

Encapsulation of 4-Oxo-N-(4-hydroxyphenyl) Retinamide in Human Serum Albumin Nanoparticles Promotes EZH2 Degradation in preclinical Neuroblastoma models

Boddu Mrunalini,^a Atul Dev,^a Avinash Chandra Kushwaha,^a Mohammed Nadim Sardoiwala,^a and Surajit Karmakar^{*a}

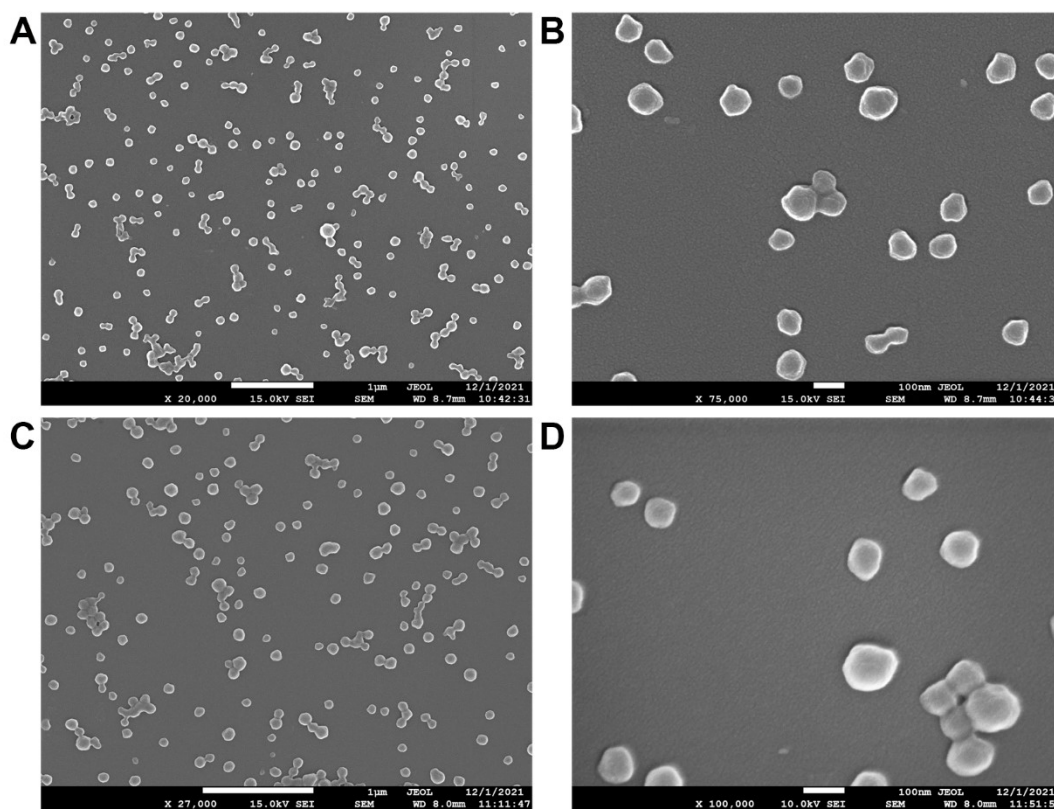


Figure S1. Morphological characterization of (a) & (b) HSANPs; (c) & (d) 4O4HPR loaded HSANPs by Field Emission Scanning Electron Microscope showing the spherical morphology of the nanoformulations.

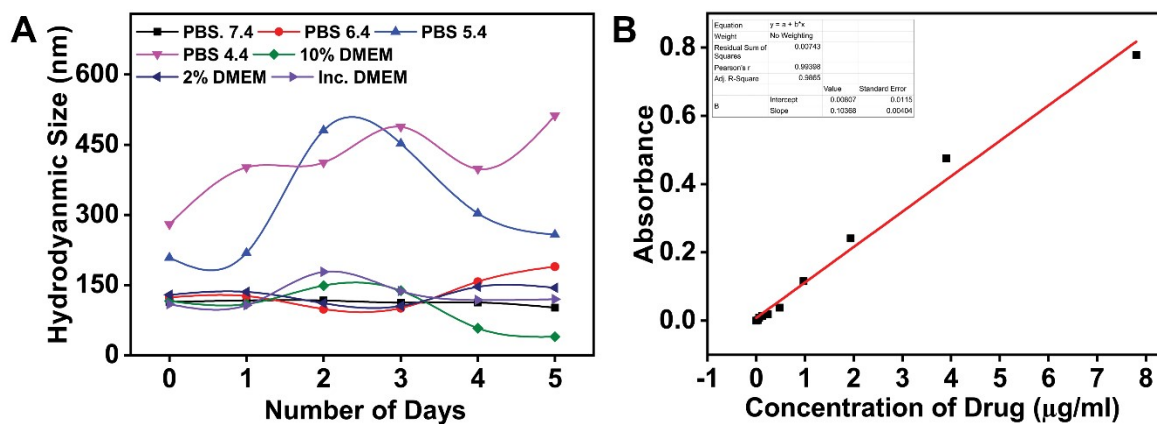


Figure S2: (a) Stability profile for hydrodynamic size of 4O4HPR loaded HSANPs in PBS with varying pH 7.4, 6.4, 5.4, 4.4, 10% DMEM, 2% DMEM and Incomplete DMEM; (b) Standard curve of 4O4HPR

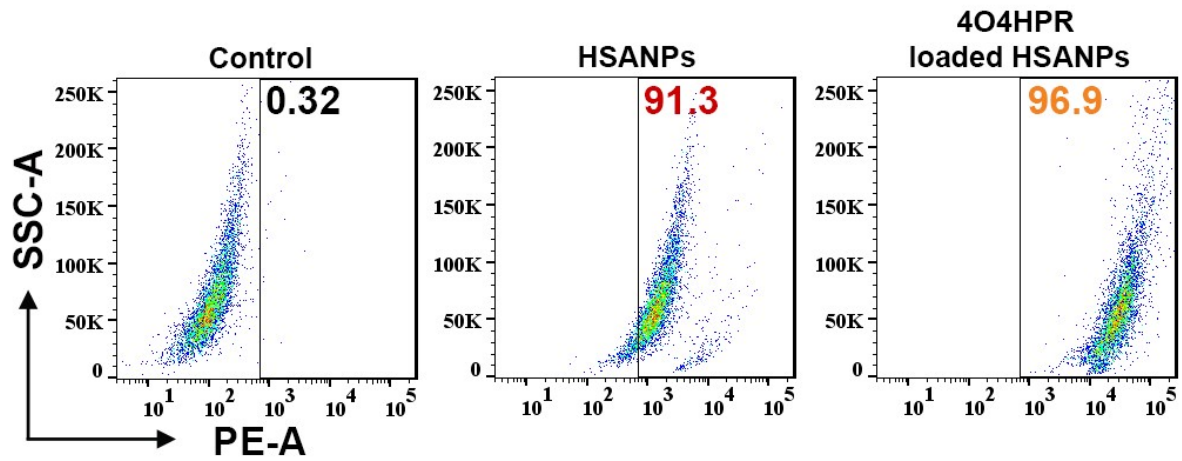


Figure S3. Flow cytometric analysis of rhodamine-tagged 4O4HPR loaded HSNPs compared to HSNPs demonstrates the higher uptake percentage of 4O4HPR loaded HSNPs.

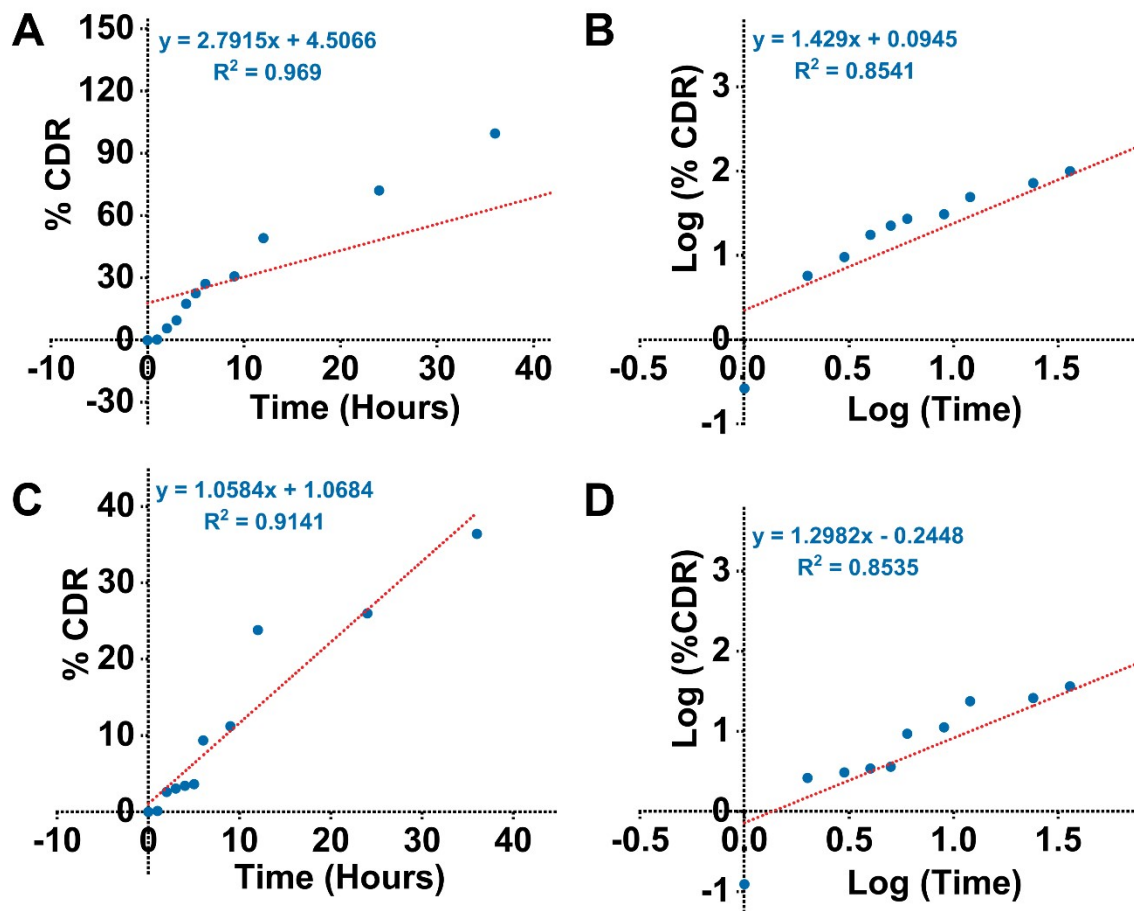


Figure S4. Drug release kinetics from (a) & (b) 4O4HPR (c) & (d) 4O4HPR loaded HSNPs in PBS-7.4.

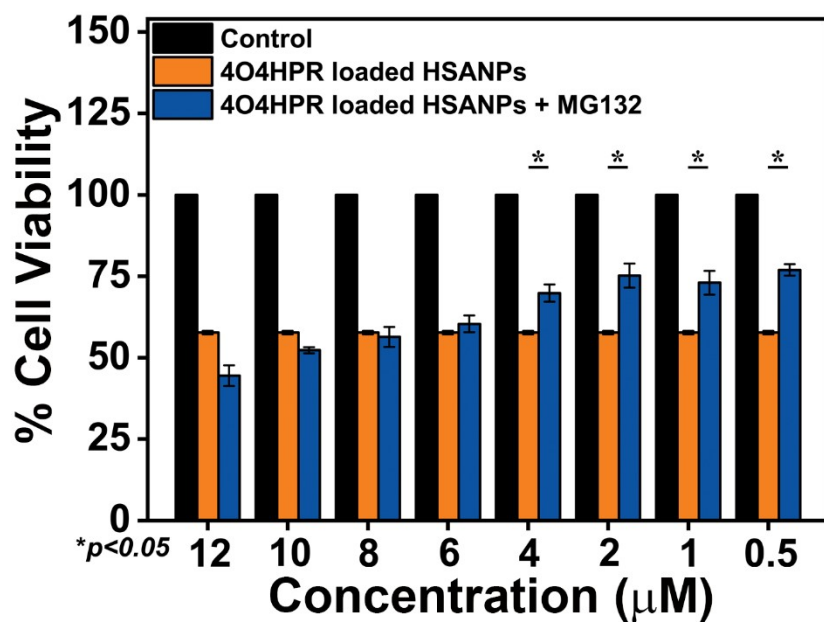


Figure S5. Cell viability assay for the dose optimization of MG132 for proteasomal pathway inhibitor study in SH-SY5Y cells treated with a high dose of MG132 for 3 hours followed by 4O4HPR loaded HSANPs treatment; (n = 3), where n is number of experimental repeats.

Supplementary Table

GAPDH	Forward primer	5`-GACTCATGACCACAGTCCATGC-3`
	Reverse primer	5`-AGAGGCAGGGATGATGTTCTG-3`
PKC-δ	Forward primer	5`-AAAGGCAGCTTCGGGAAGGT-3`
	Reverse primer	5`-TGGATGTGGTACATCAGGTC-3`
EzH2	Forward primer	5`-GCCAGACTGGGAAGAAATCTG-3`
	Reverse primer	5`-TGTGCTGGAAAATCCAAGTCA-3`

Supplementary Table 1. List of primers used for quantitative PCR analysis.