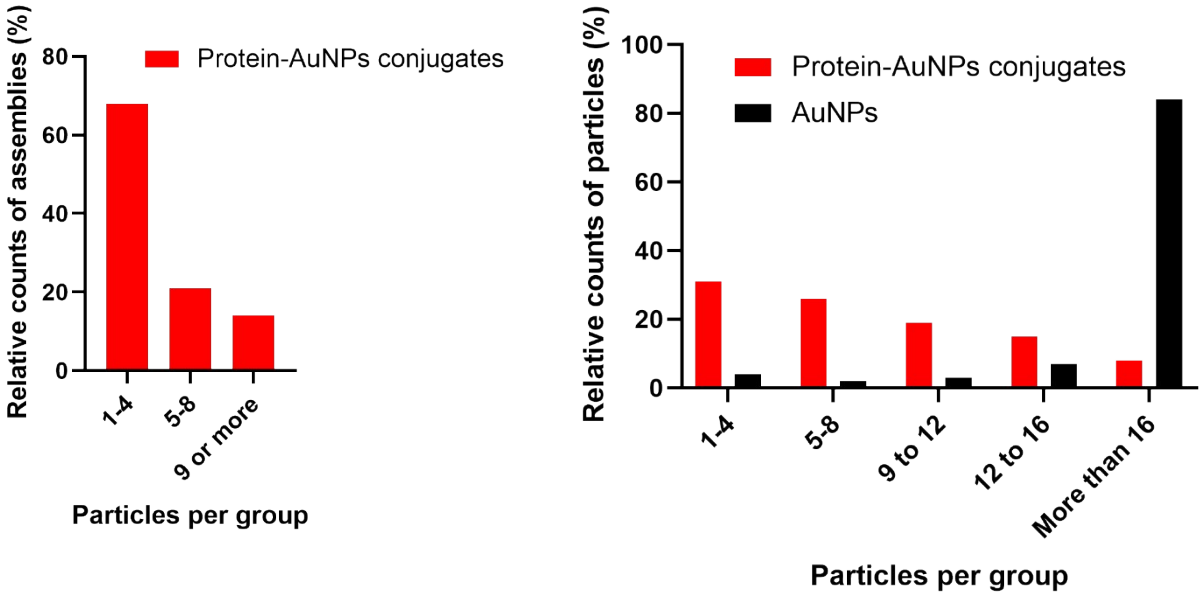

Figure S3. Histograms showing the nanoparticle distributions from TEM micrographs of CTPR16$_{4Cys}$-AuNPs conjugates and AuNPs. Left panel: relative counts of assemblies shown by the number of particles per assembly (1 to 4, 5 to 8, and 9 or more particles per group). Right panel: relative counts of particles shown by the number of particles per group (1 to 4, 5 to 8, and 9 of more particles per group).