Electronic Supplementary Material for

Synthesis of well-dispersed layered double hydroxide core/ordered mesoporous SiO_2 shell nanostructure and its application in drug delivery

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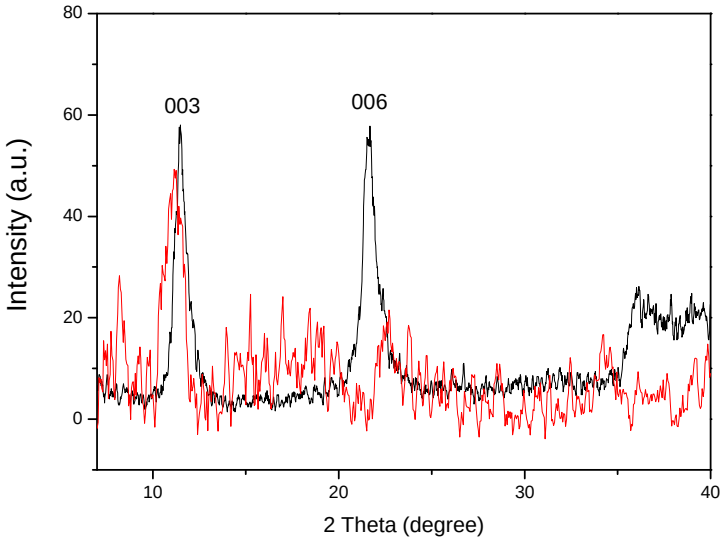

Figure S1. Wide-angle XRD patterns of As-synthesized Mg_2Al-Cl-LDH nanoplates at room temperature (25 ºC) and hydrothermally treated at 100 ºC for 4 h (black) and the LDH@*m*SiO_2 core@shell NPs (red).

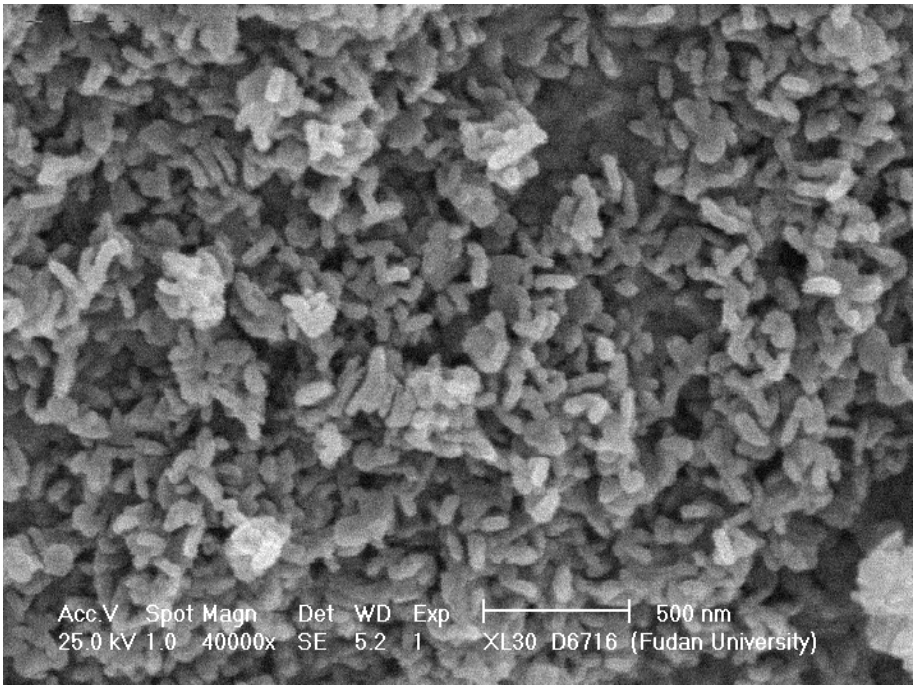

Figure S2. The SEM image of the as-synthesized core@shell nanocomposites LDH@*m*SiO_2 NPs.

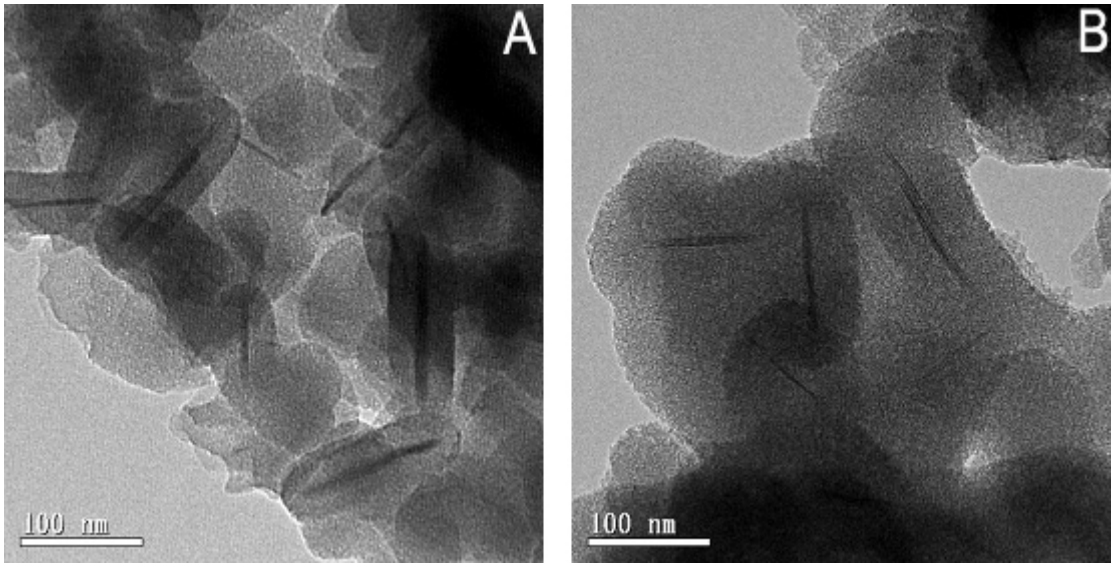

Figure S3. TEM images of the core@shell nanocomposites LDH@*m*SiO_2 NPs with a thickness of 20 nm (A) amd 50 nm (B).

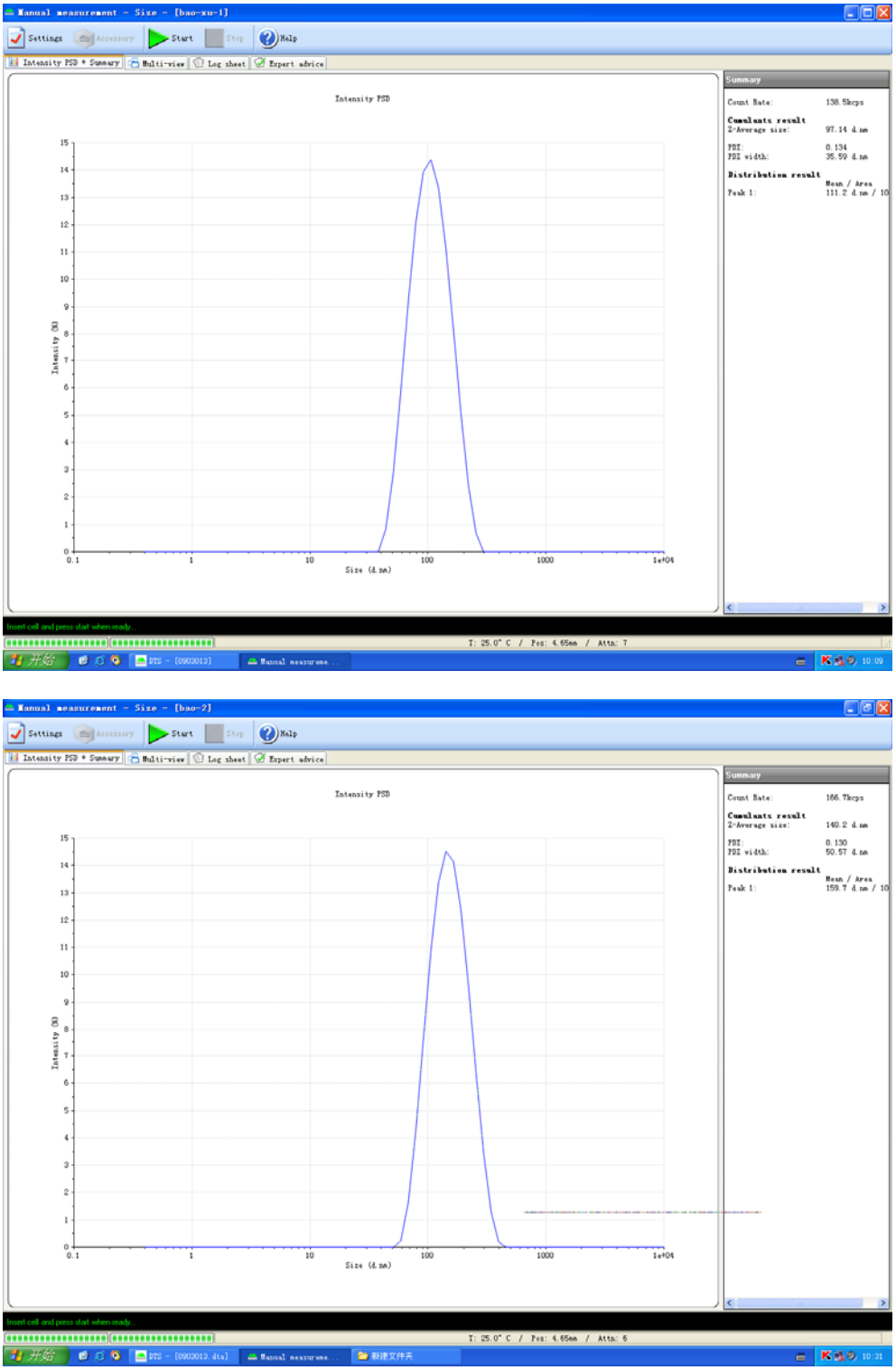

Figure S4. Hydrodynamic diameter distributions of LDH NPs (up) and LDH@*m*SiO_2 NPs with a thickness of 20 nm (down).

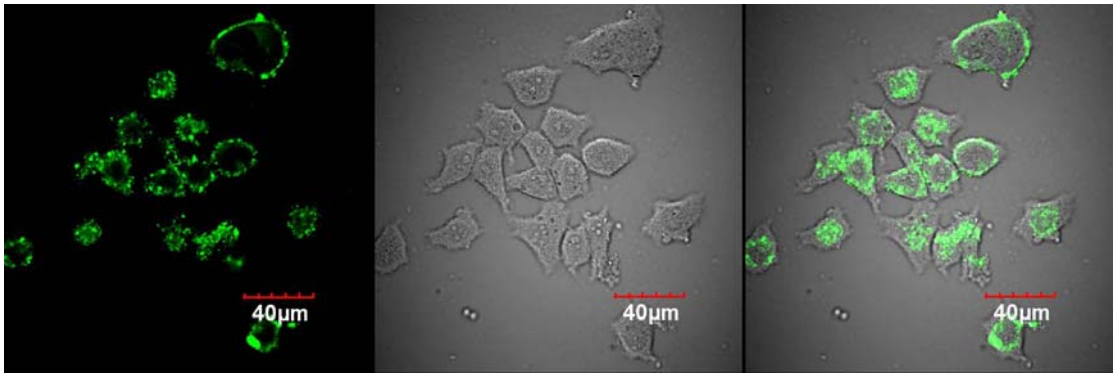

Figure S5. Confocal images of KB cells incubated with FITC-LDH@*m*SiO_2 NPs (1000 μg/ml) under 488 nm excitation, bright field and their merged image.