

Supporting Information

Design of boronic acid-attributed carbon dots on inhibits HIV-1 entry

M.Z. Fahmi,^{ab*} W. Sukmayani,^a S.Q. Khairunisa,^b A.M. Witaningrum,^b D.W. Indriati,^b M.Q.Y. Matondang,^b J.-Y. Chang,^c T. Kotaki,^d and M. Kameoka.^e

a. Department of Chemistry, Airlangga University, Surabaya 61115, Indonesia.

b. Institute of Tropical Disease, Airlangga University, Surabaya 61115, Indonesia.

c. Department of Chemical Engineering, National Taiwan University of Science and Technology, Taipei 10607, Republic of China.

d. Center of Infectious Disease, Graduate School of Medicine, Kobe University, Hyogo 654-0142, Japan

e. Department of International Health, Kobe University Graduate School of Health Science, Kobe 654-0142, Japan.

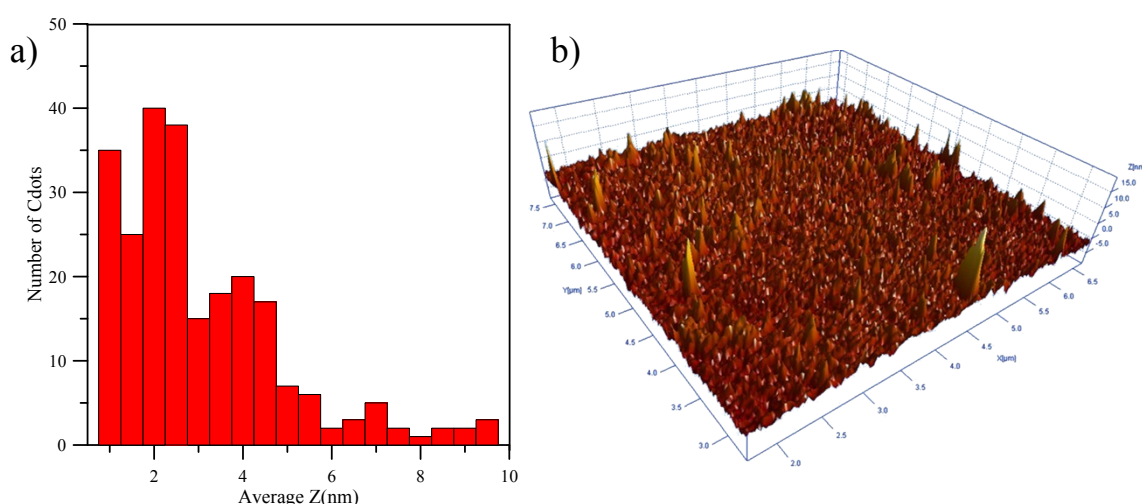


Figure S1. AFM data of as-prepared Cdots including histogram its size distribution (a) and AFM image of adjusted Cdots took from top (b).

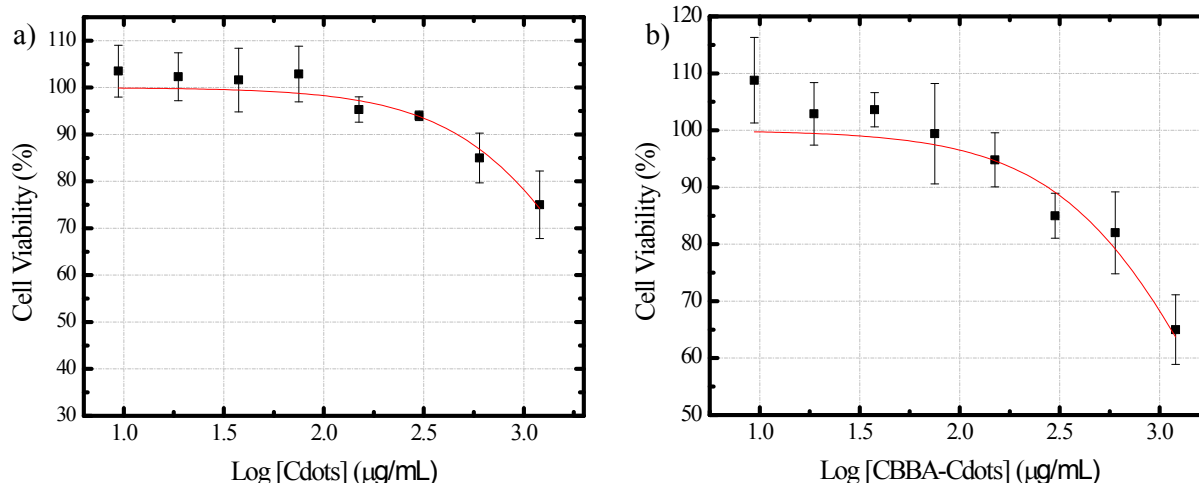


Figure S2. Comparison cell viability of MOLT-4 cancer cells after 24 h incubation with Cdots (a) and CBBA-Cdots (b). CC_{50} values can be determined on red fitted curve, which show at 3.46 $\mu\text{g/mL}$ and 3.29 $\mu\text{g/mL}$ for each log [Sample], respectively, or 2901.2 $\mu\text{g/mL}$ and 1991.9 $\mu\text{g/mL}$ for each [Sample], respectively. Red line indicates fitting curve resulted on doses response mode on Origin software.

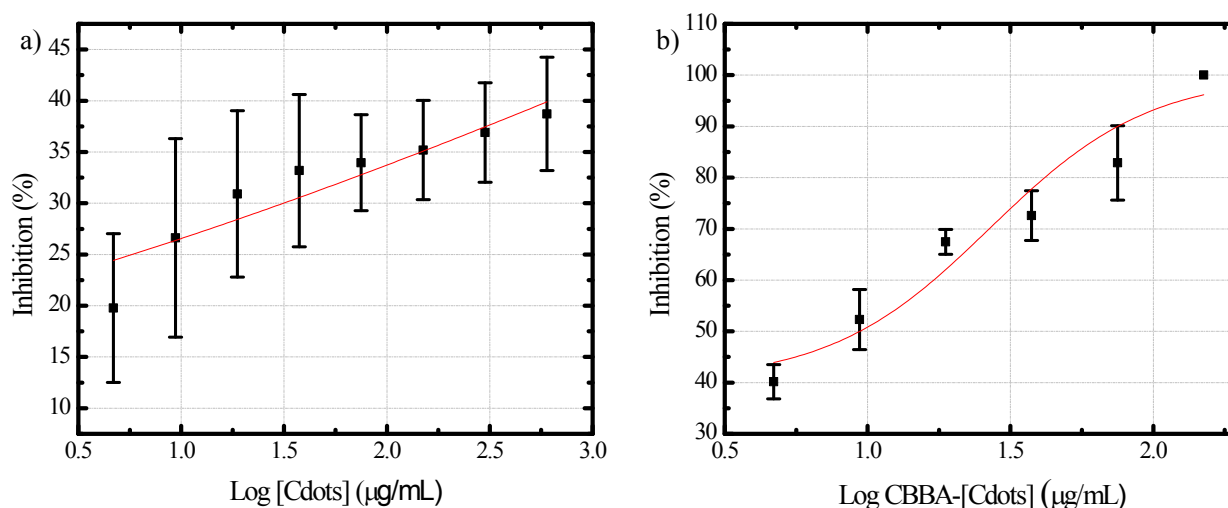


Figure S3. Graph of inhibition level of Cdots (a) and CBBA-Cdots (b) to against MT4/HIV-1 infection after 24 h incubation. IC_{50} values can be determined on red fitted curve, which show at 3.97 $\mu\text{g/mL}$ and 1.43 $\mu\text{g/mL}$ for each log [Sample], respectively, or 9605.3 $\mu\text{g/mL}$ and 26.7 $\mu\text{g/mL}$ for each [Sample], respectively. Red line indicates fitting curve resulted on doses response mode on Origin software.