Electronic Supplementary Information

Green synthesis, physio-chemical characterization and anti-candidal function

of biocompatible chitosan gold nanocomposite as a promising antifungal

therapeutic agent

S.H.S. Dananjaya^a, R.M.C Udayangani^a, Chulhong Oh^b, Chamilani Nikapitiya^{c,d}, Jehee Lee^{c,d},

Mahanama De Zoysa^{a,d*}

^aCollege of Veterinary Medicine and Research Institute of Veterinary Medicine, Chungnam National University, Yuseong-gu, Daejeon, 34134, Republic of Korea.

^bJeju International Marine Science Research & Education Center, Korea Institute of Ocean Science & Technology, Jeju Special Self-Governing Province, 63349, Republic of Korea.

^cDepartment of Marine Life Sciences, School of Marine Biomedical Sciences, Jeju National University, Jeju Self-Governing Province, 63243, Republic of Korea.

^dFish Vaccine Research Center, Jeju National University, Jeju Self-Governing Province, 63243, Republic of Korea.

* Corresponding author:

Mahanama De Zoysa

College of Veterinary Medicine and Research Institute of Veterinary Medicine, Chungnam National University, Yuseong-gu, Daejeon, 34134, Republic of Korea.

Tel:+82428216795; Fax:+82428218903

E-mail:mahanama@cnu.ac.kr; (De Zoysa, M)



Fig. S1 FE-SEM images of *C. albicans* treated with CAuNC. With the treatment of CAuNC (MIC level), pseudo-hyphae formation indicated by a red arrow, damage signal *C. albicans* cells indicated by white arrow and undamaged *C. albicans* cells indicated by the green arrow.



Fig. S2 Analysis of the effect of CAuNC on expression of proteins in *C. albicans* by SDS-PAGE. M: protein marker; C: control; MIC: 50 μg/mL; MFC: 75 μg/mL.