

Supporting Information

Highly efficient antibody purification with controlled orientation of protein A on magnetic nanoparticles

Sunghyun Kim, Daekyung Sung, and Jeong Ho Chang*

Center for Convergence Bioceramic Materials, Korea Institute of Ceramic Engineering and Technology, Chungbuk 28160, Republic of Korea

* Corresponding author. Tel:+82 43 913 1501.

E-mail: jhchang@kicet.re.kr (J. H. Chang)

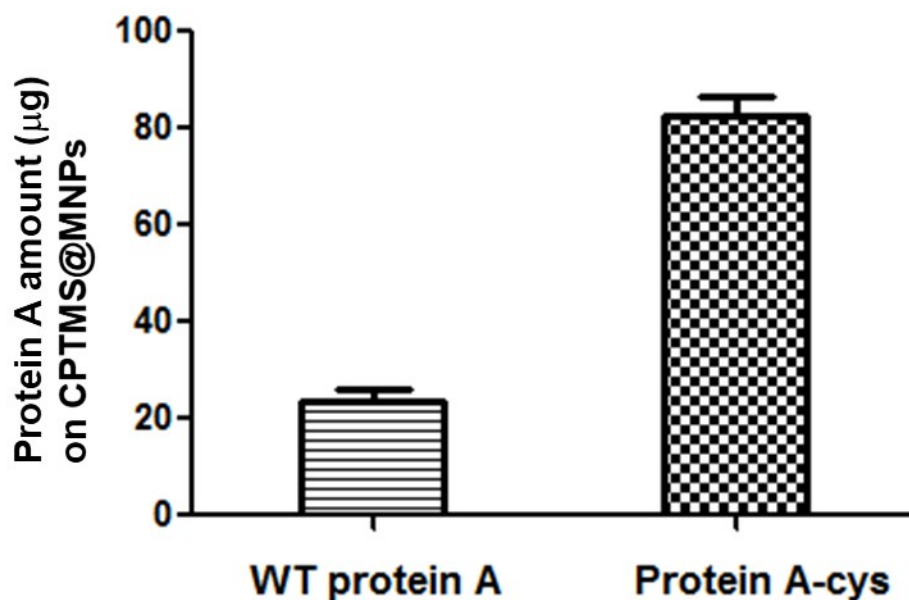
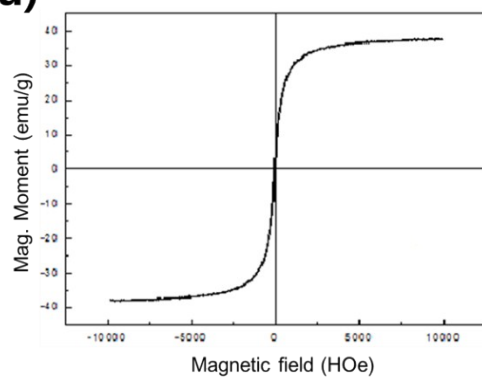


Figure S1. The immobilization amount of wild-type protein A (WT protein A) and genetically modified protein A (protein A-cys) on CPTMS@MNPs

1

(a)



(b)



2 **Figure S2.** (a) Vibrating sample magnetometer(VSM) data (b) Fast magnetic separation