Novel Pt-loaded layered double hydroxide nanoparticles for efficient and cancer-cell specific delivery of a cisplatin prodrug

Rong Ma, Zhigang Wang, Li Yan, Xianfeng Chen,* and Guangyu Zhu*

Department of Biology and Chemistry, Center of Super-Diamond and Advanced Films (COSDAF), Department of Physics and Materials Science, City University of Hong Kong, Kowloon Tong, Hong Kong SAR; and Shenzhen Research Institute of City University of Hong Kong, Shenzhen, 518057, China

Electronic Supporting Information

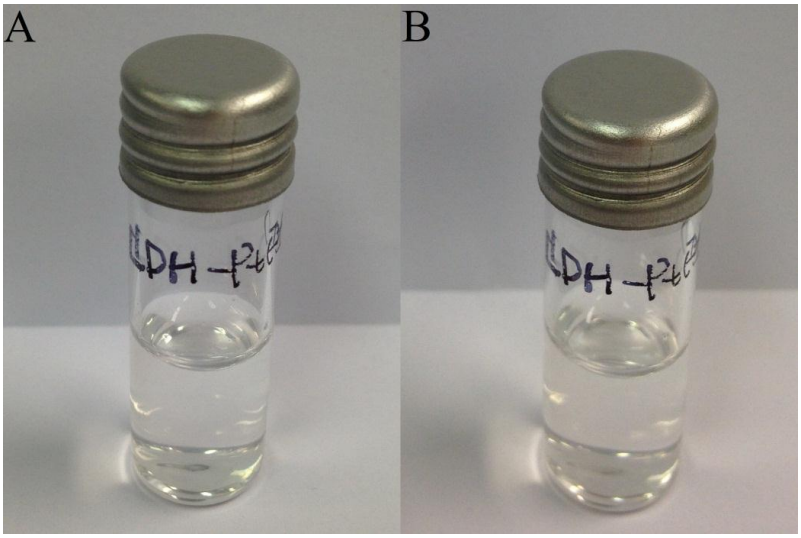

Figure S1. Stabillity of LDH-Pt(IV) in MilliQ water. (A) The as-prepared LDH-Pt(IV) at a concentration of 120 μM; (B) Sample A stored at 4 °C after 1 month.

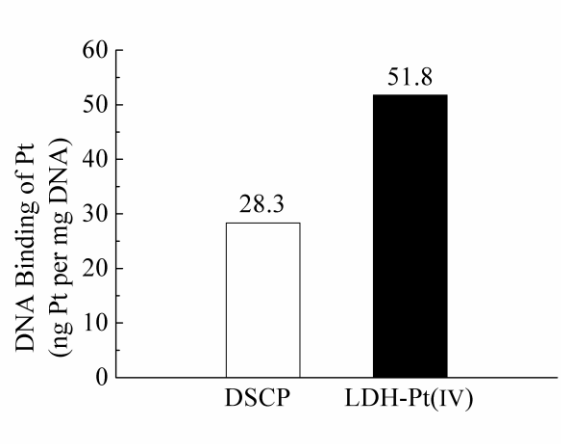

Figure S2. Pt contents in genomic DNA of A2780 cells. Cells were treated with 10 μM complexes for 10 h, and Pt contents in genomic DNA were measured.

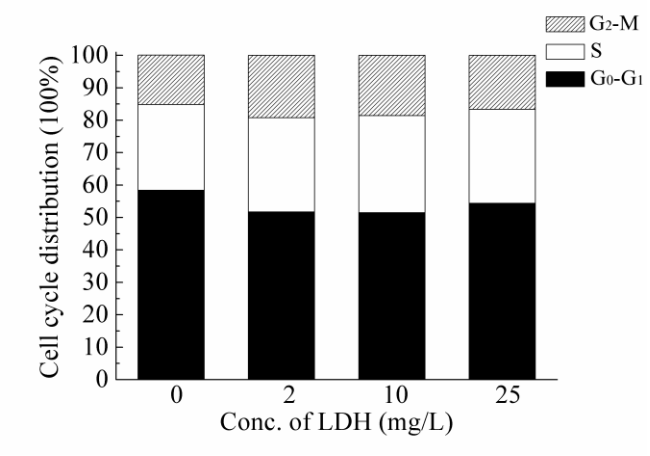

Figure S3. Cell cycle arrest of A2780 cells after treatment of LDH for 24 h.

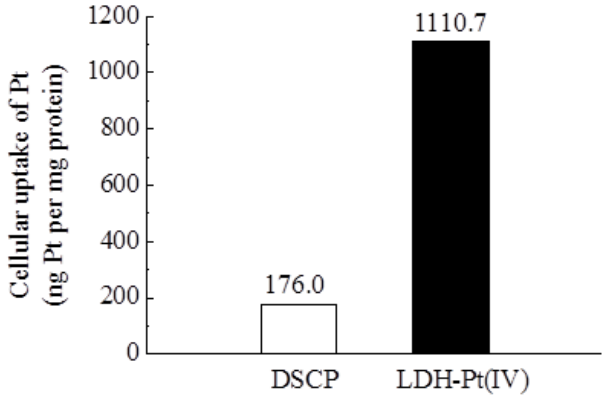

Figure S4. Whole cell uptake of DSCP and LDH-Pt(IV) in NIH3T3 cells. Cells were treated with 10 μM complexes for 10 h, and Pt contents were measured.