

Supporting info:

Lauryl-NrTP6 lipopeptide self-assembled nanorods for nuclear target delivery of doxorubicin.

Amanda Phugula^{1,2,3#}, Sofia Zuffi^{3,4#}, Sunisa Thongsom^{3#}, Paolo Di Gianvincenzo³, Santiago Gimenez Reyes^{3,5}, Ana Beatriz Caribé dos Santos Valle^{3,6}, Frederico Pittella⁶, Fernando Albericio^{1,7}, Beatriz G. de la Torre², Sergio E. Moya³

1. Peptide Science Laboratory, School of Chemistry and Physics, University of KwaZulu-Natal, Durban 4001, South Africa

2. School of Laboratory Medicine and Medical Sciences, College of Health Sciences, University of KwaZulu-Natal, Durban 4001, South Africa

3. Soft Matter Nanotechnology, Center for Cooperative Research in Biomaterials (CIC biomaGUNE), Basque Research and Technology Alliance (BRTA), Paseo de Miramon 194, 20014, Donostia-San Sebastián, Spain.

4. Molecular Oncology Laboratory, IIS BioGipuzkoa, Pº Dr. Beguiristain s/n 20014 San Sebastián Gipuzkoa, Spain

5. Instituto de Física del Sur (IFISUR-CONICET), Av. Alem 1253, Bahía Blanca 8000, Argentina,

6. Laboratório de Desenvolvimento de Sistemas Nanoestruturados, Faculdade de Farmácia, Universidade Federal de Juiz de Fora, Rua José Lourenço Kelmer, 36036-900, Juiz de Fora, MG, Brasil

7. CIBER-BBN and Department of Organic Chemistry, University of Barcelona, Barcelona 08001, Spain

These authors contributed equally.

* Corresponding authors: Sergio E. Moya smoya@cicbiomagune.es

Beatriz G. de la Torre garciadelatorreb@ukzn.ac.za

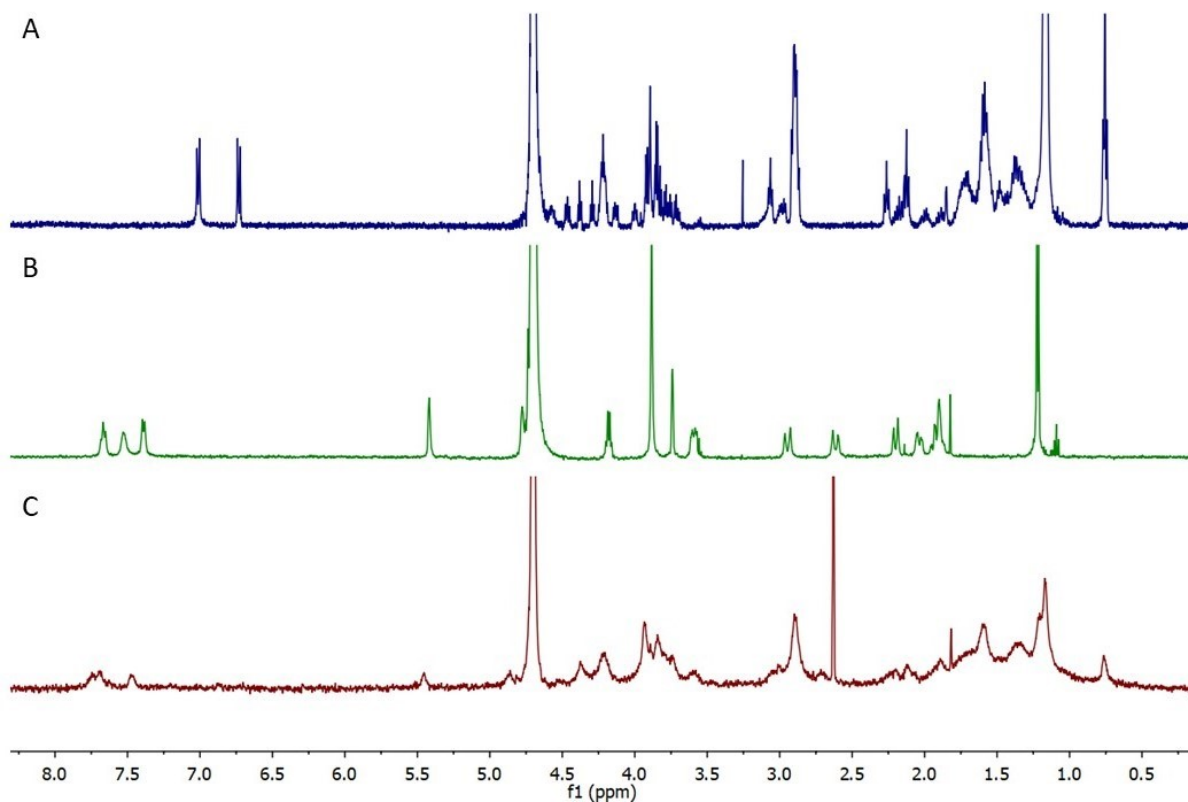


Figure S1. ¹H NMR experiments (D₂O). A) Lipopeptide, B) Doxorubicin and C) LP-DX

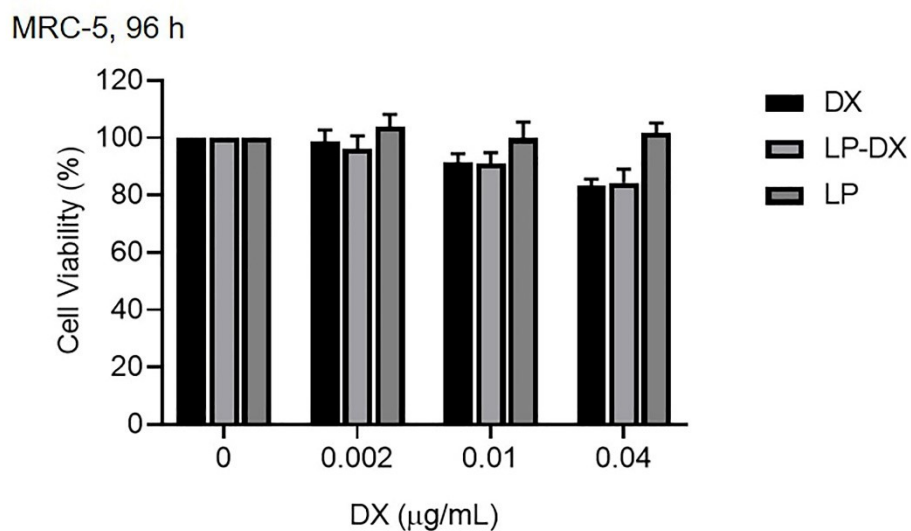


Figure S2. Effect of subtoxic doses of DX and LP-DX on non-cancer cells MRC-5. A total of 3×10^3 cells were seeded in 96-well plates and then treated with DX or LP-DX and blank LP at the concentrations indicated in the figure for 96 h. Cell viability of MRC-5 cells was determined by SRB assay.