Copyright WILEY-VCH Verlag GmbH & Co. KGaA, 69469 Weinheim, Germany, 2012.

Small Micro

Supporting Information

for Small, DOI: 10.1002/smll. 201102743

Mechanism of Cellular Uptake of Graphene Oxide Studied by Surface-Enhanced Raman Spectroscopy

Jie Huang, Cheng Zong, He Shen, Min Liu, Biao Chen, Bin Ren,* and Zhijun Zhang*

Supporting Information

Mechanism of Cellular Uptake of Graphene Oxide Studied by Surface-Enhanced Raman Spectroscopy**

Jie Huang, Cheng Zong, He Shen, Min Liu, Biao Chen, Bin Ren,* and Zhijun Zhang*

[*] Prof. Z. Zhang, J. Huang, H. Shen, Dr. M. Liu, B. Chen Suzhou Institute of Nano-Tech & Nano-bionics, CAS,
Suzhou 215125 (P. R. China)
E-mail: (zjzhang2007@sinano.ac.cn)

 Prof. B. Ren, C. Zong
 State Key Laboratory of Physical Chemistry of Solid Surfaces and College of Chemistry and Chemical Engineering, Department of Chemistry, Xiamen University,
 Xiamen 361005 (P. R. China)
 E-mail: (bren@xmu.edu.cn)



Figure S1. AFM image of GO. The GO sheets used for cellular experiment were prepared by filtration with 0.22 μ m filter to remove larger sized components.



Figure S2. TEM image of the Au-GO conjugate.



Figure S3. Photographs of Au-GO in 150 mmol L⁻¹ NaCl aqueous solution (a), PBS buffer solution (b), and Dulbecco's modified eagle's medium (DMEM) with 10% calf bovine serum (CBS) (c), Au-GO aqueous solution (d). Photos were taken after the samples were stored at ambient condition for 24 h.



Figure S4. (a) TEM image of cells incubated with Au-GO for 12 hr. (b) Enlarged area of image (a).



Figure S5. Cytotoxicity of four inhibitors, chlorpromazine, amiloride, MBCD and NaN3.



Figure S6. Fluorescence confocal images of inhibitor-pretreated Ca Ski cells incubated with RBITC labeled GO. The cells incubated with and without GO were also examined as controls.