

Supplementary Information

Figure S1. Evaluation of small molecules loading capacity. (A-B) Standard curve showing the relationship between absorbance values and concentration of LDN193189 and SB431542. (C) Table of encapsulation efficiency and loading capacity of small molecules encapsulated MSN-CaP nanoparticles.

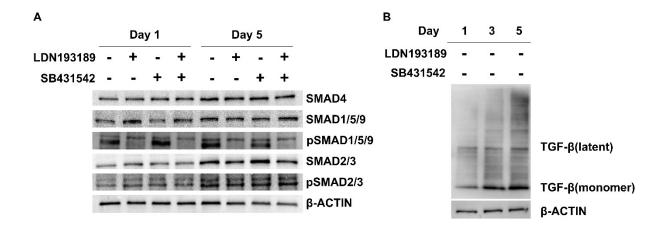


Figure S2. Dual SMAD signaling pathway promotes for highly efficient neural induction. (A) Western blot showing the levels of SMAD and pSMAD in iPSCs for 1 and 5 days. (B) Western blot analysis of TGF- β protein expression levels in iPSCs. Protein expression levels of TGF- β in iPSCs were determined for 1, 3, and 5 days.

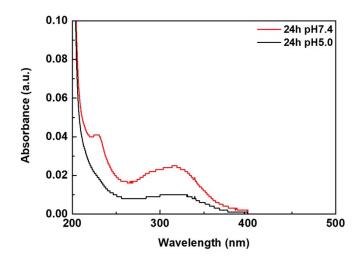


Figure S3. UV-VIS spectroscopy spectra of supernatants after 24 hour release test of LDNSB@MSN-CaP at different pH.