

Supplementary Information

Biodistribution and Clearance of Aminoclay Nanoparticles: Implication for In Vivo Applicability as a Tailor-made Drug Delivery Carrier

Liang Yang¹, Young-Chul Lee², Moon Il Kim², Hyun Gyu Park³, Yun Suk Huh⁴,
Yating Shao¹, and Hyo-Kyung Han^{1,*}

¹College of Pharmacy, Dongguk University-Seoul, Siksa-dong, Insan-Donggu, Goyang, Gyunggi-do, Republic of Korea

²Department of BioNano Technology, Gachon University, 1342 Seongnamdaero, Sujeong-gu, Seongnam-si, Gyeonggi-do 461-701, Republic of Korea

³Department of Chemical and Biomolecular Engineering (BK 21 program), KAIST, 291 Daehakno, Yuseong-gu, Daejeon 305-701, Republic of Korea

⁴Department of Biological Engineering, College of Engineering, Inha University, Incheon 402-751, Republic of Korea

*Corresponding Author: Hyo-Kyung Han, Ph.D.

E-mail: hkhan@dongguk.edu

Tel.: +82-31-961-5217, Fax: +82-31-961-5206

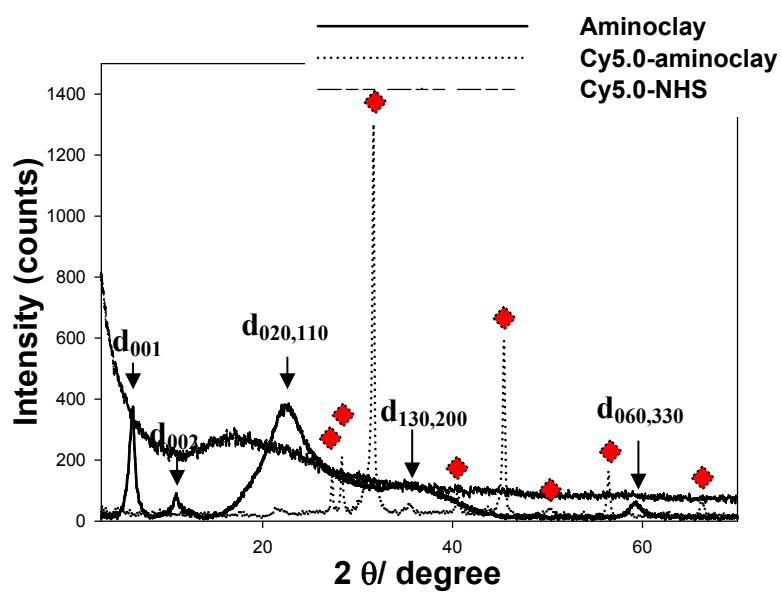


Figure S1. Powder X-ray diffraction (PXRD) patterns of aminoclay and Cy5.0-aminoclay. Note that red diamond marks indicate peaks of NaCl (JCPDS-77-2064) and KCl (JCPDS-73-0380) related to PBS buffer.

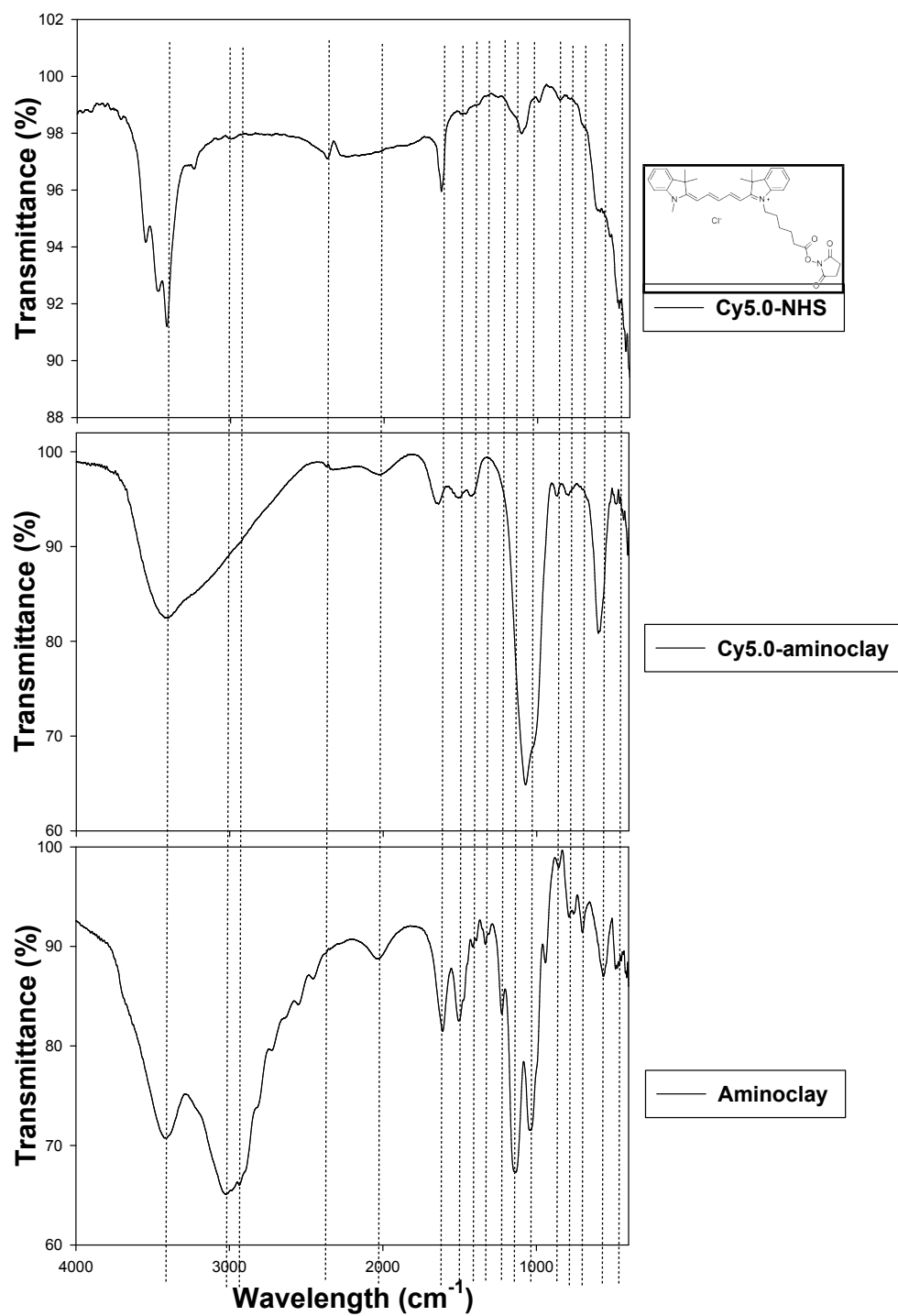
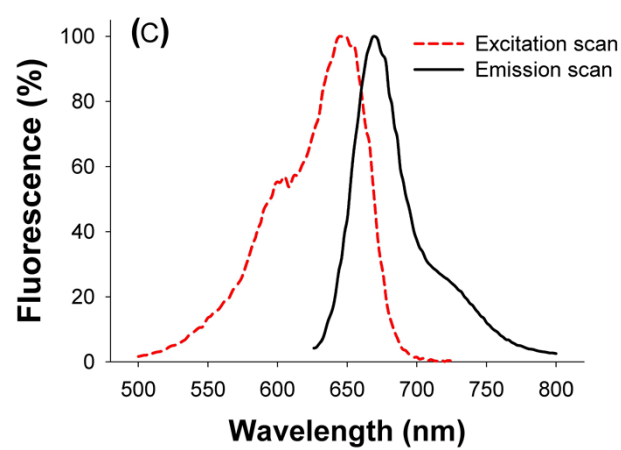
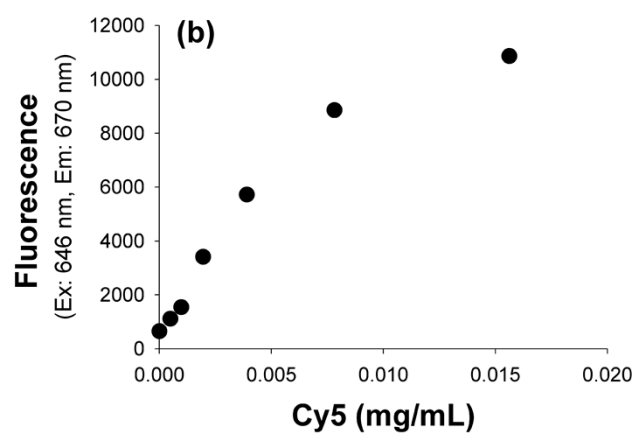
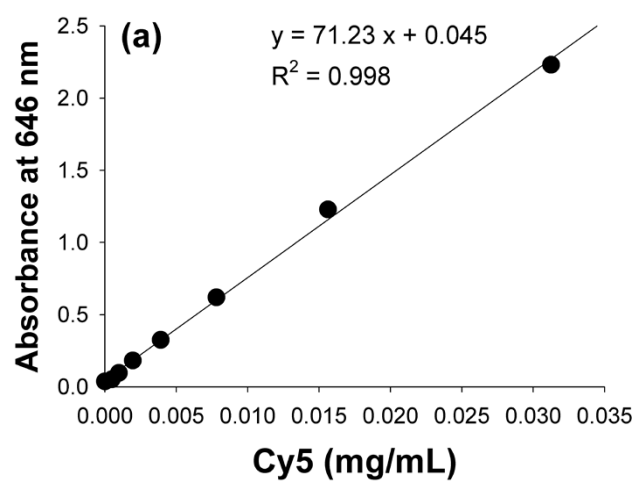


Figure S2. Fourier transform infrared (FT-IR) spectra with a pellet disk mode of Cy5.0-NHS, Cy5.0-aminoclay, and aminoclay.



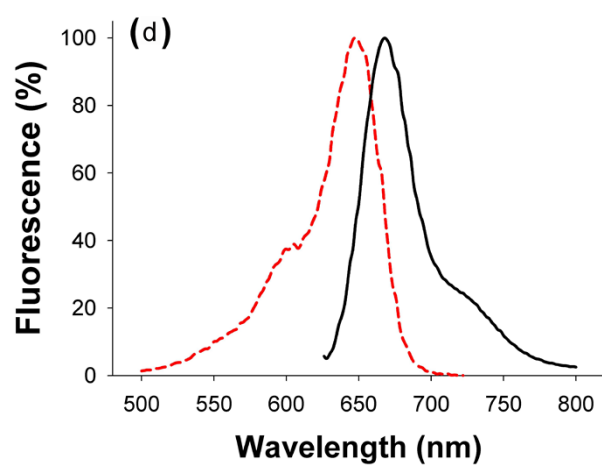


Figure S3. Standard curves of absorbance at 646 nm (a) and fluorescence intensity according to Cy5.0 loading (b). Excitation and emission scan of free Cy5.0 (c) and Cy5.0-conjugated aminoclay (d).